

Change & Release: Process Guidance Notes

Purpose – to outline the method used to successfully process Change Requests. A Change is defined as a planned event that will amend the status, function or version of any system or service under Change control.

Scope – the scope of this process covers the processing of change requests from receipt through to closure of the Change following successful completion or otherwise.

Process Guidance:

- A Request for Change (RFC) may originate from a number of sources for a variety of reasons. Such reasons include:
 - Request for new software changes or upgrades
 - Introduction of new hardware or upgrade of existing hardware
 - Changes or updates to processes or documentation
 - Changes to resolve underlying problems

The request for change is received through a Request for Change (RFC) form

2 There are three main types of change distinguished within the change process:

<u>Standard changes</u>: This change type is pre-approved and individual instances of standard changes do not require separate approval from either the CAB or Change Coordinator. Candidates for standardisation will always be low risk and probably of limited impact.

Emergency changes: An emergency change is unforeseen and must be dealt with immediately, for example, patching as a result of zero-day exploits. They are dealt with through the Emergency Change Management process.

Normal changes: All other changes.

- 3 Normal changes consist of the following sub types:
 - Minor change: A Minor change is defined as a change that has low impact on business and does not consume a lot of resources. The Change Coordinator may approve the Minor Changes. Minor changes are ideal candidates for standardisation.
 - Significant change: Significant Changes need to be assessed and approved by a Change Advisory Board (CAB). The members of the CAB are determined based on stakeholders who

- will be affected by the change. Based on the change plans and risk involved the CAB members will Accept or Decline a change.
- Major change: Major changes require senior management approval, at the level appropriate to the change. This may be up to the Directorate level or higher as necessary.
- The details of the RFC are entered into the Change Module of UniDesk as a Change Record by a change operator.
 - This will automatically generate an acknowledgement email to the originator of the RFC. This email will state that the Change has been recorded and give the originator a unique reference number (generated by UniDesk) that should be used for all future correspondence surrounding the Change.
- The Change Operator will review the RFC to establish if it is valid, that is, if the change is requested outside a "change freeze" and that all the initial information is present.
- The Change Coordinator will review the RFC to establish if it is to be considered for action. The decision on this will be based on a number of factors including:
 - the feasibility of implementing the Change
 - to what extent the Change Request is aligned to business needs
 - the impact and risk involved in implementing the Change
 - the level of priority? classification i.e. low, medium or high
 - the speed by which the change can be implemented and the resources required
 - determine the priority of the RFC against other RFCs
- 7 Where the RFC is rejected by the Change Coordinator, the originator will be notified via a process outlining the reasons for rejection.
- The originator may at this point provide additional information surrounding the request and if considered worthy by the Change Coordinator, the Change may be reclassified in light of this new information. Where the originator provided additional information, worthy of re-assessing the Change, then the Change Operator will change the status back to "Requested".
- Unless the Change is a Standard Change, the Change Coordinator will need to assess if the Change requires review by the Change Advisory Board (CAB). The CAB needs to review and approve significant changes, and will escalated major changes as they arise. Where no CAB approval is required (minor change) the Change Coordinator can, after taking appropriate advice, approve the change as no CAB approval is required.

- Where it is determined that CAB Approval is required, the details of the RFC will be scheduled for inclusion at the next available CAB meeting. The main items of information required for the CAB include:
 - Requested by (and contact details)
 - Date requested
 - Title
 - Impact (areas and services)
 - Reason for change
 - Work summary including teams involved
 - Change coordinator
 - Testing and implementation plan
 - Date required by
 - Date work scheduled (alternate options?)
 - Backout plan
 - Announced by/to
 - Review comments
- Where approval is granted, the Change Coordinator will pass the approved change information to the appropriate operator group for release. If approval is not achieved the Originator is notified with an explanation.
- Once approval has been granted, the change moves to the Release process, where it is assigned to an operator group for action. This operator group may consist of a number of staff members at different levels of the organisation depending on the particulars of the Change; in addition, it may include an external or third party where specialist advice or knowledge is required.
- The assigned operator group will carry out the build and test phase. The objective is to build the Change, ensure that it is fully tested and to produce a documented, tested back-out plan in the event that the Change fails at implementation.
- The build and test review is carried out by the Change Coordinator, who may wish to delegate this responsibility or involve others. The review is to be carried out with the operator group, to verify that the objectives of the build and test stage are satisfied. If the Change Coordinator considers that these objectives have not been met then they can send the Change back to the operator group for further work.
- Once the build and test phase has been approved, the Change is scheduled via a Forward Schedule of Change (FSC), communicated, and then implemented.
- After implementation the Change Operator must confirm that the Change has technically worked. If the Change hasn't "taken" or has unintended adverse impact at this point, the back-out plan should be implemented, or appropriate remediation

- undertaken. When the Change is marked as Implemented, the Originator is emailed automatically to advise them of the implementation.
- In some cases, it may be appropriate to attempt the implementation again, which may require rescheduling. The change record should be updated to reflect the current situation and any unintended impact on the live environment.
- The appropriate change authority (Change Coordinator, CAB, senior management) will review the change an appropriate period after it has been made live. This review will consider whether the change has achieved the intended benefits described in the RFC, and what lessons may be learned. Minor changes should be considered by the Change Coordinator as candidates for standardisation. As part of the review the Change Coordinator will ensure that any changes to Configuration Items have been committed to the Configuration Management Database (CMDB).
- Where the Change has not produced the desired benefits, there may still be a business case for attempting to achieve these. The Change Coordinator should consider whether a new RFC is required to address this need. Alternatively it may be considered that the change has achieved enough that no further change is warranted and the change closed.
- The Change Manager will continuously review and analyse statistics in order to identify improvements and implement corrective and preventative actions as required.
- 25 Standard Changes are pre-approved, so progress directly to Release.
- Standard Changes will contain direction on how to check for success and advice on whether back-out or remediation is the most appropriate action in the event of failure.
- Failed standard changes must be reviewed to understand what went wrong and will include consideration if the standardisation should be temporarily suspended, with further changes of this type being considered as minor changes pending review.
- Failed standard changes will usually be repeated, as the procedures are understood and low risk. Where the failure persists, the standard change will still be required and make become more urgent, so the Incident Management process should be invoked.
- Emergency changes require urgent assessment and approval, so a dedicated Emergency CAB (ECAB) will be invoked. This body will have sufficient authority to accept the increased risks (to the service and to the business) arising from rushing a change through with reduced decision making information, reduced testing, and documentation produced in arrears.
- The ECAB will assess whether the change is indeed an emergency and whether it has a sufficiently strong business case to proceed. ECABs cannot reject changes outright as they do not usually have the full business case for a change.

- Rejected emergency changes will be passed on to the Normal Change process for full consideration there. This may be because the ECAB is unconvinced of the need for urgency or unconvinced of the need for the change.
- The Emergency Release process is the same as the Normal Release process except that the change record is not usually maintained in real time (rather is updated in arrears), and one or more of the following is either omitted or has reduced rigor:
 - Testing
 - Documentation
 - Consultation on scheduling
 - User communication
 - Back-out planning
- The ECAB should consider whether the Emergency Change has achieved its aims. Unlike Normal Changes, this usually needs to be considered quickly after implementation, as if the change has not achieved the desired benefits, a new Emergency Change may be required with equal urgency.