ServiceNow Change Management Guide

Stanford University https://stanford.service-now.com/

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Table of Contents

1. Change Management Overview	
1.1 Introduction to Change Management	
1.2 Goals of Change Management	
1.3 Objectives of Change Management	
1.4 Key Policies	
2. Stanford Change Management Process	
2.1 Overview	
2.2 Roles and Responsibilities	
2.3 Types of Change	
2.4 Lead Times for Normal/Expedited Change Reques	
2.5 High Level Process Overview	
2.5.1. Normal/Expedited Change	
2.5.2. Emergency	
2.5.3. Standard (pre-authorized)	
2.6 Process Steps and Activities	
2.6.1. Raise and Record	
2.6.2. Assess and Evaluate	
2.6.3. Authorize and Schedule	
2.6.4. Approval Workflow	
2.6.5. Implement	
2.6.6. Review and Close	
3. Stanford ServiceNow Environment	
3.1 Creating a New Change Request	
3.2 Normal and Expedited Change Form	
3.2.1. Normal and Expedited Change form fields	
3.3 Change form tabs	
3.3.1. Notes tab	
3.3.2. Planning tab	
3.3.3. Schedule tab	
3.3.4. Risk Assessment tab	20
3.3.5. Conflicts tab	20
3.3.6. Closure Information tab	
3.4 Change Tasks	
3.4.1. Adding/modifying Change Tasks	23
3.5 Normal and Expedited Change Workflow	2 4
3.6 Approving a Change	26
3.6.1. Within ServiceNow	26
3.6.2. Via Email	27
3.6.3. Delegating Authority	27
3.7 Emergency Changes	29
3.7.1. Emergency Change form	
4. Standard Changes	32
4.1 Requesting A New Standard Change Template	
4.1.1. Review and Approvals for New Standard Change	
4.2 Creating a new Standard Change (from the approx	
5. Informational Changes	-
J. IIIIVI IIIAIIVIIAI GIIAIIEGJ	······································



6.	Change Notifications	40
7.	Reports and Status Pages	41
	7.1 CAB Homepage	
8.	Additional Information	44



1. Change Management Overview

1.1 Introduction to Change Management

Change Management is the process responsible for managing all Changes to the production operations environment from inception to completion. To be successful in managing change, the Change Management process must ensure that all changes are recorded and authorized at the appropriate level. Change Management helps organizations understand and work to minimize risks of changes to the IT environment.

1.2 Goals of Change Management

- Improve the quality of changes and reduce the potential for change induced incidents by ensuring that a standard methodology is used to handle all changes and control the impact upon the day-to-day operations of the organization.
- Manage the business risks at a high level (i.e., taking acceptable risks but evaluating and prioritizing based upon what is acceptable).
- Deliver successful changes at the first attempt.

1.3 Objectives of Change Management

- Minimize the risk and severity of any disruption
- Ensure that all changes are logged (or captured) in a centralized repository where the information can be shared by other processes.
- Assess all changes based on their impact, benefit and risk to the business, and to approve or reject the request for change accordingly.
- Schedule all changes based on the requirements of the business, the availability of appropriate resources and in consideration of other changes being deployed.
- Ensure that all changes are appropriately tested and certified and that the appropriate implementation and remediation plans are available.
- Provide timely communication of change plans and schedules as well as the status of all changes to appropriate stakeholders and affected users.
- Provide general reporting capabilities against the repository of changes, including trending information and specific metrics relevant to the process.



1.4 Key Policies

- Each proposed change requires a Change record and associated task(s) be entered into the Service Now enterprise-wide Change Management tool.
- Every emergency, unsuccessful and successful selected random change will be reviewed and any identified post-implementation actions will be documented.
- All normal and expedited changes will be assessed for risk and appropriate actions established to mitigate potential incidents.
- Maintain change windows and enforce scheduling of changes along with authorization for exceptions.
- The Change Owner (Assigned to) individual will be deemed the owner of the change request from creation to closure.
- All Change Requests must have the Change Owner (Assigned To) or their informed designated representative in attendance to have the Change Request considered for authorization. Core CAB members are required to attend or have their designee attend the regular CAB meetings.

2. Stanford Change Management Process

2.1 Overview

A Change Request is required when there is an addition, modification, or removal of any IT Service, system or component(s) that are part of a Production environment as well as all services with agreements that specifically state service levels and environment up-time, are subject to the Change Management process and policies.

Note: See Appendix for "Out-of-Scope" list. (Note: as of July 15, 2016, there are no "out-of-scope" changes asked for or authorized. As a result, all changes require a Change Request.)

2.2 Roles and Responsibilities

Each role is assigned to perform specific tasks within the process. The responsibilities of a role are confined to the specific process. They do not imply any functional standing within the hierarchy of an organization.

For example, the process manager role does not imply the role is associated with or fulfilled by someone with functional management responsibilities within the organization. Within a specific process, there can be more than one individual associated with a specific role. Additionally, a single individual can assume more than one role within the process although typically not at the same time.



Roles	Description
Change Requestor (Requested By)	The person filling out the change and submitting (creating) it via the Service Now support tool. Unless the Change Requester assigns the Change Request to a different "Assigned To" individual, this role provides all the details regarding the change, including the business justification, implementation plan, CI details, remediation plan, etc. that are to be included in the request. RESPONSIBILITIES: - Unless the Change Request is assigned to another "Assigned to" individual, this role is deemed the Owner of the Change Request from creation to closure - Generates and
	submits the change to start the process Enters the business needs, goals and objectives of the change and ensures they are accurate Ensures the risk factors have been assessed and verifies the validity of the initial priority setting Provides all necessary supporting documentation for the change (i.e. install, test, and remediation plans) Provides CAB representation when necessary.
	CHARACTERISTICS: - General business understanding and perspective A good understanding of overall production environment Knowledge of the organizational structure and the business-to-customer relationships Affinity with the technical environment to allow for description of infrastructure and operational impacts to the change.
Change Owner (Assigned To)	This role provides all the details regarding the change, including the business justification, implementation plan, CI details, remediation plan, etc. that are to be included in the request.
	RESPONSIBILITIES: - For any Change Request assigned, this role is deemed the Owner of the Change Request from creation to closure - Generates and submits the change to start the process Enters the business needs, goals and objectives of the change and ensures they are accurate Ensures the risk factors have been assessed and verifies the validity of the initial priority setting Provides all necessary supporting documentation for the change (i.e. install, test, and remediation plans) Provides CAB representation when necessary.
	CHARACTERISTICS: - General business understanding and perspective A good understanding of overall production environment Knowledge of the organizational structure and the business-to-customer relationships Affinity with the technical environment to allow for description of infrastructure and operational impacts to the change.
Assignment Group	The group assigned to own and possibly implement the Change Request. This group must be one of the groups to which the person Assigned To the change belongs.
Assessor (Assignment Group Manager)	The assessor role (typically the Manager of the Assignment group) performs a technical assessment of the change ensuring that it complies with the overall IT architectural design, that all Configuration Item (CI) relationships are identified and evaluated for risk potential. The role may also provide expert input at the University IT Change Advisory Board (CAB) meetings regarding the potential impact of the change on other CIs or Services not directly part of the change.
	RESPONSIBILITIES: - Ensures the risk factors have been assessed and verifies the validity of the initial priority setting - Ensures all necessary supporting documentation for the change (i.e. install, test, and remediation plans)Ensures that all Configuration Items (CI) relationships are identified (affected and impacted) -Ensures appropriate resources have been assigned
	CHARACTERISTICS: - General business understanding and perspective A good understanding of overall production environment Knowledge of the organizational structure and the business-to-



	customer relationships Affinity with the technical environment to allow for description of infrastructure and operational impacts to the Change.	
Change Manager (July 2016: Chris Lundin and Thuylynh Nguyen)	Unlike process managers for the other processes the Change Manager/Change Management Group has an active role in the day-to-day activities of the process as well as the responsibility for the day-to-day execution of the process. Specific oversight responsibilities include: - Managing the day-to-day activities of the process - Gathering and reporting on process metrics - Tracking compliance to the process - Escalating any issues with the process - Acting as chairperson for process meetings. Additionally, the Change Management-specific responsibilities include: - Authorizing the Change Request (CR) - Convening and chairing the UIT Change Advisory Board (CAB) meetings - Ensuring that the Forward Schedule of Changes (FSC) is current and available - Conducts post-implementation reviews (PIRs) for those changes for which such reviews are deemed necessary - Authorizing Change Process Models/Templates - Final confirmation point for Emergency Change type	
Change Approver	The Change Approver is accountable for reviewing the change to determine the readiness for implementation considering such things as: successful development testing, potential risk associated with implementing (or not implementing) the change; the scope and benefits that are expected to be realized; the suitability of the remediation plan, completeness of the implementation details; and the planned schedule for the various change tasks. A Change Approver may authorize, reject, or return the change for further information/clarification.	
Change Task Implementer Responsible for executing the change tasks to which they have been assigned. Upon cor they must update the task with appropriate information and select closure code and/or There may be multiple task implementers for a given Change Request (CR) (each assigned own tasks).		
CAB – Change Advisory Board (UIT Change Management Group)	Advises or assists the Change Manager with: - Approval of high and very high risk/impact Change Requests (CR) - Change implementation scheduling (Forward Schedule of Changes) - Post-implementation reviews (PIRs) - Approving Standard Change Process Template requests At Stanford, this group meets weekly on Wednesdays (1:30 p.m.) to review and authorize upcoming requested changes of Risk Impact 1 or 2s.	
ECAB (Emergency Change Advisory Board)	Provides advice to the Change Manager in the event of a declared emergency change. The ECAB is a subset of the CAB and may be called upon at any hour of the day to approve an Emergency Change Request. The ECAB is comprised of Director-level individuals from each appropriate group.	
Change Process Owner (July 2016: Larry Dillard)	A Senior Manager with the ability and authority to ensure the process is rolled out and used by all departments within the IT organization. Specific responsibilities include: - Defining the overall mission of the process - Establishing and communicating the process mission, goals and objectives to all stakeholders	



	 Resolving any cross-functional (departmental) issues Ensuring consistent execution of the process across departments Reporting on the effectiveness of the process to senior management Initiating any process improvement projects 	
Informational Change Requester	Individuals assigned access to create informational changes outside the control of University IT.	

2.3 Types of Change

Change Type, along with Risk, Impact and Priority, is determined based on the Technical and Business Risk and Impact Assessment for a Change.

Below is a summary of the different types of changes that can be created in Stanford's Environment (from https://uit.stanford.edu/service/changemgt/types).

Change Type	Description
Normal Change	A Normal change is one that meets the defined lead time for testing and validation. It can have single or multiple teams involved and can vary in risk level. These changes need Technical, Business, and CAB approval. NOTE: See below for lead times
Expedited Change	An Expedited change does not meet the lead time requirement for a Normal change but is not an Emergency Change. It follows same process and approval flow as a 'Normal' Change, but lead times are much shorter and they require a reason for being expedited). These changes need Technical, Business, and CAB approval. NOTE: See below for lead times
Emergency Change	Emergency changes are used to restore service or fix a P1 Incident ("Service Alert") immediately or situations where the impact to a service is imminent if action is not taken. These changes do not follow the complete lifecycle of a Normal change due to the speed with which they must be implemented and authorized. Emergency changes are formally raise/recorded, reviewed, approved after the fact.
	NOTE: Changes affecting Stanford Health Care (SHC) and/or Stanford Children's Health (SCH) require authorization from their respective CABs. Lead times provide enough advance notices for UIT to present the requested Changes to those CABs. Emergency and Expedited changes should always be communicated to the Stanford Healthcare Account team (healthcare-account-team@lists.stanford.edu) so they can advise the respective Hospital leadership.
Standard Change	Standard changes are created from pre-approved templates based on the change being one that is repeatable with no deviation and has completed the Normal change flow at least 3-5 times with no issues. These changes do not need approval since they have been pre-approved by the
Informational Change	CAB after a request is made and a review completed. An informational change is not being implemented by Stanford University IT and is used only to inform CAB members of times and possible impacts. These changes have no approval since Stanford can't impact timing or scope.



2.4 Lead Times for Normal/Expedited Change Requests

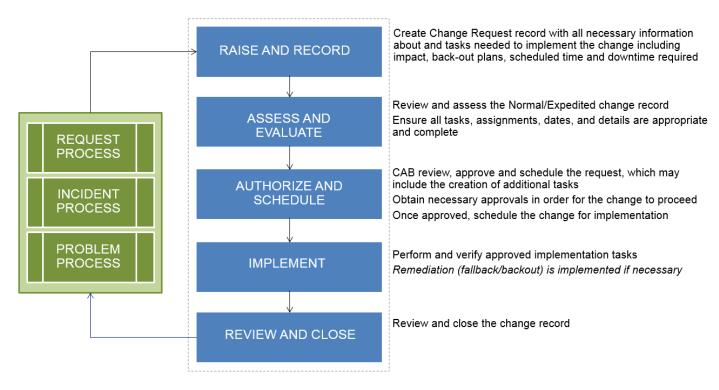
Risk/impact	Detail	Lead time
Very High	 Highly visible to clients (affects downstream applications) Will (or could) disrupt services both central offices as well as distributed users Being made during critical batch or production window (regardless of maintenance window), which include major application upgrade, installation of major new application, technology or hardware Requires a complete system recycle to install Backout: Difficult or impossible. Requires system recycle Example: Significant patch bundle, firewall upgrade 	10 business days (including all approvals, including CAB)
High	 Highly visible to clients (may affect downstream applications) May disrupt single school, central office or large number of distributed users Patches that require system down time regardless of maintenance window Significant bug fix or involves two or more applications which changes system behavior Could include firewall rule request which are significant or have unknown impact Backout: Difficult, requires application-level recycle Examples: Normal patch bundles, OS version change on Application Server 	5 business days (including all approvals, including CAB)
		1 business day
Low	 None to low visibility to our clients Minor impact if problems occur during or post implementation, may impact single service or department during implementation This level is for just fixes to data, code changes falling in this level would be a minor change Backout: Minor difficulty, no recycle required Examples: Application form validation or other minor app code changes, low impact data fix 	0 days
None	These changes have no impact and have very little risk of causing any issues when implemented. Backout: Requires minor effort to back-out, no recycle required	0 days

Additional information regarding Change lead times can be found on https://uit.stanford.edu/service/changemgt/change leadtimes

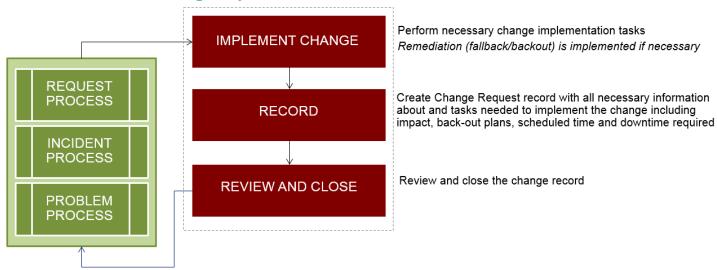


2.5 High Level Process Overview

2.5.1.Normal/Expedited Change

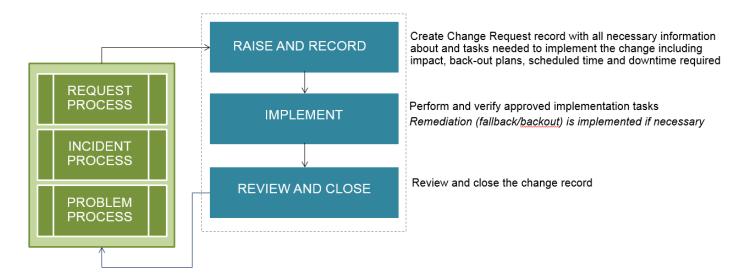


2.5.2. Emergency





2.5.3. Standard (pre-authorized)





2.6 Process Steps and Activities

2.6.1 Raise and Record

The first step in the Change Management process is raise and record. During this activity, the Change record is created and all necessary information is captured. The amount of information captured will depend on the Change Type (e.g., Normal, Emergency, or Standard type). Once the information has all been captured, the Change record is submitted for review, assessment, authorization, scheduling, and implementation (the next activities).

Process Steps	Role	Detail
1.1 Create Change Request	Change Requestor (Requested By), Change Owner	A Change Request is raised (captured and logged) by the Change Requestor and all of the basic information regarding the change is identified.
		The change may be the introduction of a modification to or the addition of any item of the IT supported infrastructure including hardware, software, and documentation. Changes may be as simple as a documentation change, a user access request, or planned maintenance, and as complex as the rollout of a new business application, a project change proposal. Data entered at this point must conform to the published Change Management standards and policies. Since all of the request details may not be known or available at this time, the request should be saved in a draft state. The defined change types are Normal, Expedited, Emergency, Standard and Informational.
1.2 Provide details	Change Requestor (Requested By), Change Owner	A Change record has already been created and the basic information provided. This task will see the additional details provided. Tasks
		required to ensure that the change is implemented (including testing and preparation) will also be identified. Configuration Items (CIs) that will be changed must be identified and related to the Change. Once all of the necessary information has been provided, the request will be "submitted".

2.6.2. Assess and Evaluate

The second step in the Change Management process is assess and evaluate. Review and assess the Normal/Expedited Change record. A filtering step weeds out any unnecessary or impractical changes.

Process Steps	Role	Detail
2.1 Perform	Assessor (Assignment Group	Having been submitted the Change record must now undergo an
Assessment	Manager)	assessment for accuracy and completeness. It is also during this step
		that any additional tasks that may be required are added to the
		Change. If the Assessor is not satisfied with any of the information in
		the Change, it may be returned to the Change Owner. Upon
		successful completion of this task, the Change is considered to be
		authorized and may now proceed for required approvals.

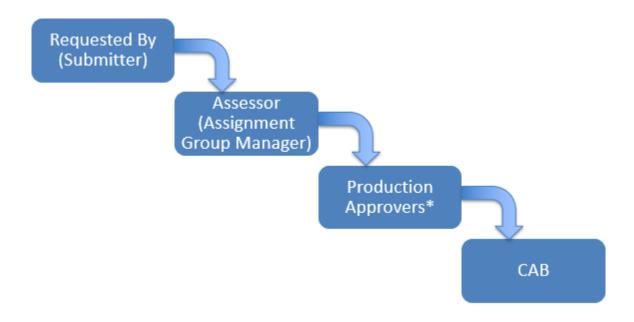


2.6.3. Authorize and Schedule

The third step in the Change Management process is authorize and schedule. Technical assessment of the request is performed during this activity, which may include the creation of additional tasks. All necessary approvals must be obtained in order for the change to proceed. Once approved, the change is scheduled for implementation.

Process Steps	Role	Detail
3.1 Authorize the Change	Change Approvers, Change Manager, CAB, ECAB	All remaining approvals will be obtained as part of this task. The actual number of approvals required may vary based on the risk/impact rating and CI. The Change may be returned to the Change Owner if an approver requires additional information or clarification. Complicated, high impact changes may need to be authorized at the business executive level as well as the UIT Executive level before the implementation is initiated.
3.2 Plan updates (schedule)	Change Manager, CAB	CR must be scheduled for implementation. Care should be taken not to schedule changes without first verifying the availability of resources assigned to those tasks. Similarly, changes to the schedule should be communicated to all assignees. The Forward Schedule of Changes (FSC) should be consulted and subsequently updated as a result of this step. This activity will also ensure that all necessary requirements are provided.

2.6.4. Approval Workflow



^{*}Additional approvers are identified by the CI and the risk/impact level of the Change. Note: Complicated, high impact changes may need to be authorized at the business executive level as well as the UIT Executive level before the implementation is initiated.



2.6.5.Implement

The fourth step in the Change Management process is implement. If necessary, an acknowledgement is obtained from Release Management that the change has undergone and met any testing requirements. The approved implementation tasks are now performed and verified. Remediation (fallback/backout) is implemented if necessary. A post-implementation review (PIR) is conducted and the change is closed.

Process Steps	Role	Detail
4.1 Implement	Implementer, Change Owner,	Various tasks that have been scheduled may now be executed.
	Change Manager	Verification of the task completions must occur as part of this
		step.
4.2 Execute	Implementer, Owned By,	In the event that the change is unsuccessful, or is partially
Remediation/Backout	Change Manager	implemented and cannot be completed, the change may need to
		be backed out. In this case, the approved remediation plan(s) must
		be followed.
4.3 Authorize	Change Owner	The purpose of this task is to authorize the activation of this
Activation		release i.e., allow the implemented change to be utilized in the
		production environment.

2.6.6. Review and Close

The fifth step in the Change Management process is review and close. Review and Close the Change record.

Process Steps	Role	Detail
5.1 Conduct Post	Change Manager, Change	The purpose of this activity is to examine how the change was
Implementation	Owner, CAB	handled throughout its entire lifecycle, and whether it produced the
Review (PIR)		desired results. Opportunities to improve the implementation of
		similar changes in the future are tabled and action items assigned
		accordingly.
		A Post-Implementation Review (PIR) will be conducted in this task for
		Changes Closed-Unsuccessful, Emergency Changes, and random
		Closed-Successful Changes.
5.2 Verify and	Change Manager, Change	This step ensures that all information has been captured in the
Close	Owner	Change record. An appropriate closure code must be selected based
		on the results of the change.
5.3 Cancel CR	Change Owner, Change	This task has been reached because the Change Request has be
	Approver(s)	identified an no longer being needed and can be cancelled.



3. Stanford ServiceNow Environment

3.1 Creating a New Change Request

Change requests can be created in ServiceNow in a few different ways. You can navigate to **Change>Create New** in the Application Navigator to create a new change. Clicking on **Create New** will take you to the Change interceptor page where you specify what kind of changes is requested:



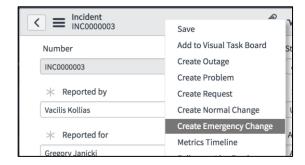
The Change interceptor provides different options for changes that you can create.

Note: Only members of the Change Management Group have the option to create **Informational** changes.

Note: During the roll-out from August to December, everyone will be able to create Emergency Change Requests from the interceptor.

Note: After the December roll-out only members of the UIT Change Management Group or the UIT ECAB group will see an option to create an **Emergency Change** from the interceptor. Others will be creating Emergency Change Requests from within the P1 incident that triggered the Change.

FUTURE: [Coming in December 2016 when Incidents are fully implemented in ServiceNow] Changes can also be created directly from an incident record by **right-clicking** on the grey heading of an incident. A **Normal Change** can be created from any incident, but an **Emergency Change** will only be available as an option for **Priority 1** incidents.



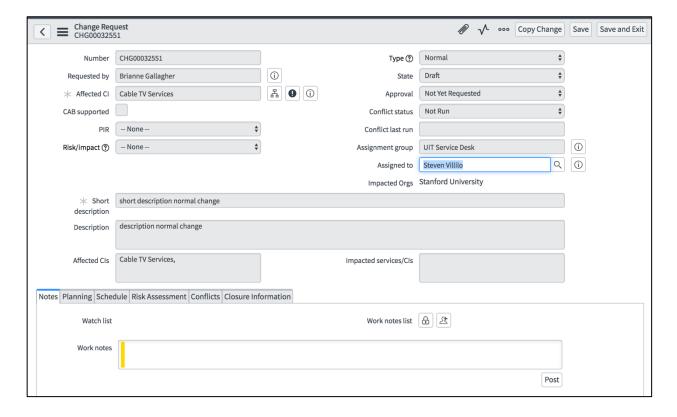
When a Change is created from an Incident, certain fields from the Incident will be copied to the Change (like **Affected CI** and **Short Description**) and the Change will be automatically linked to the Incident in the system.



Lastly, a **Normal change** can also be created from a **Problem** by right-clicking on the grey heading at the top of any problem record.



3.2 Normal and Expedited Change Form



When you first navigate to the Normal Change form, the following fields will be mandatory before the form can be saved: **Affected CI**, **Requested by**, **Short Description**, **Assignment Group**.

When the Normal Change form is saved for the first time, it will move to a state of **Draft**.

After you have thoroughly filled out the Change Request form, you can submit it for approval using the Request Approval button in the upper right. Before you submit a Change for approval, be sure to fill in all the drop down fields in the Risk Assessment tab, the Change Plan field and the Risk and Impact Analysis field in the Planning tab, and the Planned Start Date and Planned End Date fields in the Schedule tab.



3.2.1. Normal and Expedited Change form fields

- **Number** A unique number identifying the Change record in the system (auto-assigned)
- **Requested by** The individual who submitted the initial Change request. The person who reported or is affected by this request.
- **Affected CI** The configuration item or business service affected by the change.
- **CAB Supported** Flag set by Change Management Group to indicate Change Request was approved in a CAB meeting. If checked, CAB approval will be skipped for the Change request.
- **PIR (Post Implementation Review)** Members of the Change Management group select a value for this field. It is a dropdown field that indicates the status of the Post Implementation Review. Options are None, Required, In Progress and Completed. All Emergency Change Requests require a PIR.
- **Risk/Impact** A calculated field based on the answers supplied in the Risk Assessment tab. See https://uit.stanford.edu/service/changemgt/impacts_risks for more information.
- **Short Description** A short description of the Change Request.
- **Description** A detailed description of the change request. Enter what this change is and why this change is being made. Include the benefits of implementing this change and the impact if this change is not implemented.
- **Type** [auto-set based on lead times and type of change requested] The type of Change. Options are Normal, Expedited, Emergency, Informational, and Standard. Click on the field label (Type ®) to see full description of the different types of change.
- Approval This field indicates the status of the Change Request's approval. When the Change is first created and in Draft State, it will have an approval value of Not Yet Requested. When the first approval is requested from the Assignment Group's manager, the Approval state will change to Requested. The state of the Approval will only change to Approved after all approvals have been completed. If at any point the Change is rejected, the Approval state will be Rejected and the overall State of the Change Request will be reset to Draft.
- Conflict Status Indicates whether other Changes are scheduled to occur at the same time as the current change. Use the Conflicts tab lower on the form to check for and review conflicts. Conflicts are not "blockers" i.e. that the Change cannot be scheduled then, but should be reviewed and considered for possible impacts.



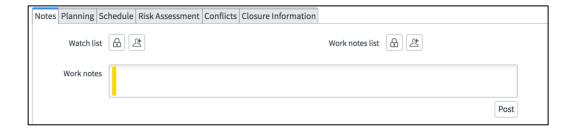
- **Conflict last run** Indicates the date and time when conflicts were last checked using the Conflicts tab. If the Planned Start Date, Planned End Date, or Affected CI change, the system automatically **checks for conflicts** again whenever the change form is saved or submitted.
- Assignment group The group assigned to implement the Change.
- Assigned to The individual stakeholder ultimately accountable for the end result of the Change, seeing it through its lifecycle. The person primarily responsible for working this Change Request.



- Impacted Orgs the organization(s) impacted by the Change; If either Stanford Health Care or Stanford Children's Health is impacted by the Change, the appropriate hospital organization is required to be selected.
- Impacted Services/Cis Additional services or configuration items impacted by the Change

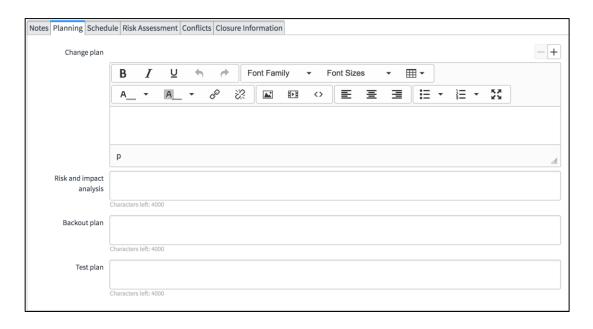
3.3 Change form tabs

3.3.1. Notes tab



- **Watch list** A list of people who will receive email updates on the Change request whenever *activity* is recorded on the change request.
- **Work Notes list** A list of people who will receive email updates on the Change request whenever *work notes* are added.
- *Work notes Internal notes about the progress and status of the overall Change; this field will be mandatory when a Change is closed unsuccessfully. The field is used to communicate information between individuals, groups or for reference history.

3.3.2. Planning tab

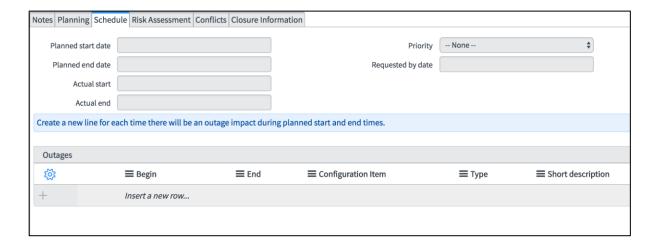




- *Change Plan Use this field to outline all the steps required to implement the Change, unless they are included in the Change Tasks. If there are Tasks associated with the Change, outline them here. The Change Plan field is required before the Change can be submitted for Approval.
- *Risk and Impact analysis Enter potential risks associated with the Change. This field is required before the Change can be submitted for Approval.
- **Backout plan** Enter the steps to revert the Change to its state prior to implementation. Include information about when the Change can be backed out.
- **Test plan** Enter the details of the planned and completed tests prior to implementation that indicate potential success of the Change. Also enter the details of the planned post-implementation test steps.

3.3.3. Schedule tab

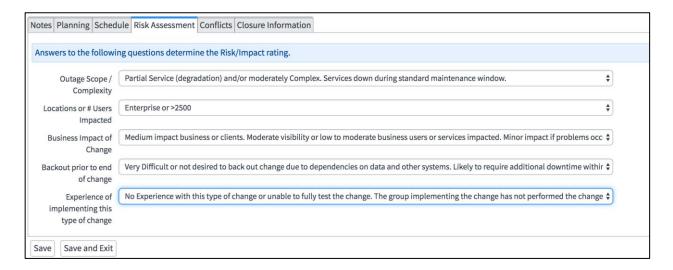
- *Planned Start Date- Date any work will begin in production; required before the change can be submitted for approval.
- *Planned End Date Anticipated date the work will be completed by; required before change can be submitted for approval.
- **Actual Start** Actual date/time work was started. If null, this is set by the system on click of "Begin Work" button.
- Actual End Actual date/time work was completed. If null, set by system on click of "Close."
- **Priority** Assists with planning purposes if multiple Changes conflict.
- **Requested by date** Date the Change must be completed by if there is a delay in implementation. Kind of a "drop dead date" if delays occur.





3.3.4. Risk Assessment tab

Note: All fields in the Risk Assessment tab must be filled in before the Change Request can be submitted for approval.



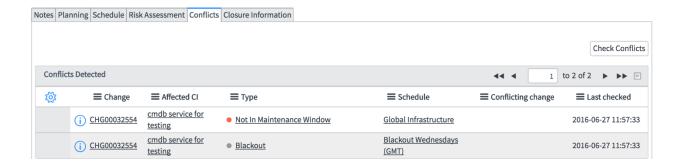
- *Outage Scope/Complexity Describes the scope and complexity of the Change. (e.g., a change which has dependencies on other services, clients need to be notified in advance, and other groups and time outside of the standard maintenance window is required.)
- *Locations or # of Users Impacted Indicates the number of users who will be impacted by the change or potentially impacted if a Change has unintended consequences. Estimate as best you are able.
- *Business Impact of Change Describes the visibility of change to clients and the profile of clients being impacted.
- *Backout prior to end of change Ease and duration of effort required to back-out of a Change.
- *Experience implementing this type of change Experience implementing this type of Change in the past.

3.3.5. Conflicts tab

The Conflicts tab displays other changes occurring at the same time as the current Change record
that could potentially impact scheduling. They should be reviewed and considered for possible
impacts but do not prevent the change from being submitted.

The Conflict status and Conflict last run fields are explained above.





3.3.6. Closure Information tab



Note: The **Canceled** button will only be available when the Change request is in Draft state to the assignment group.

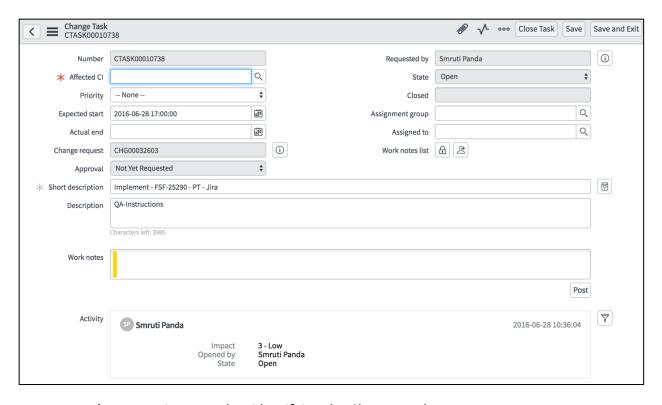
- Close code Code entered upon closure of a Change.
 - o Closed Successful Change was fully implemented with no issues
 - Closed Unsuccessful Change was implemented but issues occurred or Change was backed out
- Close notes Information entered upon closure of a Change regarding the overall experience of the Change or deviations from the original Change plan.

After a Change has been closed, all fields on the record will be read only.



3.4 Change Tasks

Change Tasks are optional but can be created as needed. They are typically a set of necessary actions assigned to a group outside of the main group handling the Change Request. An example might be a Change Task assigned to the DBA group to take a full database backup before the Infrastructure team can patch a system. The separate Change Task can be created and assigned to the DBA group and they can use that to record their taking the backup. They then mark that task "Complete" and then the Infrastructure team knows that action has been taken. The master Change Request cannot be marked Closed until all related Change Tasks have been marked "Closed".



- **Number** A unique number identifying the Change Task
- Affected CI The Configuration item/service affected by the Change Task
- **Priority** How important the task is for completion of the overall Change
- **Expected Start** Expected date/time that work will begin
- **Actual End** Actual date/time work was completed. If blank, the system sets this field to the date/time that the "Close Task" button was clicked.
- Change Request Change Request from which Change Task was assigned
- **Approval** Current state in the approval process
- Short description A short description or title for the Change Task
- **Description** A detailed description of what the Change Task is and why it is being assigned
- Requested by The person who created the Change Task



- State Where the task is in its lifecycle. Options are Open (default for new tasks), Work in Progress, Closed Successful, Closed Unsuccessful, and Closed Canceled. Only the person assigned to the Task will be able to change its state.
 - Note: For non-Emergency Change Requests in a State of Scheduled or Work in Progress, only the associated Change Task's assignment group and the Change Management Group will be able to change the State of the Change Task.
 - For Emergency Change Requests in a State of Draft or Assessment, only the associated Change Task's assignment group and the Change Management Group will be able to change the State of the Change Task.
- Closed The date/time that the Change Task was completed
- **Assignment Group** Group assigned to resolve this Change Task
- Assigned To The primary person assigned to complete the task. Members of the Change Task
 Assignment Group will be able to change the Assigned To in the event that person is
 unavailable to complete the task. Before a parent Change Request can be submitted for
 Approval, all associated Change Tasks should have an Assigned To user.
- **Work notes list** Individuals who will receive email notifications whenever the Work Notes field on the Task is updated with new information.
- **Work notes** Information related to the Change Request or Task. Work notes are used to communicate information between individuals and groups or for reference history.

3.4.1. Adding/modifying Change Tasks

Who	When	What
Assignment Group members	Change Request in Draft	Add, delete, modify
Assessor (Assignment Group Manager)	Change Request in Assessment	Add, delete, modify
Change Management Group members	Change Request in any State but Closed	Add, delete, modify

Note: if any Change Task is **Closed Unsuccessful**, the parent Change Request will require Post Implementation Review before it can be closed. All Change Tasks should be closed before the parent Change Request is closed. The **Work Notes** field on the Change Task record will be mandatory upon closing the Task.

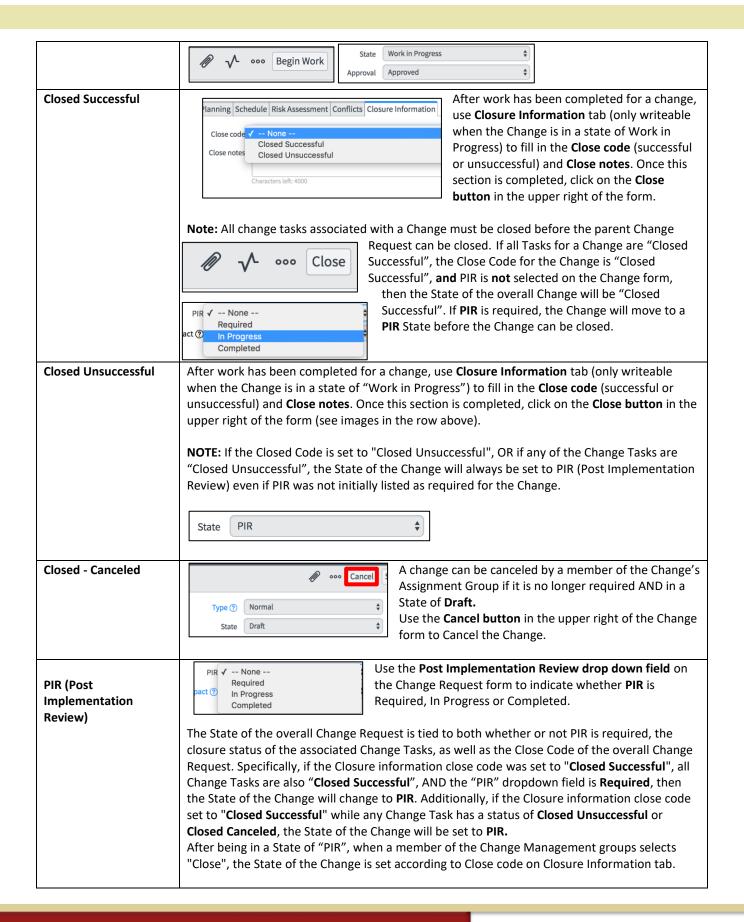


3.5 Normal and Expedited Change Workflow

The states and buttons outlined below apply to Normal and Expedited Changes.

State	Description
Draft	The Change request has not been submitted yet for review and authorization. A change requestor can save a change request as many times necessary while building out the details of the change prior to the submission. This is the default value when the Change is saved. Press the Request Approval button to move the Change onto its next State. State Draft Poralt Poral
Assessment	During this state, the Assessor (Assignment Group Manager) reviews the change details. State Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approval Requested The Assessment Approx The Assessment Approx The Assessment Approx The Assessment The Ass
Submitted	After the change has been approved by the Assessor, the change will enter a Submitted state and trigger a secondary approval to one of the approvers of the Affected and Impacted CI. Additional approvers will be generated based on the calculated Risk/Impact of the change. If the change is approved, the next approval, CAB, will be generated. Upon review in CAB, at least one member from the UIT Change Management Group will need to approve. If CAB Supported is checked on the change form, CAB will not generate as an approval. It indicates that the change has been reviewed and discussed at the weekly CAB meeting and therefore, already authorized. Note: before the Change Request has been approved, manual approvals can also be added by members of the Change Request's assignment group. To manually add an approval, scroll to the bottom of the Change Request form, click on the Approvers related list, then click on the Edit button.
Scheduled	The change is fully authorized and scheduled. State Scheduled Approval Approved Approved
Work in Progress	The planned start date has approached and the actual work to implement the change is being conducted. Members of the CAB, Assignment Group or the Assigned To user can use the Begin Work button in the top of the screen to indicate work is starting on the Change. Pressing this button automatically puts the Change in a state of Work in Progress.







FUTURE (ANTICIPATED REVIEW): 5% of successfully completed normal changes where PIR is NOT required will be randomly selected for a PIR.

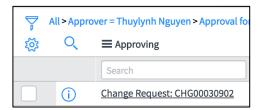
Note: only ServiceNow administrators can delete (entirely erase) Change records.

3.6 Approving a Change

3.6.1 Within ServiceNow

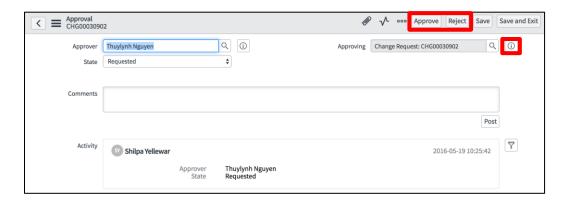
As a change approver, you can see the current change requests pending your approval by going to **Approval>My Change Approvals**.





After clicking on **My Change Approvals**, click into the to see the approval record and approve/reject the Change.

The approval record for each change will look similar to the form below:



Use the **Approve** and **Reject** buttons in the upper left of the screen to approve or reject the Change request. The bottom half of the approval record displays read-only information about the Change record for your reference as you decide whether to approve or reject the request.

Note: if you Reject the Change Request, you will be required to enter comments in the **Additional Comments** field.

Click into the ito the right of the **Approving** field to see the Change Request record directly.



Approval Form Fields

- Approver Person approving the change
- **State** Approval status of the Change
- Comments Comments added by Approver
- Approving Reference field that displays the number of the Change Request being approved

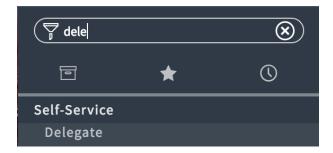
3.6.2. Via Email

Both Change Assessors and Change Approvers will also receive an email notification of Change Requests requiring their assessment or approval. That email notification is intended to have sufficient information that allow approved assessment or approval. Click on either the "Approve" or "Reject" button in that email notification and an email will be redirect to ServiceNow to take that action.

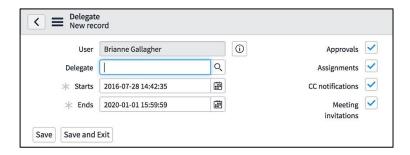
3.6.3. Delegating Authority

You can choose someone to be your delegate while you are away from work.

1) Go to Self-Service>Delegate

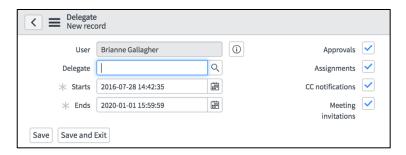


2) Clicking on **Self-Service>Delegate** takes you directly to a new Delegate record like the one below.





3) Once in the Delegate record, enter the user who will act on your behalf by clicking on the reference icon to the right of the **Delegate** field. Then enter the **Start** and **End** times between which the Delegate will act on your behalf. Note that notifications sent prior to the time that the Delegate record is created, regardless of the time entered in the **Starts** field, will not be sent to the Delegate.



- 4) Use the checkboxes to indicate the type of permissions the delegate will have.
 - a. **Approvals** the delegate can approve requests for you and see approval assigned to you in their My Approvals queue.
 - b. **Assignments** the delegate can view and work on tasks assigned to you; the delegate will see tasks assigned to you in their My Work queue.
 - c. **CC notifications** the delegate receives a copy of email notifications sent to you, except for meeting invitations

On relevant records, you will **still** be listed as the **Assigned to** or **Approver**, but your delegate(s) will be able to edit the records and perform approvals on your behalf, as long as the delegate's security roles in the system do not preclude his/her access to doing so. The delegate does not inherit your security roles in the system when their delegate record is created. This means that you should only delegate tasks to users with a level of system access/permission that is similar to or greater than yours.

Notes:

- **You can enter multiple delegates for the same time period by creating more than one delegate record for that time.
- **The system will only allow ACTIVE users to serve as delegates, even though all users will be able to be selected as delegates.

For additional information on Delegate functionality within ServiceNow, please consult the ServiceNow Product Documentation: https://docs.servicenow.com/bundle/geneva-servicenow-platform/page/use/employee-self-service/task/t-belegateApprovalsTasks.html



3.7 Emergency Changes

Emergency changes cover both situations where the impact to service has already been experienced (a P1 Incident ("Service Alert") and situations where the impact to a service is imminent if action is not taken. These changes do not follow the complete lifecycle of a Normal change due to the speed with which they must be implemented and authorized. Emergency changes are formally submitted and approved after the fact. As a result, the process flow of an Emergency change differs slightly from that of a Normal change.

Emergency Changes will almost always be created from a **Priority 1 incident** by right-clicking on the incident form heading, as outlined in the Section above on **Creating New Changes**.

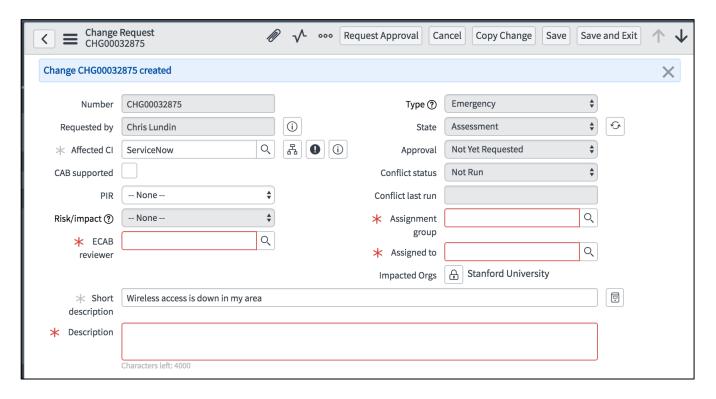
Unlike Normal Changes, which can have three levels of approval prior to implementation, Emergency Changes must only be **approved by the Assignment Group manager and a member of the ECAB** (UIT Emergency Change Management Group).



3.7.1. Emergency Change form

AUGUST 2016: Clicking on **Create New** will take you to the Change interceptor page where you specify what kind of changes is requested (Emergency). You can also navigate to **Change>Create New** in the Application Navigator to create a new Emergency change.

FUTURE (after December 2016 go-live): After right-clicking on the heading of a Priority 1 incident and selecting "Create Emergency Change," you will be taken to the Emergency Change form.



In general, the **Emergency Change** form will look much like the Normal Change form, with some important differences.

The Emergency Change form has a field for **ECAB** (Emergency Change Approval Board) Reviewer. In this field, select the person who must approve the Change.

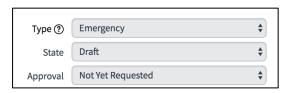
- (1) Before approval can be requested, you must fill in the following fields:
- **ECAB Reviewer** (you should select the appropriate Director-level position from the cognizant UIT workgroup which handled the Emergency change)
- Short Description (COMING DECEMBER 2016: auto populated from the P1 Incident)
- Description
- Assignment Group
- Assigned To
- The Change Plan and the Risk and Impact Analysis fields in the Planning tab
- The Actual Start and Actual End in the Schedule tab



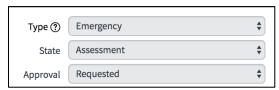
- All 5 drop down tabs in the Risk Assessment tab
- The fields in the Closure Information tab

Initially, the Emergency Change will be in a State of **Draft**.

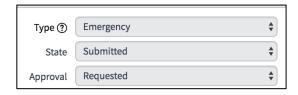
(2) After filling the Emergency Change form completely and after all Change Tasks are CLOSED, click on the Request Approval button (or simply save the form) to initiate the approval process.



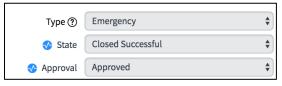
 After requesting approval, the State of the Change will change to Assessment and an email will be sent to the CAB (<u>uit-change-advisory@lists.stanford.edu</u>) for its information.



First, the Assignment Group Manager will assess and approve the Change. After the
Assignment group manager has approved the Change, the State of the Change will be
Submitted and a new approval will go to the ECAB Reviewer indicated in the Change
Request.



- If at any point the Change is rejected, an email notification is sent to the Assigned To user and the Change is placed back into **Draft** status.
- If the ECAB Reviewer approves the Change, the Change will be considered fully approved.



- (3) The next State of the Change is **PIR** (Post Implementation Review), required for all Emergency regardless of the Closed code. The Close code and close notes are also required for Emergency changes and are validated upon click of "Close" button.
- (4) After being in a State of **PIR**, members of the Change Management Group can manually change the state of the PIR field and the State field and close the Change request.



4. Standard Changes

Standard changes are considered routine. This is a change that:

- is frequently implemented
- has repeatable implementation steps
- is considered low risk, and
- has a proven history of success.

Standard changes are considered pre-approved and follow a shorter lifecycle omitting the peer approval and CAB authorization steps. They proceed directly into a scheduled change ready for implementation. Standard changes are stored in a catalog of templates approved by the UIT CAB to make the process of raising them more efficient. This also enables the CAB to control the changes they have authorized as standard.

Change Requestors can request new Standard Change Templates or use an existing template to create a new Standard Change Request. Instructions for both are below.

4.1 Requesting A New Standard Change Template

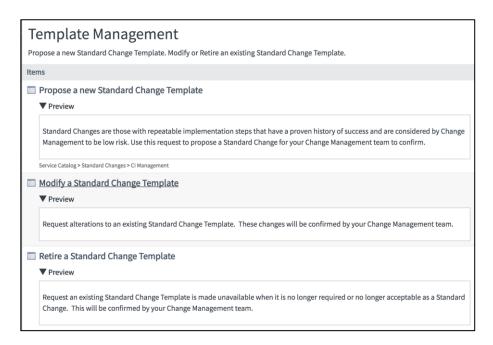
- (1) Navigate to **Change > Create New** and select "Standard" from within the Change Request interceptor. You will be taken to the Standard Change Template Library, where you can choose from existing Standard Change templates or propose a new template for a Standard Change.
- (2) Select the **Template Management** category within the library.

Template Management

Propose a new Standard Change Template. Modify or Retire an existing Standard Change Template.

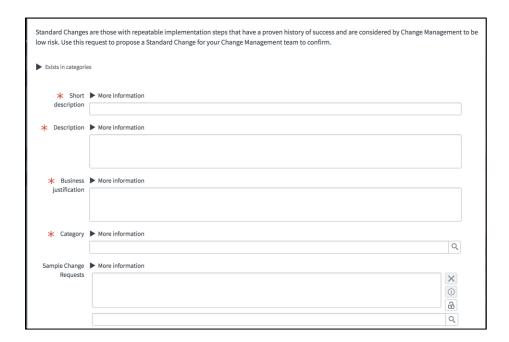


o Doing so will take you to the page below:



- If you select a "Propose a New Standard Change Template," you will be taken to the form below:
- NOTE: From the Template Management page, you can also you select Modify or Retire
 a Standard Change Template, and you will be taken to a form where you will indicate
 the template you would like to modify/retire as well as the business justification for the
 modification.





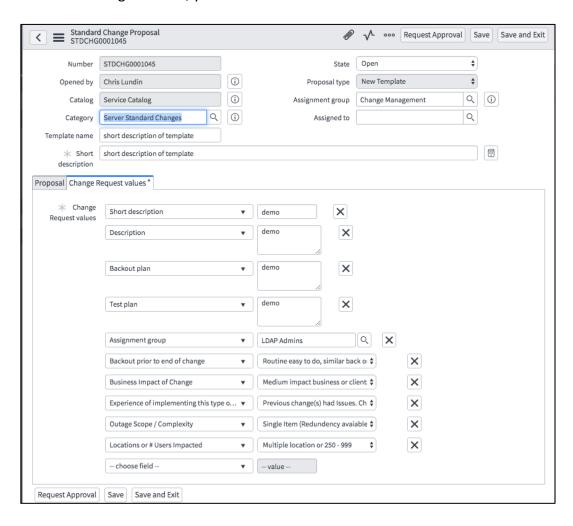
(1) Use the **top of the form** to provide details about the template request, like a Short Description of your request, a Business Justification, the Category in the Standard Change library where the template should exist, and Sample Change Requests that would have benefited from the template.



(2) Use the **lower half of the form** to fill in the values of the actual Standard Change template. These values will be the default values of all future Standard Changes using this template.

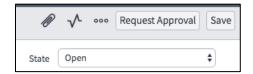


- (3) When you have finished completing the form, you can immediately **Request Approval**, or **Save** the form to continue modifying your values. In order to **Save** the form, the Short Description, Description Business Justification, and Category fields at the top of the form **MUST** be filled in, though the other fields can be left blank. However, before you can **Request Approval** for the proposed template, **ALL** of the Change Request values (lower half of the form) must be filled in.
 - o After saving the form, you will be taken to a view of the form like this:



- Use the Change Request Values tab to continue to modify the values in your proposed template.
- (4) Once you are ready to submit your template request for approval, click on **Request Approval** button, which is now in the upper right of the form. After you have requested approval, the **State** of the proposal will change from **Open** to **Work in Progress.**





4.1.1. Review and Approvals for New Standard Change Proposals

(1) After requesting approval, the template proposal will need to be approved by the Change Management group. Part of their approval process will be review by the CAB at its weekly meeting.

After "Request Approval" has been selected, the request for the Standard Change Template will be routed to the Change Management Group to be presented at a future CAB meeting. At the CAB meeting, members of the CAB will review the requested Standard Template Request, review prior normal Change Requests submitted as evidence of frequent, repeatable, no impact, etc. Upon the CAB authorizing the Standard Change Request, members of the Change Management Group will authorize the change on behalf of the CAB, and it will be selectable from the Standard Change Template Library as described in Step 3.2 following.

- If one of these group members approves the template, the template request will be
 Closed and the template will be added to the Standard Change library for use for future
 Standard Change requests.
- o If the proposal is **Rejected**, it will be **Closed** and will **NOT** be published to the Standard Change Library.

To see your Standard Change Proposals, go to **Change>Standard Change>My Proposals** within the Application Navigator.



4.2 Creating a new Standard Change (from the approved template)

(1) Navigate to Change > Create New and select "Standard" from within the Change Request interceptor. You will be taken to the Standard Change Template Library, where you can choose from the existing Standard Change templates. Select a Standard Change from within the available options (e.g., Standard Changes > Network Standard Changes > Add network switch to datacenter cabinet).



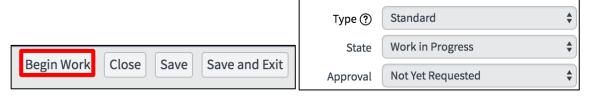
- (2) You will be taken a Standard Change form with many of the values auto-populated for you from a template. Select the Configuration Item/Service impacted by the Change (Affected CI), whether or not the Change is CAB supported, and the person to whom the Change should be assigned (Assigned To) as well as the necessary fields within the Planning and Schedule tabs.
 - The group assigned to the Change can add appropriate Change tasks as necessary.
 - The individual Assigned to the Change can Submit the Change when all of the necessary information has been supplied.



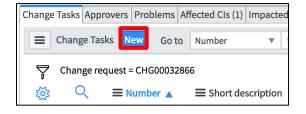
- Note: In order to submit the change, all of the values in the Risk Assessment tab as well
 as the Assignment Group field must be filled in.
- (3) After the Change has been submitted, it will move to a state of **Scheduled**. After a Change has been submitted, the fields in the **Risk Assessment tab** are no longer editable.



(4) Use the **Begin Work** button in the upper right to begin work on the change. **No approval is** necessary for Standard changes.

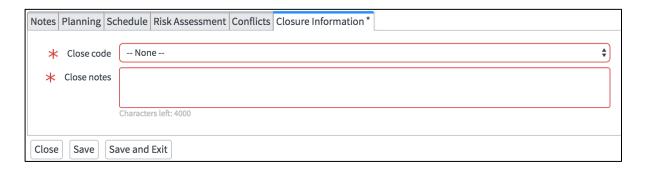


- Once work has begun on the Change, the State will change to Work in Progress.
- (5) As with all other Change types, **Tasks** can be added from the related list at the bottom of the Change form by clicking on the **New** button and filling in the details of the Task(s).





(6) After the Change, including the associated Change Tasks, have been completed, indicate whether the Change requires PIR and use the CLOSE button to close the Change. Before closing the change, you will have to fill in the **Close Code** and **Close Notes** fields within the **Closure** information tab.



 As was the case with Normal and Emergency changes, if the Close Code of the Standard change is Unsuccessful, the next State of the change will be PIR.

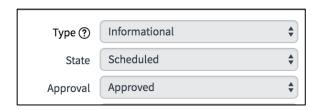
5. Informational Changes

The Change Management Group members (a small number of individuals) can submit **Informational Changes**. An **informational change** is not being implemented by Stanford University IT and is used only to inform CAB members of times and possible impacts. These changes have no approval since Stanford cannot impact timing or scope. Some examples might include vendors (Comcast, BlueJeans, WebEx, etc.) or non-UIT campus members (Land, Buildings and Real Estate, Residential & Dining Enterprises, etc.)

- (1) Informational Changes begin in a State of **Draft**. Before an Informational Change can be submitted, the following fields must be completed:
- Affected CI
- Short Description
- Description
- Assignment Group
- Assigned To
- The Change Plan and the Risk and Impact Analysis fields in the Planning tab
- The Planned start date and Planned end date in the Schedule tab
- All 5 drop down fields in the Risk Assessment tab
- (2) After all the necessary fields are completed, the Change Management Group can submit the change using the **Submit Change** button.









(3) Informational Changes will automatically be scheduled and approved. Change Management Group members can use the **Begin Work** button to begin work on the Change. At that time, the Change will move to a State of **Work in Progress**.



(4) Fill in closure details in the Closure Information Tab and use the **Close** button to Close the Change. Like other types of Change, the next State will be **Closed Successful** if the Change and its associated tasks were closed successfully and PIR was not required. Otherwise, the next State will be **PIR**.



 After PIR is complete, change the PIR field to Completed and then click on the Close button once more.



6. Change Notifications

The following Notifications will be sent regarding Change Records.

Recipient	Condition
Change Approver	A Change Request of any type requires approval
Assigned To,	A Change Request of any type has been approved
Change Management Group	
Assigned To,	A Change Request of any type has been rejected
Change Management Group	
CI Subscriber	A Change Request affecting a Configuration Item I subscribe to has been approved
Change Management Group &	When an Emergency Change request moves to Assessment State
CAB	
Change Management Group	When a Change Request of any type has been fully approved
Assigned To	A Change Request has been assigned to you
Assignment Group	A Change Request has been assigned to your group
Assigned To	A Change Task has been assigned to you
Assignment Group	A Change Task has been assigned to your group
Assigned To,	A Change Request has been canceled
Change Management Group	
Assigned To,	A Change Task has been work noted (but not to Assigned To if Assigned To made the
Work notes list	work note update)
Assignment Group,	An unassigned Change Task has been work noted
Work notes list	
Assigned To	Change Task Canceled
Assigned To,	A Change Request has been work noted noted (but not to Assigned To if Assigned To
Work notes list	made the work note update)
Assignment Group,	An unassigned Change Request has been work noted
Work notes list	
Change Management Group	Standard Change proposal approved
Change Management Group	Standard Change proposal rejected
Change Approvers	Change Request has been withdrawn
Assigned To	Change has been set to Expedited



7. Reports and Status Pages

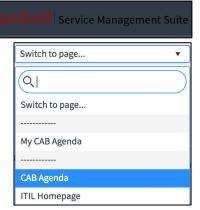
7.1 CAB Homepage

In order to better manage Changes, the **CAB Agenda** homepage is available and contains useful reports.

To get to your homepage, click on the **Stanford logo** in the upper left of the banner frame. Once on your homepage, use the drop down menu on the right side of the page to switch to the **CAB Agenda** page.

Once on the CAB Agenda page, you will see several key reports.

- (1) The first report on the page is a list report of the **Changes previously missed by the CAB** and includes details about the change requests like the date/time they were created, short descriptions, types, and priorities. The list includes requests that
 - a. Have a planned start date within the last 3 months
 - b. Are not CAB supported
 - c. Have a risk/impact rating of 1 or 2





- (2) The second report Upcoming Change Requests Previously Approved displays requests that
 - Are non-CAB supported (not yet reviewed by CAB) non-Standard changes
 - In a Submitted state
 - Have a Planned Start Date after today
 - Have a risk/impact rating of 1 or 2

These were discussed and authorized at a prior CAB meeting and are now in Scheduled mode awaiting the planned Start Date. They are listed on the FCR (Forward schedule of Change Requests). They usually are not discussed again at CAB unless someone raises an issue.



- (3) The next report **Upcoming Changes Reviewed** displays
 - Non-CAB supported (not yet reviewed by CAB) non-Standard changes
 - In a Submitted state
 - Have a Planned Start Date after today
 - Have a risk/impact rating of 1 or 2

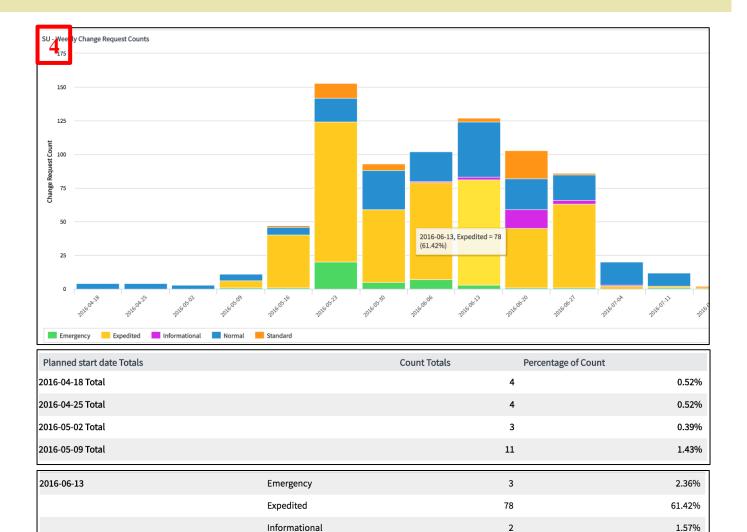


These are discussed at the weekly CAB meeting.

- (4) The next report on the CAB homepage looks like the below. The **Weekly Change Request Counts Report** displays Change requests
 - o Planned Start Dates by week within the last 3 months
 - Stacked by Type of Change (see the key at the bottom of the graph).

Hover over or click into a section of the bar chart to see details about the underlying data. The Planned Start Date Totals beneath the bar chart provide further information about the Change requests used to generate the report.

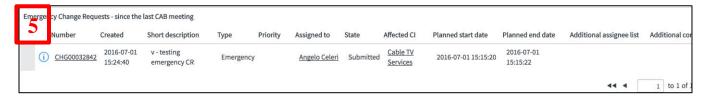




(5) The final report – Emergency Change Requests – since the last CAB meeting - displays a list of upcoming Emergency Change requests in a Submitted state.

Normal

Standard



These are reviewed at the CAB meeting, and any comments collected. Since Emergency Change Requests require PIRs (Post Implementation Reviews) those details may be reviewed by CAB.



32.28%

2.36%

41

8. Additional Information

For more information about using ServiceNow and ServiceNow Change Management, consult the ServiceNow Product Documentation available at the links below:

- Product Documentation main page: https://docs.servicenow.com/
- **Change Management in Geneva**: https://docs.servicenow.com/bundle/geneva-it-service-management/page/product/change-management/concept/c ITILChangeManagement.html
- Using Lists of Records: https://docs.servicenow.com/bundle/geneva-servicenow-platform/page/use/using-lists/concept/c-useLists.html
- ITSM Training and Stanford Documentation: https://navvia.stanford.edu/

