

Master the change management process

Make change a business enabler in your environment

Introduction

This process is a detailed explanation of how you can use ServiceNow® Change Management with the Now Platform® to maintain the highest possible levels of service quality and availability despite making changes to the environment.

Change management process scope

Change management includes managing all changes to the live environment, including:

- Services
- Technology

Change management objectives

Your change management process should:

- Provide a systematic approach to control the lifecycle of all changes
- Facilitate making beneficial changes with minimum disruption to IT services
- Control changes to your configuration management database (CMDB)

Regardless of your level of maturity with ServiceNow, follow this guide as closely as possible. At ServiceNow, we encourage using the same simple, lean ITSM processes that are reflected in our out-of-the-box designs.

In this guide, you'll find additional recommendations from ServiceNow Professional Services beyond the specific out-of-the-box (OOTB) functionality. You may add additional functionality to what's offered, but you should only do so in scenarios when you will achieve a required business outcome that can't be achieved using an OOTB method. When you follow this approach, your upgrade paths will be smoother, and you'll be better able to expand your use of the Now Platform.

This process guide will help you develop and maintain an effective change management process by explaining:

- The best practices for controlling the lifecycle of changes
- How to streamline the process to support effective change while managing risk
- How to integrate other processes with change management

BEFORE YOU START, YOU NEED:

- A process owner who is the authoritative voice for the organization and is able to make decisions
- A willingness to critically examine current working practices
- An understanding of any regulatory requirements your process must comply with

Terms and definitions

Change – The addition, modification, or removal of anything that could have an impact on an IT service

Change management – The process responsible for facilitating the implementation of changes and that:

- Achieves the goal of the change management process, which is to enable you to make beneficial changes with minimum disruption to business operations, while maintaining the best possible levels of service quality and availability
- Applies a consistent approach to risk assessment, business continuity, change impact, resource requirements, and change approval
- Maintains a proper balance between the need for a change and the timing of its integration into the live environment

Roles and responsibilities

Change management process owner

The change management process owner's primary objective is to own and maintain the change management process. The process owner is usually a senior manager with the ability and authority to ensure all stakeholders roll out and use the process.

Responsibilities

- Define the overall mission of the process.
- Establish and communicate the process's mission, goals, and objectives to all stakeholders.
- Document and maintain the process and its procedures.
- Resolve any cross-functional (departmental) issues.
- Ensure proper staffing and training for execution.
- Ensure the execution of the process consistently across the organization.
- Monitor, measure, and report on the effectiveness of the process to senior management.
- Continually improve the process.

ServiceNow role – There is no required role, but the process owner needs a login.

Change manager

The change manager is responsible for the day-to-day facilitation of the change process and focuses on managing and administrating all changes.

Responsibilities

- Check newly raised changes for quality.
- Validate the eligibility of each change, its implementation steps, applicable risk mitigations, backout plans, and planned schedule.
- Review standard change proposals for inclusion in the standard change catalog.
- Review unsuccessful changes for future improvements.
- Chair the change advisory board (CAB) meetings.
- Manage the CAB agendas.
- Facilitate emergency change approvals.
- Review the changes raised retrospectively for process compliance.
- Manage the overall schedule of changes.

ServiceNow role – The **change_manager** role is required.

Change requester/change implementer

The change requester/implementer is responsible for creating and implementing changes.

Responsibilities

- Raise change records to cover any work being done to a technology service.
- Explain why the change must occur.
- Provide detailed implementation steps.
- Provide pre- and post-implementation test information.
- Provide detailed risk information and mitigation approaches.
- Provide a backout plan when possible.
- Follow the approved plan at the approved time to implement the change.
- Review the change after implementation to confirm its success.
- Take the appropriate steps if the change didn't go as intended.

ServiceNow role – The **itil** role is required in ServiceNow.

Change approver

The change approver must decide if a change was planned well enough to mitigate its risk to services as much as possible.

Responsibilities

- Review the full contents of the change.
- Approve or reject changes based on their content.
- Request further information if you're unable to make a decision to approve or reject a change.

ServiceNow role – The **approver_user** role is required.

CAB manager

The CAB manager facilitates the CAB meetings or delegates the responsibility.

Responsibilities

- Review the full schedule of the change to identify any potentially conflicting changes.
- Approve or reject all changes discussed during CAB meetings.

ServiceNow role – The `sn_change_cab.cab_manager` role is required.

How changes are initiated

Directly in ServiceNow – IT support users can raise changes directly in the Change Management application as required.

From an incident – Incident managers, service desk agents, or other IT support staff can raise a change from an incident when they identify the fix required to resolve the incident.

From a problem – Problem managers, service desk agents, or other IT support staff can raise a change from a problem when they identify the fix required to resolve the problem.

Through the Service Catalog – A user can request a standard change by selecting the appropriate template from the standard change catalog.

From a request – Users outside of the IT department can make a request of IT that requires a change to deliver the request.

Automatically via integrations – Changes can be automatically generated via external systems such as vendor system integrations.

Change management lifecycle

The states in any ServiceNow application serve a specific purpose. They are designed to make it clear where in a process a particular record currently resides and to display its progress. States should represent a unique phase in a process where a specific set of related activities are grouped together and designed to achieve a particular outcome in order to move to the next phase of the process. Our recommended change management process has the following state model:

- **New**
- **Assess**
- **Authorize**
- **Scheduled**
- **Implement**
- **Review**
- **Closed**
- **Canceled**

Process overview

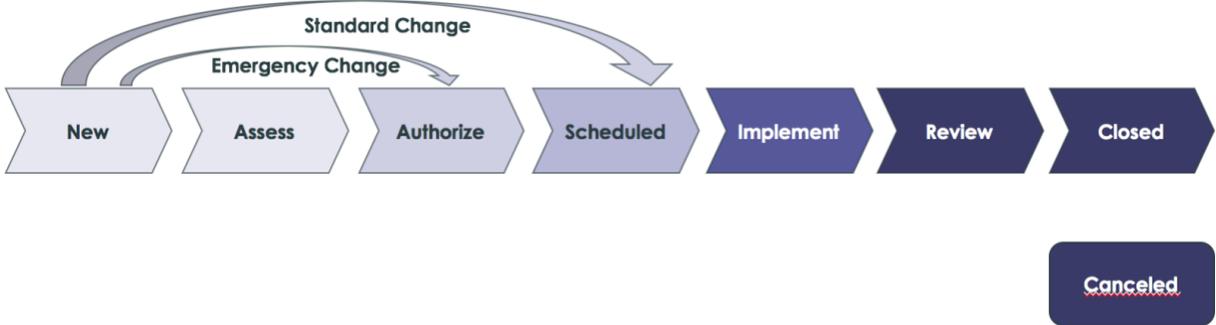


Figure 1: The change management process overview

Normal change process

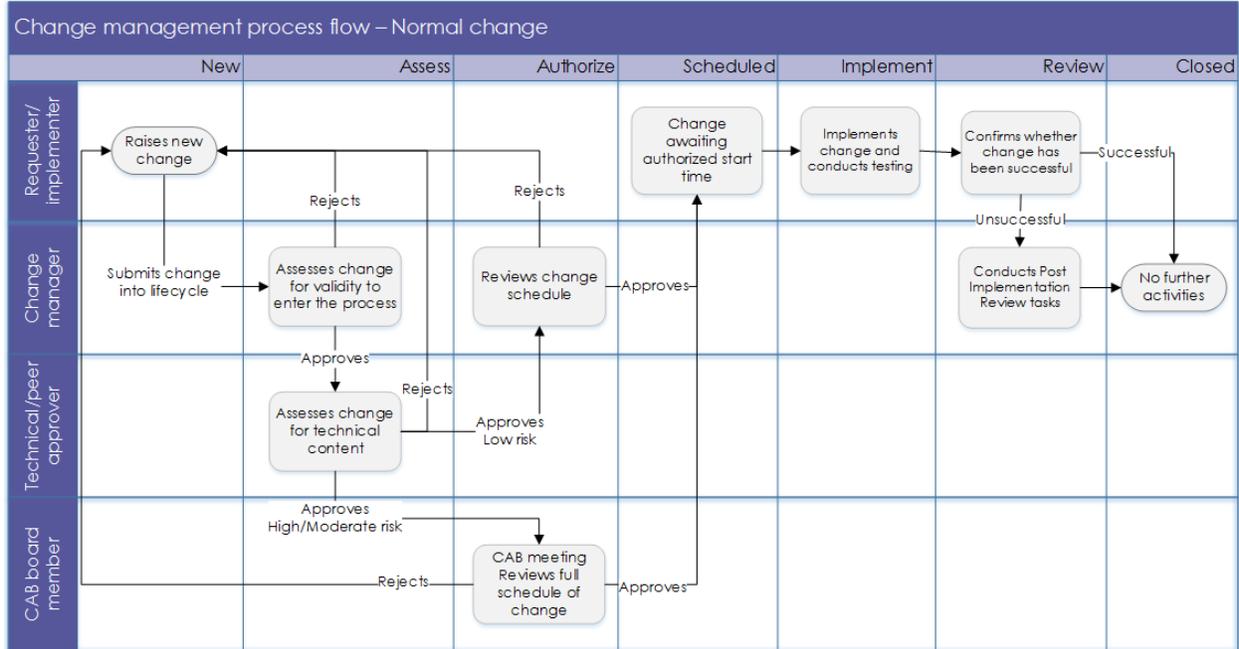


Figure 2: The change management process flow for a normal change

State – New

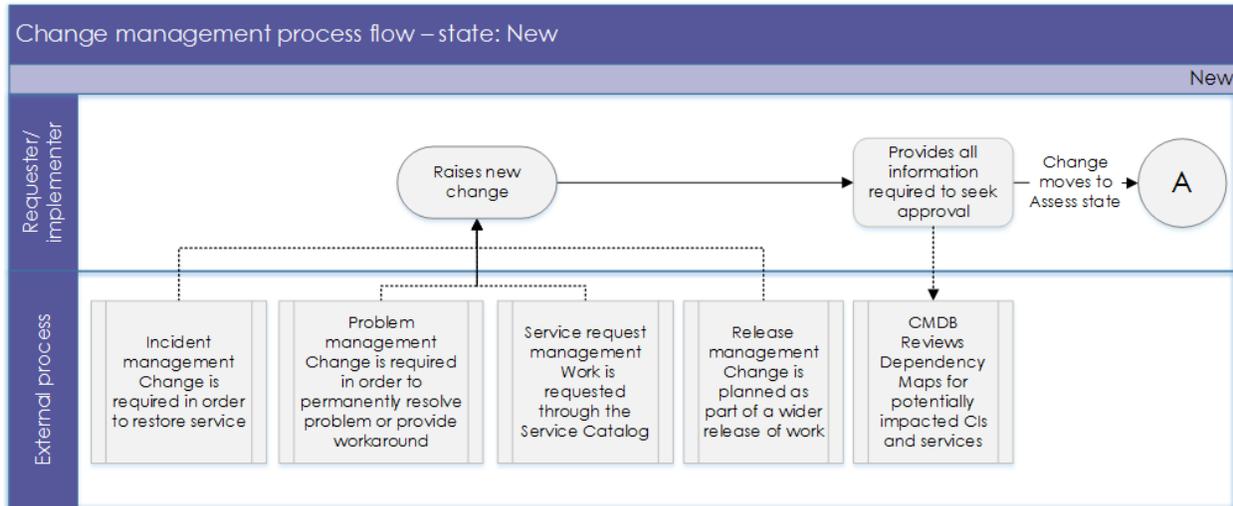


Figure 3: The change management process flow for the **New** state

When you first create a change, its state is **New**. At this point, it's effectively a draft of a change that you can update as many times as necessary. A change in the **New** state is not considered live in the lifecycle and isn't being viewed by anyone other than the requester raising it.

Fully populate all the required content. When you're ready to submit the change, click the **Request Approval** button.

Note: If you try to submit the change without completing all required fields, those fields will be highlighted (and you won't be able to submit the change) until you complete them.

ServiceNow recommends these mandatory fields:

- **Requested by**
- **Risk** – This is usually automatically determined rather than open for selection.
- **Description**
- **Assignment group**
- **Short description**
- **Justification**
- **Implementation plan**
- **Risk and impact analysis**
- **Backout plan**
- **Test plan**
- **Planned start date**
- **Planned end date**

If you use change tasks in the Change Management application, they may replace the need for the **Implementation plan**, **Risk and impact analysis**, **Backout plan**, and **Test plan** fields. This information could be stored in one or more tasks instead.

Create any tasks required during the lifecycle of the change in the **New** state either automatically or manually. When you do, you'll see the full picture of the work from the start, and you can plan resources appropriately when multiple groups need to be involved to complete a task.

Risk analysis

If you use risk assessment questions in Change Management, your users should be automatically prompted to answer these questions before they can submit the change into the lifecycle. The application includes several OOTB example questions. Here are some that customers commonly use:

- What is the complexity of the change?
- Has this type of change been done in the past successfully?
- How many users will be impacted?
- Does this impact a critical business service?
- How many resources or groups are involved in implementing the change?
- Is the change during a freeze period?
- How long does the change take to implement?
- How long does the change take to back out?
- How difficult is the change to back out?
- Will the change require an outage?
- Has this been implemented in a pre-prod environment?
- What would be the scale of impact if the change were not to go as planned?

Possible answers to the questions should be provided as multiple-choice options and should avoid subjectivity. For example, a question such as "What would be the scale of impact if the change were not to go as planned?" should not have answer choices like "Large," "Moderate," and "Small." Instead use specific, quantifiable choices, like "Less than 50 users," "50–1,000 users," "1,000–5,000 users," and "All users."

After you've populated all the mandatory information, click the **Request Approval** button to submit your change into the lifecycle.

State – Assess

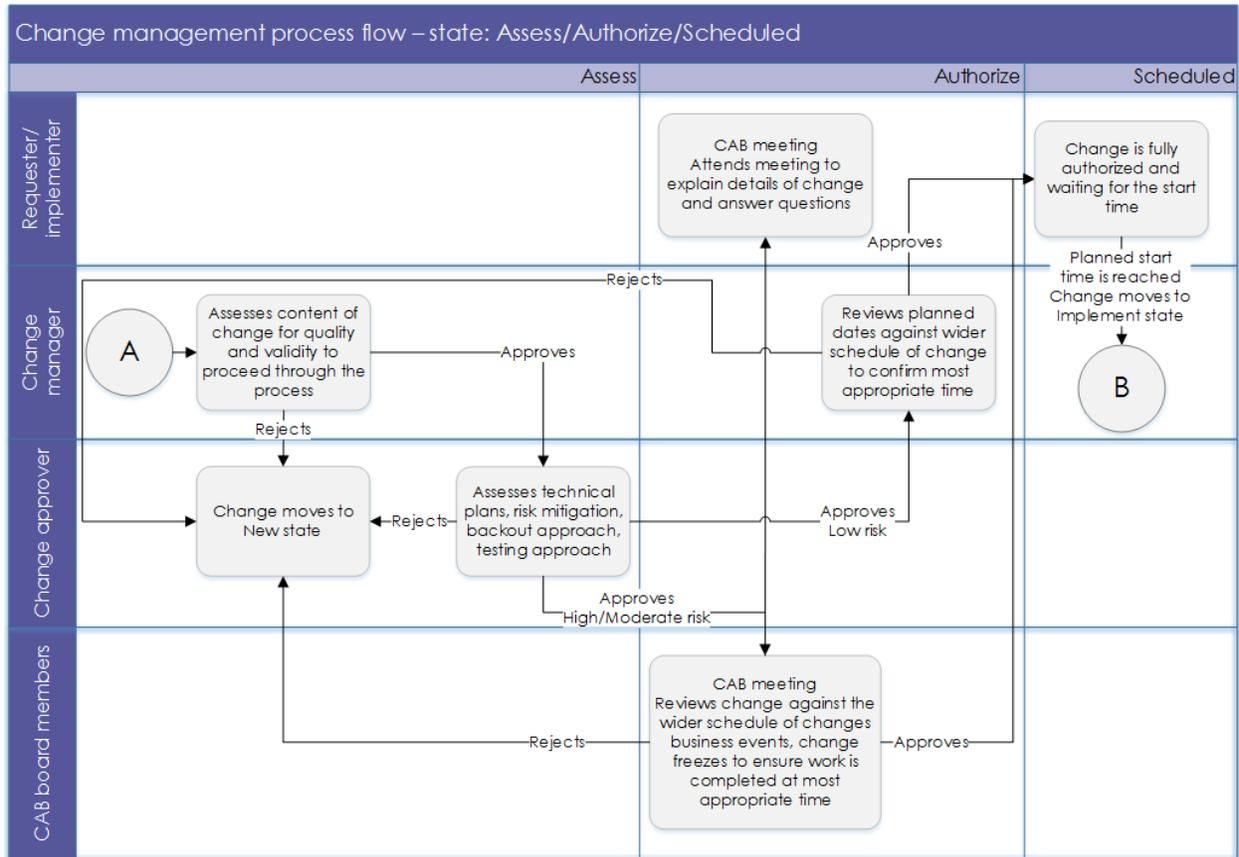


Figure 4: The change management process flow for the **Assess** state

When it's in the **Assess** state, the change receives the bulk of its approvals—all technical approvals should occur.

Although it's not demonstrated OOTB, ServiceNow customers often require a change manager to review a change before it's sent to any other team for approval. Here's the process:

1. The system requests the change manager's approval first when it's in the **Assess** state.
2. The change manager conducts a quality control check to confirm that the content can proceed to other approvers. The change manager's goal during this review is to make sure all the information the other approvers need to fully assess the change was provided and that its change window is suitable (so as not to waste the other approvers' time).
3. If the change manager rejects the change, they must include an explanation of why it was rejected in the **Comments** field of the approval record, and it goes back to the **New** state.
4. If the change manager approves the change, the state remains at **Assess** and all technical approval groups' approval is automatically requested in parallel.

The technical approvers are chosen based on the configuration items (CIs) included in the **Affected CIs** related list. But while the change manager first reviews the change, they can review the list of automatically added approval groups and manually add additional groups using the **New** button on the **Group Approvals** related list. The change manager must review this list as soon as they have completed their own approval process.

Expert tip

Always request approvals as groups rather than individual people so there can be no single point of failure in the process. As soon as one individual from the group has approved, then the group has approved and approval records from other members of the same group are no longer required.

If any approver rejects the change, they must include an explanation of why it was rejected in the **Comments** field of the approval record, and it goes back to the **New** state.

When an approver needs more information to make a decision, they set the state to **More Information Required** and manage the lack of information during an offline discussion (that is, *not* within the tool). Once the approver has the information they need, they can approve or reject the change.

Once all approvals are received, the change automatically moves to the **Authorize** state.

State – Authorize

Use the **Authorize** state primarily for CAB approval. All changes with a high and moderate risk automatically require CAB approval. You'll also use the **Authorize** state to confirm the scheduled dates for a change.

Hold a CAB meeting using the CAB Workbench functionality to make it simple. All required changes the CAB needs to review will display in a meeting record associated with the change on the **CAB Agenda Items** related list. If you need to discuss the change with multiple CABs, each meeting record will display.

During the CAB meeting, the members:

- Review the overall landscape of changes occurring during a particular period relevant to that CAB's meeting frequency
- Make a decision and either approve or reject the change within the CAB Workbench

The CAB members can also reschedule the change if its requested time frame doesn't work in the context of other scheduled changes.

If the CAB approves the change, it automatically moves to the **Scheduled** state. If the board rejects the change, it returns to the **New** state along with the board's reason for rejecting it.

Heads up!

You don't need to set up CAB meetings to discuss low-risk changes. If you need to run a final check of the planned dates against the overall schedule, request final approval within the Change Management application. If you don't, these changes will skip the **Authorize** state completely.

When all approvals are received, the change automatically moves to the **Scheduled** state.

State – Scheduled

No activities take place in the **Scheduled** state since it's fully approved for implementation. It will stay in the **Scheduled** state until its **Planned start date**. On its planned start date, click the **Implement** button to move the change to the **Implement** state.

State – Implement

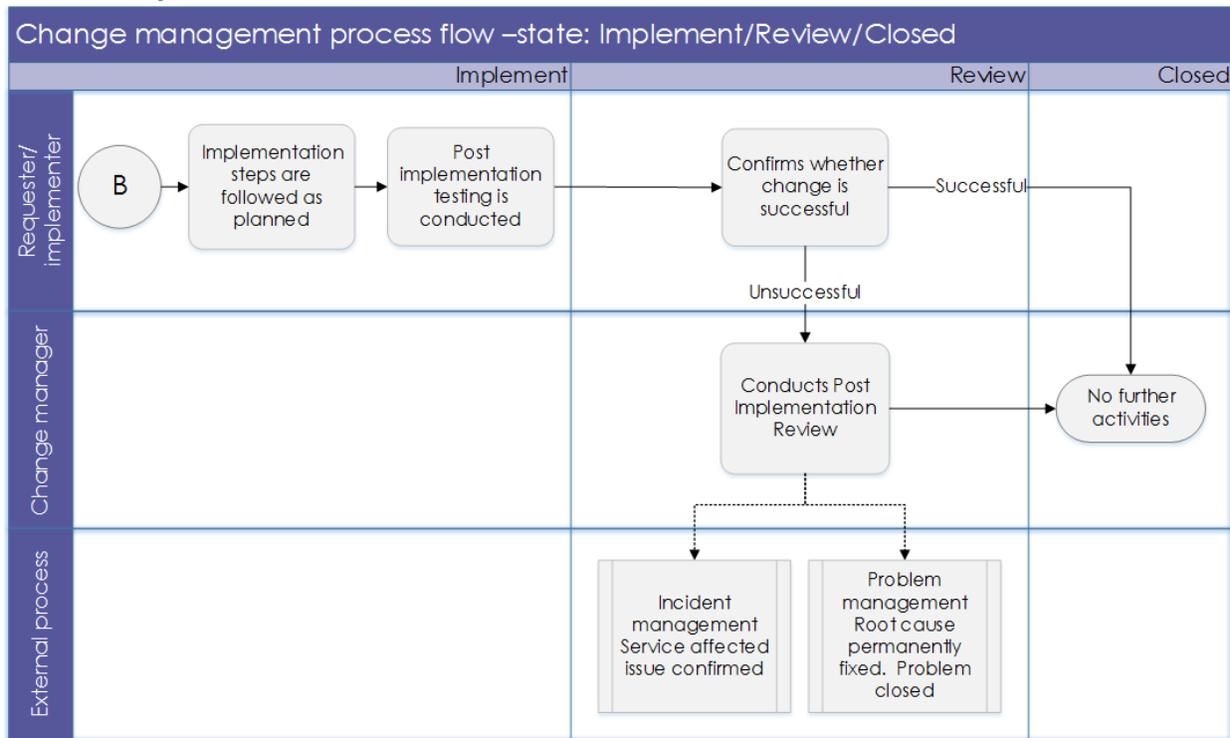


Figure 5: The change management process flow for the **Implement** state

The change is now in the process of being implemented. When the change moves to the **Implement** state, the **Actual start date** field is automatically populated with the date and time. Implementers can use the **Work notes** field or change tasks to capture all the activities taking place within the implementation.

When the implementation is finished, click the **Review** button to move the change to the **Review** state.

State – Review

You'll complete your post-implementation review activities during the **Review** state. When the change moves to the **Review** state, the **Actual end date** field is automatically populated with the date and time. The implementer will populate these mandatory fields:

- **Close code**
- **Successful**
- **Successful with issues**
- **Unsuccessful**

- **Close notes**

You can manually override the dates in the change record if they differ from the automatically populated dates.

While your change is in this state, if the **Close code** is not set to **Successful**, you can include additional review fields or tasks—particularly when your change management team needs to conduct a more thorough review of why the change didn't go according to plan. Apply what you learn to your future change management activities.

When the review is complete and the **Close code** is set to **Successful**, click the **Close** button to move the change to the **Closed** state.

State – Closed

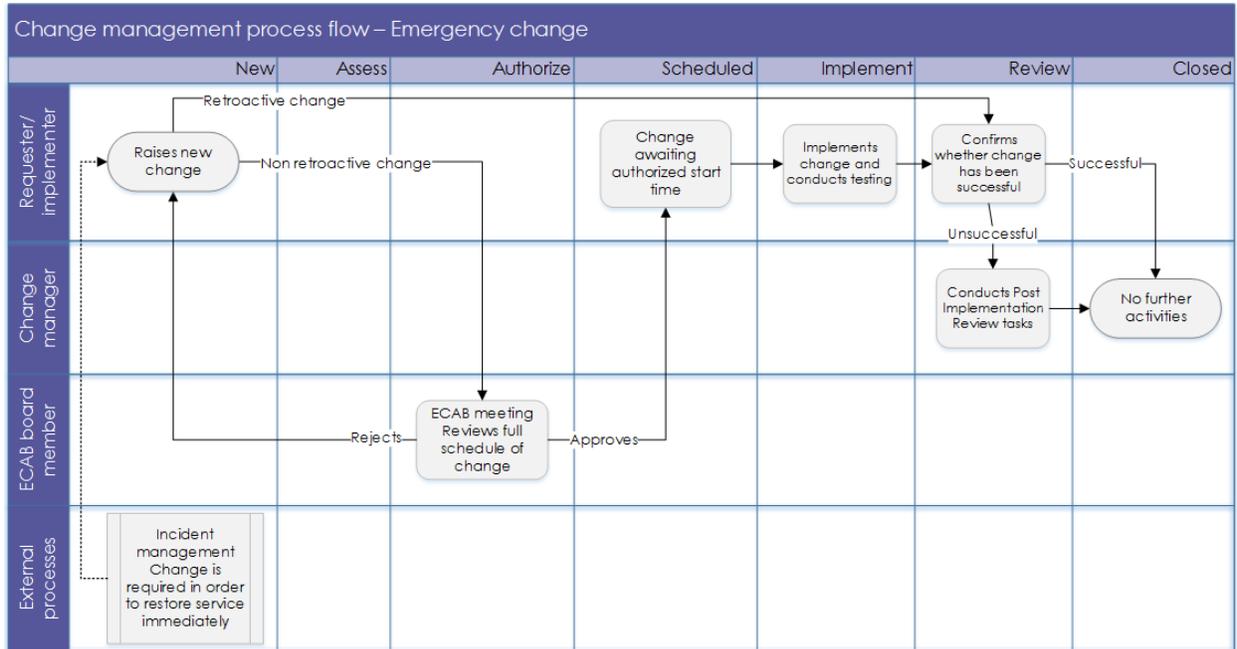
No further activity can occur against the change in this state with one exception—when the change was originally considered successful but subsequently discovered to be otherwise. In those situations, the change manager can return the change to the **Review** state to conduct a post-incident review (PIR) against it.

State – Canceled

You can cancel a change at any time. This means the change is no longer required and will not occur.

From the context menu, click **Cancel Change**. Provide a reason for canceling the change and click **Save**. The change request is cancelled and the reason for cancelling the change is added to the **Work Notes** field. This is captured in the **Activity Log**.

Emergency change process



Note: Retroactive changes are not an OOB feature. It has to be configured, if needed.

Figure 5: The change management process flow for an emergency change

Emergency changes are those that cannot follow the normal lifecycle and lead times since they are in response to a service that has already failed or one that is about to fail if no action is taken.

Approval

This is only required from an emergency change advisory board (eCAB) group that is capable of making a decision about the content and timing of the change on behalf of everyone who would normally approve. This single approval occurs during the **Authorize** state, which means the **Assess** state is not used at all.

Retroactive changes

In situations when it's critical to apply a change immediately without the opportunity to raise it as a record and seek approval, create it as a retroactive change under the emergency change process. Emergency changes allow the **Planned start** and **Planned end** dates to be in the past.

Move these changes immediately to the **Review** state since they're already implemented. ServiceNow recommends that the change management team undergoes a review to ensure the process is being used correctly and to understand why it was necessary to implement the change without approval first.

Standard change process

Standard change template lifecycle

Proposal Record

Template Record

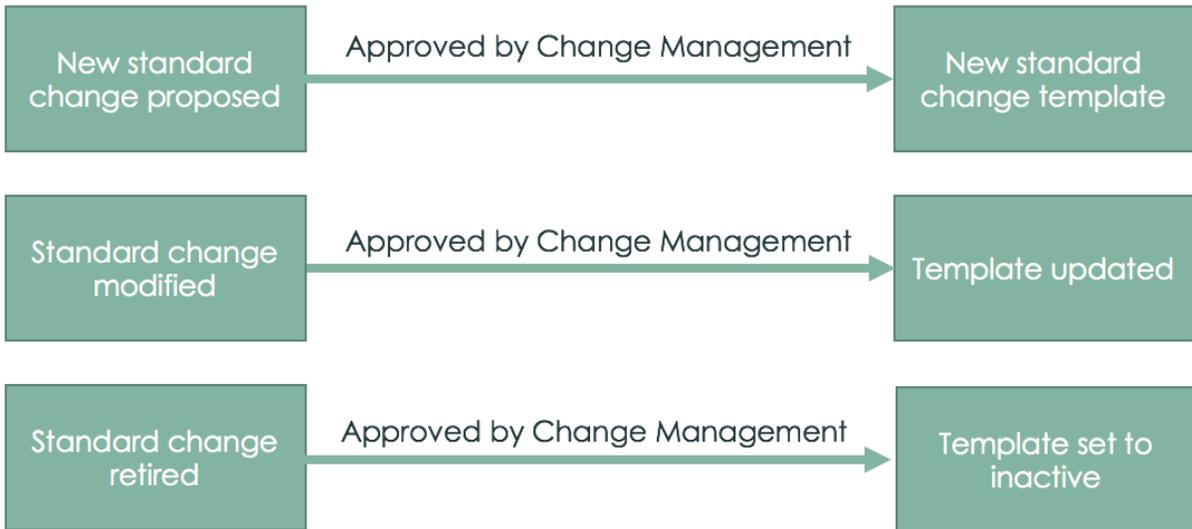


Figure 6: The lifecycle of a standard change

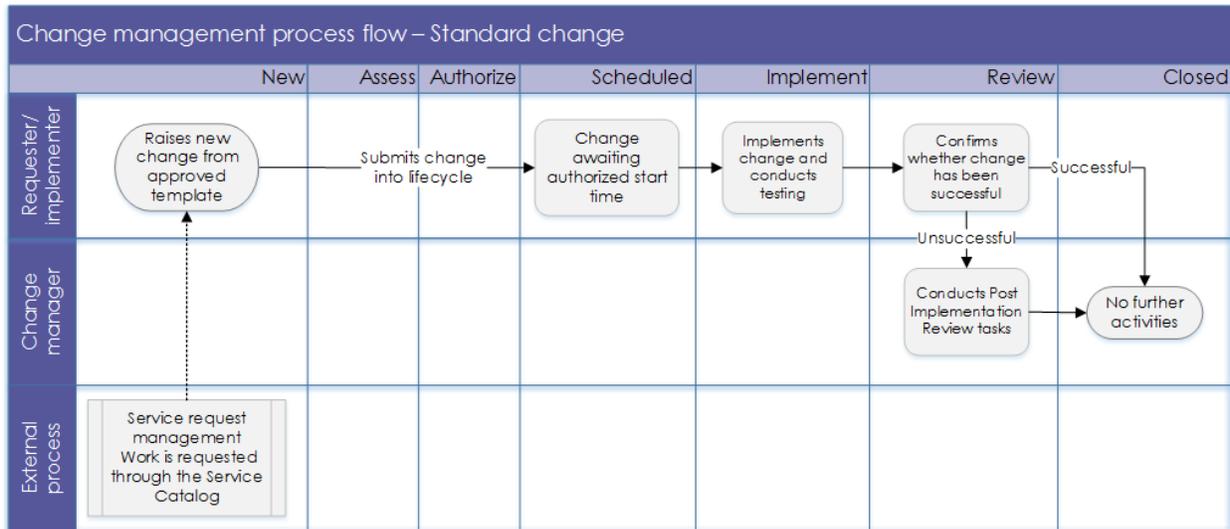


Figure 7: The change management process flow for a standard change

The standard change process offers a method to reduce some of the administration around changes. One goal of this process is to address the reputation change has—that it's bureaucratic and a barrier to users performing their roles. This process allows certain changes to

avoid a lengthy approval process and CAB discussions completely so they can be implemented much faster.

Standard changes are low risk and have repeatable implementation steps and a proven history of success. They're stored as standard change templates to give the change management team a means to track which changes are accepted as standard and to give its approval for them.

Standard change templates

You can propose a new standard change template through the Service Catalog—or directly from an existing change—as long as that change has not been marked as unsuccessful. Here's the process:

- Include all of the repeatable information about that change in your standard change template.
- Your proposal for the new template is routed to the change management team for review.
- If the team agrees that the change qualifies as a standard change, they approve the proposal and it is published into the standard change catalog as a template.

At this point, any user with the correct permissions can raise a new change from the template using prepopulated, uneducable data. They'll still be able to add variable data such as the **Planned start** and **Planned end** dates.

You can also modify or retire standard change templates using this same approach.

Monitor your templates over time to check how frequently they're used or to examine any changes created with the template that were unsuccessful. Use these periodic reviews to give your change management team the chance to decide whether the template should be retired or temporarily withdrawn.

Standard change lifecycle

Once you submit a standard change into the lifecycle, it goes directly to the **Scheduled** state. No approvals are requested since the template was approved. For a standard change that requires scheduling approval, make sure it occurs during the **Authorize** state.

Once the change is in the **Scheduled** state, it follows the same lifecycle as a normal change.

Overdue changes

Any change that has passed its **Planned end date** and is not in the **New**, **Review**, **Closed**, or **Canceled** state is considered an overdue change.

Your change management team should review these overdue changes to determine:

- **If they've been implemented** – The team must update the record to reflect this.
- **If the change didn't occur** – The change manager must make a decision on what to do with the change.

Other processes

Incident management

You can raise changes in order to resolve an existing incident. To link the two records together, raise the change directly from the incident. Once the change is implemented, you can review the incident to confirm it has been resolved.

On the other hand, a change might also cause an incident. When this happens, you can raise a new incident directly from the change, which will also preserve the relationship between the two.

Problem management

In most cases, when problems arise, you'll need to raise a change to implement a permanent fix or (at the very least) apply a workaround.

Raise the change directly from the problem record to maintain the relationship between the two. Once the change is implemented, you can review the problem to confirm it has been resolved.

Configuration management

The configuration management system underpins all records and activities related to any CI. It contains details of the infrastructure vital to services, CIs, and their relationships.

Within the change management process, the CMDB relates the CIs, including business services, to the change. This allows you to use the Dependency Views, which display the relationship between the selected CI and other CIs related up and downstream, highlighting the potential impact of a change.

In addition, CIs related to the change on the **Affected CIs** related list automatically determine which groups should approve the change.

Process governance

Measurement

Key performance indicators (KPIs) evaluate the success of a particular activity toward meeting its critical success factors. You can successfully manage KPIs either by repeatedly meeting an objective (maintaining the KPI) or by making progress toward an objective (increasing or decreasing the KPI).

The Benchmarks feature in ServiceNow gives you instant visibility into your KPIs and trends, as well as comparative insight relative to your peers' industry averages. You can contrast the performance of your organization with recognized industry standards, and view a side-by-side comparison of your performance with global benchmarks.

When it comes to change management, make the success of the process itself your primary concern, focusing on how efficiently changes can be processed while maintaining a high level of due diligence to reduce risks to services.

Dashboards and reporting

Process KPIs

Process KPIs provide information on the effectiveness of the process and the impact of continuous improvement efforts, and they are:

- Best represented as trend lines and tracked over time
- Monitored by the process owner

| Item | Purpose |
|--|---|
| Percentage of standard changes | This KPI measures process efficiency. The higher the total of standard changes is, the more efficiencies you've gained. |
| Average time from submission to Scheduled state | This KPI measures process efficiency. The shorter the average time is, the faster changes are moving through the process. |
| Percentage of unsuccessful changes | This KPI measures the effectiveness of the change management process. |
| Percentage of changes that caused incidents | This KPI measures the negative impact that changes have made to IT service quality. |

Table 1: Some process KPIs and their purpose

The takeaway

As you continue to improve your change management process, keep these things in mind:

- Change management should be seen as an enabler for the business—not an obstacle.
- Keep your approval levels at the minimum required to meet your organization's risk appetite.
- Use standard changes where possible to facilitate change within the organization.