

ITD Infrastructure Maintenance Window Procedure

Document data:

Document type: Operating Procedures

Administering entity: Information Technology Directorate

Records management system number: D08/76997

Date board endorsement: NA

Date approved: 29 July 2008

Approved by: Brian Cameron, Director IT

Indicative time for review: Annual

Responsibility for review: Director IT

Rationale and Scope

The University is increasingly reliant upon its ICT services and infrastructure for the day to day conduct of Research, Teaching and Learning as well as the administration of the organisation. Additionally the evolving model of operation is such that periods of relatively low reliance upon ICT services and infrastructure are diminishing such that there is effectively no suitable period where the University can be without access to ICT services.

To ensure ongoing optimal operation and to minimize risk of unscheduled service outages or security breaches ICT infrastructure requires periodic maintenance. This maintenance is generally the application of security and operating systems level patches, installation and relocation of physical equipment as well as logical structures.

The purpose of this procedure is to provide a mechanism through which the University can ensure ongoing optimal operation of its ICT infrastructure and services while minimising operational disruption through a planned cycle of periodic ICT infrastructure maintenance windows.

Periodic ICT infrastructure maintenance windows may involve any ICT service, combination of services or range of underlying hardware or software infrastructure. Activity occurring within these windows will be focused around the application of security and operating systems level patches, installation and relocation of physical equipment as well as logical structures.

Periodic ICT infrastructure maintenance windows will not generally include planned project related activities such as application upgrades or major infrastructure implementation. Separate planned outage events will be scheduled for these events.

Procedures

Frequency:

ICT infrastructure maintenance windows will be scheduled Monthly and Quarterly.

Monthly windows will be on the third Saturday of each month.

Quarterly windows will be on the third Saturday of the first month of each quarter (Jan, Apr, Jul & Oct).

NB: A quarterly window will include a monthly window.

Duration:

Monthly windows will be of five hours duration from 06:00 to 11:00

Quarterly windows will be of eleven hours duration from 06:00 to 17:00

Forward Schedule of Change (FSC):

Planned change will accommodate an overall window duration estimate which includes allowance for preparation/shutdown activities and start-up/testing activities. For example in a monthly window, if shutdown and start up activities are expected to take 2 hours, only 3 hours of change activity can be scheduled without exceeding the maintenance window.

Procedure:

1. 2 weeks before the windows the ITD Change Manager will commence planning the schedule of change and associated dependencies. This ensures that all information for the Request(s) for Change (RFC) is assembled and is adequate for the Change Advisory Board(CAB) to make informed decisions.
 2. 1 week before the window the nominated ITD Change Advisory Board will approve the forward schedule of change.
 3. 1 week before the window the ITD Change Manager will advise the University community of the services that will be impacted by the FSC. This alert will be posted on the ITD Service Alerts web page.
 4. 3 days before the window ITD will hold a final planning meeting to assess any requests from the community or business impact that may have an adverse affect and finalise a decision to proceed or not to proceed with the window and FSC.
 - a. If the decision is to not proceed a notice will be placed on the ITD service alerts web page advising the community.
 - b. If the decision is to proceed with an amended FSC a revised notice of impact to services will be placed on the ITD service alerts web page.
 - c. If the decision is to proceed with originally published FSC no further advice will be provided and the notice placed in step 3 above will remain on the service alerts web page.
 5. During the maintenance window activities will be conducted as per the approved FSC and in compliance with the sequence advised in the schedule.
-

ITD Infrastructure Maintenance Window Procedure

6. During the maintenance window if all activities have been completed and available time has not been expended work may be undertaken from a reserve activity list. Note: this can only be done upon the approval of the nominated ITD Change Manager.
7. After the window staff who performed activities will update all of relevant configuration databases and documentation to reflect the activities conducted during the window and advise the ITD Change Manager.
8. 3 days after the windows the ITD Change Manager will hold a review meeting with the staff who performed activities in the window. The purpose of this review meeting is to review the FSC to assess lessons learned around estimation, accuracy and issues which will be used to inform future window planning and execution.
9. 1 week after the window the ITD Change Manager will perform a check of relevant configuration databases and documentation to ensure that staff have updated the reference to reflect the activities conducted during the window.

Approval signature

Brian Cameron, Director Information Technology

Definitions

Change Manager:

This is the person within ITD with responsibility for the coordination of a maintenance window.

Change Advisory Board (CAB)

This is a selected group of ITD staff with responsibility for approving changes introduced to the production environment. The CAB will convene to assess (confirm impacts, resourcing and priority) and approve changes to be included in the FSC.

Assessment by the CAB will include:

- Impacts: on business and infrastructure services, if the change does not go ahead/fails,
- Resources: people/ time to complete/new infrastructure
- Priority: eg Critical/Immediate , High, Medium ,Low based on Impact and Urgency

Forward Schedule of Change (FSC):

This is a detailed list of the changes that are scheduled to be performed during the maintenance windows. Each change on the FSC will have a supporting Request for Change (RFC) Document

Request for Change (RFC):

A document requesting a change. This document will include the following details:

ITD Infrastructure Maintenance Window Procedure

- RFC unique ID ie CR0001
- Change requester
- Proposed Change Implementer
- All Items that will be changed
- Services that will be Impacted
- Initial priority
- Reason for the Change
- Backout plan
- Estimated Resources time/people to complete
- Change in resource usage with change in place (ie additional 250Mb memory footprint)
- Impact if the change is not implemented or successful
- List of documentation that needs updating
- Detailed description of the task
- Facility to record actual start, end times and duration.
- Identification of tasks which must have been completed prior to commencing this task.
- Identification of tasks which cannot commence until this task has been completed.
- Testing method and results for ensuring that the task has been completed as planned and equipment/service is operating in accordance with service standards.
- Signoff facility to be completed by the staff undertaking the task to indicate that the task was undertaken and testing was completed successfully.
- Facility to record unexpected behaviour or events which occurred and are related to the task.
- Final signoff to advise that the relevant configuration databases and documentation to ensure that staff have updated to reflect the activity as conducted during the window.

Reserve Change List:

This is a detailed list of RFC's, approved by the CAB, which can be use to nominate additional change to be performed in a maintenance window should time permit.
