1. CONTEXT

Change Management is defined within ITIL. Its role here is as a model or template for how other process areas should operate to align with the ITIL approach, where this is relevant for the University of Ottawa IT.

Change Management optimizes risk exposure, minimize any business disruption and to ensure that anything released into production goes right the first time. With these as the drivers Change Management should reduce risk and therefore deliver direct benefit to the business.

Change Management aims to ensure that all changes to the IT infrastructure are assessed and authorized in a controlled manner. All changes to service assets and configuration items are recorded in the ServiceNow.

The goals of ITIL Change Management are to:

1. Respond to the customer’s changing business requirements while maximizing value and reducing incidents, disruption and re-work;
2. Respond to the business and IT requests for change that will align the services with the business needs.

The ITIL Change Advisory Board (CAB) is a team that meets to assess an ITIL Change Request and recommend its authorization or rejection.
2. WORKFLOWS BY CHANGE CATEGORY

2.1. DATA CENTER CHANGES

This is the most common and well-understood change. Data center change is anything that impacts:
- Servers;
- Networks;
- Facilities;
- Business applications.

All of the components mentioned above are shared between many users, therefore changes to them can significantly impact the productivity of uOttawa IT. Because of this characteristic, data center changes have a more rigorous workflow than changes with less impact. Below is presented the steps for a typical data center change:

- **Change Request**
  - Clearly define the impact in the Justification field
  - Detailed Change plan with all steps
  - Detailed Backout plan with all steps
  - Detailed test plan

- **CAB Approval List**
  - Change manager
  - Senior server analyst
  - Senior network analyst
  - Senior application analyst
  - Application owner
  - Business representatives
  - Implementer of the change request

- **Task**
  - Review change request (thorough check and assessment) from both technical and business perspective
  - Prioritize requested changes
  - Determine the impacts and dependencies
  - Minimize inherent risks
  - Approval of the requested changes

- **Implement**

- **Review**
  - Clearly document change success
  - Capture screen shots / or / testing procedure results

For data center changes, the tasks must be created each time by someone with knowledge of exactly what will be required to implement the requested change.
2.2. WORKSTATION CHANGES

Changes to workstations normally don’t have any impact on the overall production environment. By definition, a workstation impacts only the one person assigned to use it, so these changes do not pose a high risk and do not need to be processed by the CAB.
2.3. DATA CHANGES

Data changes need to be reviewed by the CAB. A very small change to a key data element might impact how the entire organization can record transactions. Without change control, it would be difficult to understand who made that initial modification and why.

Data changes are changes to:
- Business data;
- Control Files;
- No alterations to the infrastructure, software, or environment.

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CAB Approval List
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Change Review
- Clearly document change success
- Capture screen shots / or / testing procedure results

Data changes are hard to detect and often are done without the controls imposed by the change management process. All university of Ottawa IT teams must follow the change process rather than going around the process.
2.4. DOCUMENTATION OR ADMINISTRATIVE CHANGES

Administrative or documentation changes are so simple that they do not need tasks, whether automatically generated or entered manually. The work flow is simply a matter of asking for the change and then making it (no CAB needed).

Documentation or administrative changes are changes to:

- Process documents;
- Operations “run books”;
- Knowledge base articles;
- SID documents.

Documents are a critical part of uOttawa IT environment and should be maintained as configuration items. Without documentation change control, there is no way to keep the CMDB updated. Thus, documentation and administrative changes should be considered a part of change control.
3. WORKFLOW BY CHANGE URGENCY

3.1. EMERGENCY CHANGE

When uOttawa IT services are completely disrupted because of a failure of one or more components, we don’t want to wait for a normal change approval cycle to get them restarted. Emergency changes are approved by the IT Manager oncall, who is responsible for the resolution of an ongoing incident (refer to the “outage resolution process v6(1).docx” for details of the IT Manager oncall duties and responsibilities). For more complex and high impacting incidents, the emergency CAB can be convened very quickly to provide an impartial view of the necessity of the change and the risk of implementing it as an emergency.

![Flowchart](chart.png)

**Note.** Emergency change cannot be approved or implemented without being related to a high-severity incident. This helps avoid the tendency to put a change into the emergency category simply because someone forgot to record it before it was implemented.
3.2. URGENT CHANGE (eCAB)

Urgent changes are changes that are not emergencies but that cannot wait for the normal cycle to play out. Because the typical CAB meets only once per week, situations arise in which someone wants to implement a change before the next CAB meeting. Clearly if the situation is urgent, the emergency change work flow could be used, but sometimes the situation allows for three or four days but not the full week that would be required to wait for the next CAB. This is where the urgent change work flow comes into play.

An eCAB is a subset of the full CAB, who can hold ad hoc meetings whenever one or more urgent changes need to be considered. Other than having a shortened approval cycle, the work flow steps for an urgent change are exactly the same as those for a nonurgent change.

One issue with urgent changes is that their use must be closely controlled. **Lack of planning should not be tolerated as an excuse to make all changes urgent.**
3.3. NORMAL CHANGE

A normal change is simply one that satisfies our standard approval and lead times. Most organizations use a normal change as the baseline or default length of change and follow the workflow defined by the change category as described earlier in “Workflows by Change Category.”

To minimize the issue with urgent changes as mentioned in the above section, uOttawa IT propose to implement the following normal change schedule for CAB:

- CAB Every Tuesday from 10:30 a.m. to 11:00 a.m.
- CAB Every Thursday from 1:30 p.m. to 2:00 p.m.