Software request process for the information commons

Requests can be placed during the bi-annual software call periods and also outside of the request periods, but a minimum of 6 weeks is required for this work to be scheduled.

Current deployed software will not be updated or version upgraded during the teaching semester unless a critical error or security breach is identified. This is to maintain consistency in applications.

There is a 3 step process to assist in assessing your software requests suitability for the IC being Needs Analysis, Technical Analysis and User Acceptance Testing.

Needs analysis

All academic software requests are analysed to determine need; identify a funding source, and to assign an internal priority for technical analysis. You will be contacted directly by the IC liaison Officer if a needs analysis is to be conducted, and to provide the following details if required to assist in assessing your request:

- Software title and version requested
- Known alternative titles (should the requested software not be suitable or unavailable)
- Number of students (for course related) or expected number of users (for non-course related i.e. workshop, training)
- Expected usage (daily, weekly, monthly)
- Expected number of concurrent users
- Priority location for deployment (IC lab booked)
- Date required
- Period software is required (maximum allowed is 12 months before review)
- Funding source (if known or available)
- Academic impact (self-rated)
- Alternative contact for user acceptance testing.

The academic impact is an attempt to measure the academic importance placed on this software to the University business. It is used as an internal measure to help set priorities for the technical analysis phase and as an internal alert/impact measure should the software fail in production-it does not guarantee funding or it's availability in the IC.

To assist with selecting the correct academic impact, the following definitions have been provided:

Critical - Research unable to proceed or there is a legal requirement for software. No teaching application can be given this rating.

High - Teaching severely impacted. Software needed to teach course and is required by students on a daily basis.

Important - Research or teaching heavily impacted. Software needed for regular weekly tutorial.

Medium - Research effectiveness impacted or teaching impacted. Software used for 1 - 3 sessions in a course.

Low - Minor teaching impact or generic request. Typically, software is used only once in a course, or is nice to have available.

Once this information has been collected, Information Technologies Service (ITS) attempt to source the software, determine the licensing arrangements and obtain a quotation for the software if required.

This part of the process typically takes about two to four weeks but may take significantly longer if they are unable to contact the software vendor.

Reasons for NOT proceeding with requests at this stage will fall into one of four categories:

- Abandoned by requester-e.g. software unavailable, vendor gone out of business etc. After consultation with Information Services staff a decision is taken by the requester not to proceed.
- Abandoned by Information Services-process has taken 2 months and Information Services have been unable to contact requester or due to Software licence restrictions
- Software conflicts with other applications and is not usable in IC environment
- No source of funding identified.

An automatic price based alert will be triggered if the software cost is greater than $50 per student for a course and/or greater than $5,000. The requester will be contacted and asked if they wish to proceed; it is unlikely that Information Services would consider funding this software without local contribution, particularly if for use in a single course or ANU area.

The level of software co-funding from Information Services will be assessed on a case-by-case basis. Approval at this stage of the software request process does not commit Information Services to funding the software.

At the completion of the academic needs analysis a decision to proceed or not will be made. Either way the requester will be provided a summary of information on the decision taken. Successful requests are then moved to the technical analysis phase.

Technical analysis

The technical analysis phase of the academic software request process tests the software applications suitability for inclusion within the IC software image. The chance of an application not working is higher in this managed environment because of the complexity of the systems.

Each piece of software installed as part of the image needs to be packaged. Packaging software allows for the software to be installed and removed remotely and for updates to the software to be incorporated. Therefore, each piece of software needs to be tested to see if it can be packaged and is compatible with the operating system.

If a software application cannot be packaged, then it is not normally possible for the software to be installed on an IC machine. Information Services does not have the resources available to

physically install software on each individual machine. Additionally, manual installation of software onto an IC machine can adversely affect the management of the other software on the system.

Packaging of software is not a simple process and the interactions between all the installed software packages needs be investigated. For instance, installation of one application can affect shared files used by another application rendering one or both pieces of software unstable or unusable.

The requester will be informed when work commences on their application and they will be given a basic update on how the process is progressing.

If an application is determined to be technically infeasible, the request will be abandoned and a report sent back to the requester. If an alternative application was suggested as part of the original request, this alternative application will then be tried. The alternative application would be started as if it was a new request and will go through academic needs analysis and the technical analysis phase.

User acceptance testing

User Acceptance Testing (UAT) is an important final phase for the deployment of software. New or upgraded applications will not be deployed to the IC managed environment until signed off as acceptable and fit for purpose by the tester.

Information Services staff will test the basic functionality of the software as part of packaging, but the requester will be required to thoroughly test the software with an example of their course work and appropriate datasets to verify that the software behaves as expected.

If the application fails testing, the errors are noted and Information Services will work with the requester to resolve the problem if possible.

Please note – If problems are discovered after the software has been deployed, a job needs to be logged with the Service Desk. Software problems can take a significant amount of time to fix and it is in the requester/s interest to thoroughly test the software and resolve all issues during the UAT phase before signing-off.

Software can only be deployed to IC computers when signed-off by the requester/s. Once the software has been successfully deployed, the software request process is complete and a final report is generated and sent to the requester.

Requesters should be aware that updating the version of an application would not generally happen unless the deployed software has been configured to update automatically. The only exception to this is the installation of security related patches that will be automatically installed to preserve the integrity of the machine.