



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

Academic Software Survey 2017

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1. Survey Overview

Purpose

IT Services administer site licences for a portfolio of academic software widely used throughout Trinity. We also provision a range of academic software for use in IT Services computer rooms, based on responses to an annual email requesting information on academic software requirements.

We wanted to collect evidence of the academic software used for teaching & learning and research at Trinity, to ensure that we have the site licensed software that Trinity staff need to stay at the forefront of teaching and research.

We were most interested in responses from academic and research staff and also from technical staff.

Survey

An email advising of the survey was sent to the academic and administrative email lists and a reminder was sent before the closing date. The survey was run using Survey Monkey and closed at the end of February 2017.

The survey had 3 main sections:

- Site licensed software
- Other widely used software which was listed by name
- Free text entry of up to five other applications

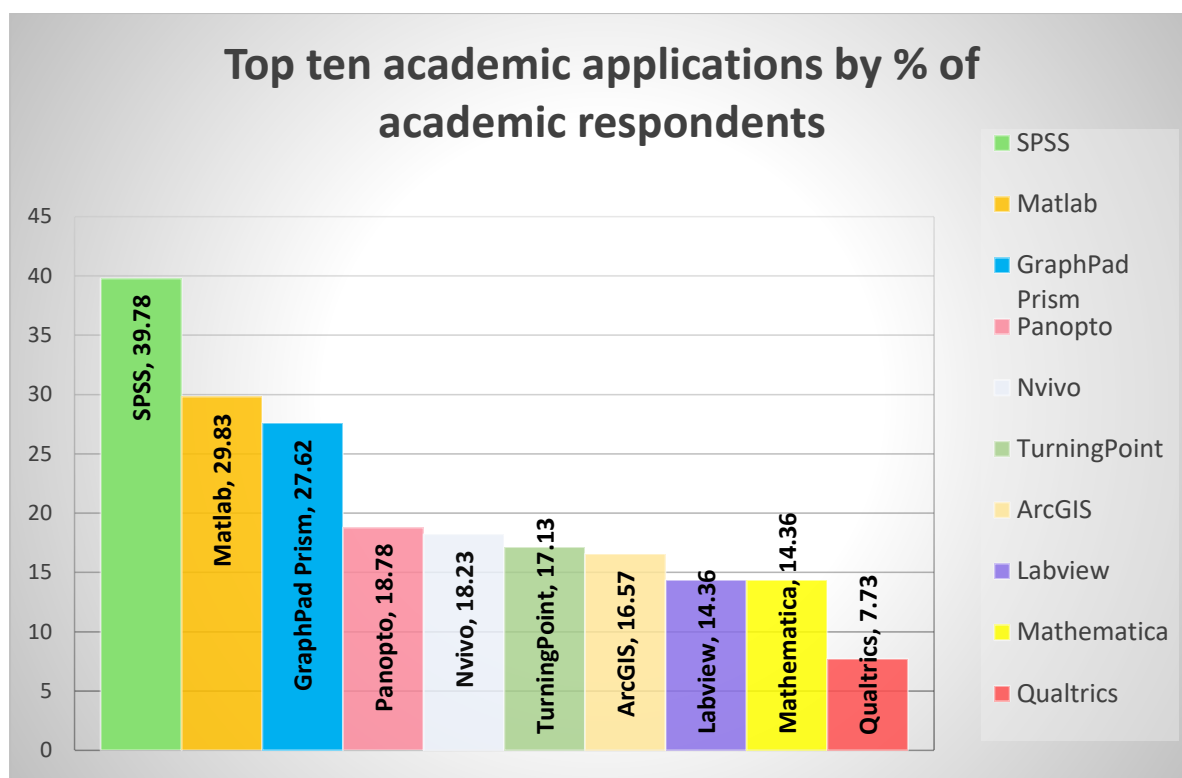
Respondents contact details were requested to enable follow up if required.

Survey Result

The total number of responses received to the survey was 244 and academic & research responses totalled 181 or almost 75% of the respondents. Less than 1% of respondents did not indicate a staff category. The above response rate gives a result accuracy of approximately 95%.

The survey responses will input to decisions on whether to renew or discontinue existing site licences, or to investigate site licences for software not currently licensed on this basis. If there are additional benefits e.g. home use, resulting from site licensing this will also be considered.

Based on the survey responses the ten academic applications most used (now or intended) by academics in Trinity are shown in the chart below:



Licence Administration

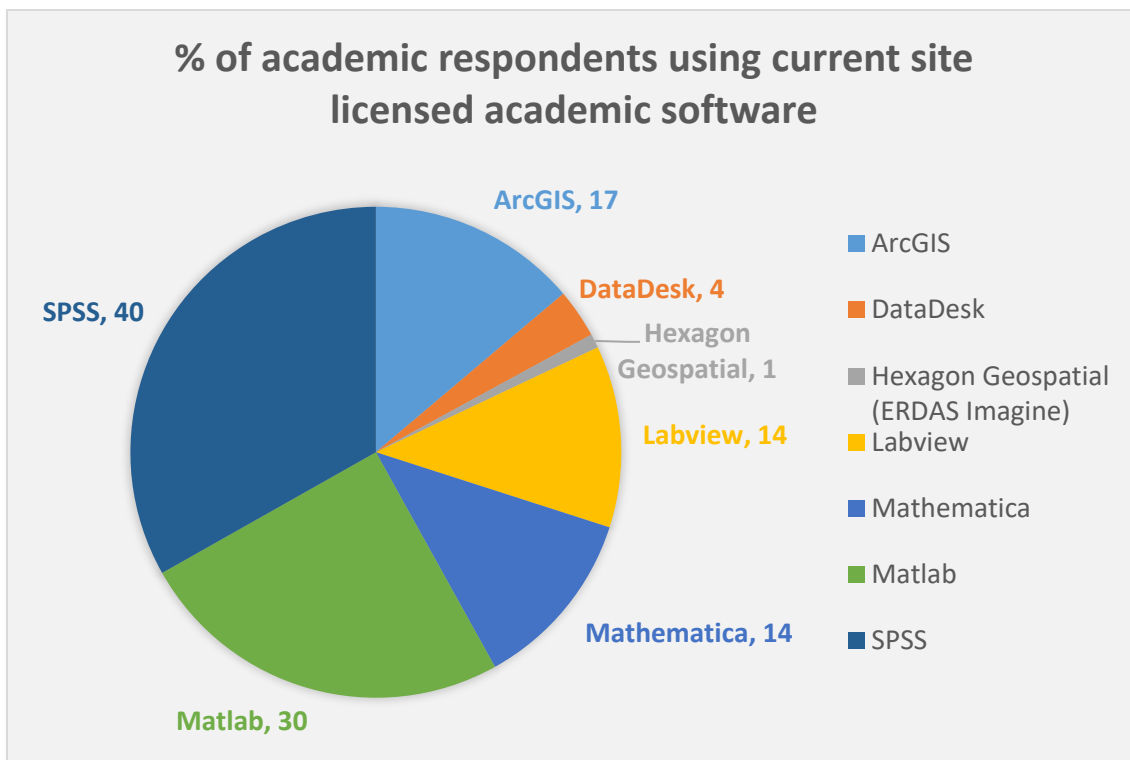
Licensing of these top ten applications is currently processed as follows:

Software	Administration and funding model
SPSS	Site licence administered and funded by IT Services
Matlab	Site licence administered by IT Services and funded by contributions from departments agreed annually
GraphPad Prism	Purchased separately by departments
Panopto	Was trialled last year – paid by IT Services. Will be site licensed from end June 2017 for 3 years.
Nvivo	Purchased separately by departments
TurningPoint	Being trialled. Current proposal, subject to procurement process, is for one Faculty to administer with contributions from the three Faculties. IT Services involved in establishing maximum pricing.
ArcGIS	Site licence administered and funded by IT Services
Labview	Site licence administered by Mechanical and Manufacturing Engineering and funded by contributions from IT Services and four academic departments
Mathematica	Site licence administered and funded by IT Services
Qualtrics	Purchased separately by departments

2. Site licensed software

Usage

The use of software currently site licensed at Trinity is shown in the chart below:



Renewal

- IT Services recently renewed the site licence agreement for SPSS until end June 2019.
- Based on the above survey results IT Services will renew the Matlab, ArcGIS and Mathematica site licences at their next renewal date depending on relevant funding being available.
- Labview is administered by the Department of Mechanical and Manufacturing Engineering and funded by contributions from IT Services, Physics and the three Engineering departments.

Proposed investigation

- With an academic usage rate of less than 4% it is proposed to further investigate the use and value of the Data Desk licence and whether there are other licensing options prior to the next renewal date in July 2017.
- It is intended to further investigate the use of Hexagon Geospatial (ERDAS Imagine) and other renewal options before the next agreement renewal date in 2018.

Funding

The funding methods for the site licences above are inconsistent:

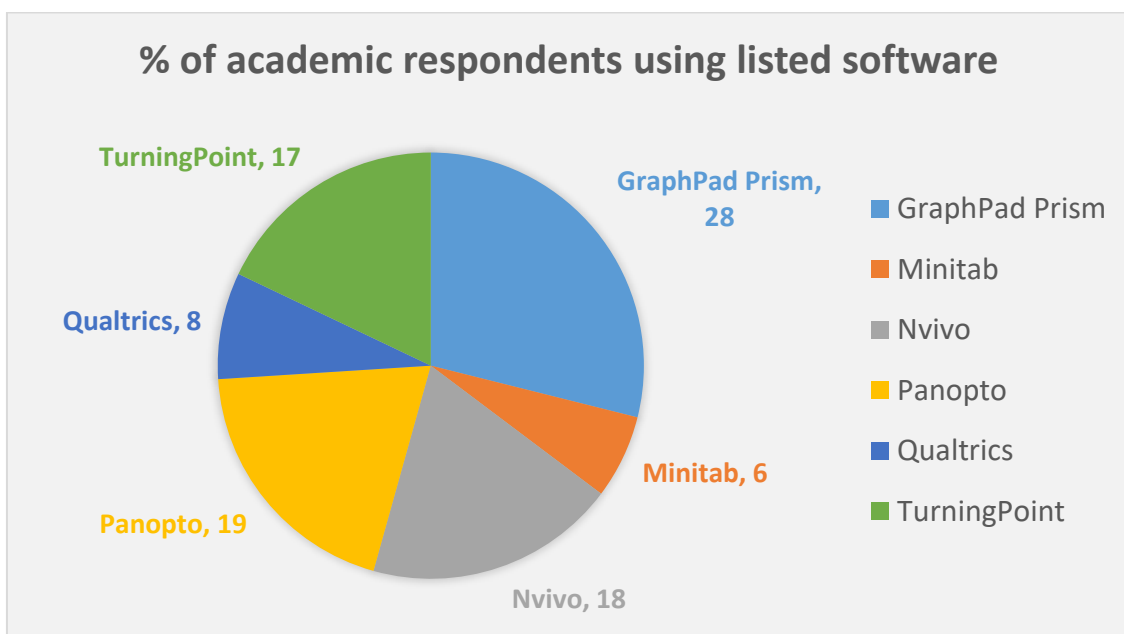
- SPSS is paid for from IT Services budget

- Matlab is paid by contributions from the departments using it. This is very inefficient as there is no guarantee that contributions will be agreed from year to year and a lot of time and effort is spent in reaching agreement. This prevents Trinity realising the savings to be made by entering into a 3 year agreement as increasing student numbers result in higher annual costs. Also if agreement is not reached then departments would have to purchase their own licences and/or “unfreeze” existing licences and Trinity would then lose the benefits which come with the site licence.
- ArcGIS, Mathematica, Data Desk, and Hexagon Geospatial are funded from IT Services budget.
- Labview is administered by the Department of Mechanical and Manufacturing Engineering with contributions from IT Services and four academic departments.

3. Listed software

Usage

The use of software currently licensed and widely used in Trinity is shown in the chart below:



Proposed investigation of site licence

Based on the survey results it is proposed to investigate whether, subject to funding, it would be beneficial to Trinity to license the following software on a site wide basis:

- Graphpad Prism
- Panopto – to be licensed from end June 2017
- Nvivo

Other listed software

TurningPoint will be trialed in College in 2017/2018. It is proposed that one of the Faculty Administrators will administer the licence with funding contributions from each of the three Faculties.

Minitab is licensed annually for 200 concurrent users by IT Services; however with a response rate of 6% this will be investigated and reviewed.

Qualtrics software is licensed separately by a number of departments in Trinity and some investigation into site licensing this software has been carried out by IT Services. Based on current usage there is no cost saving to site licensing this software.

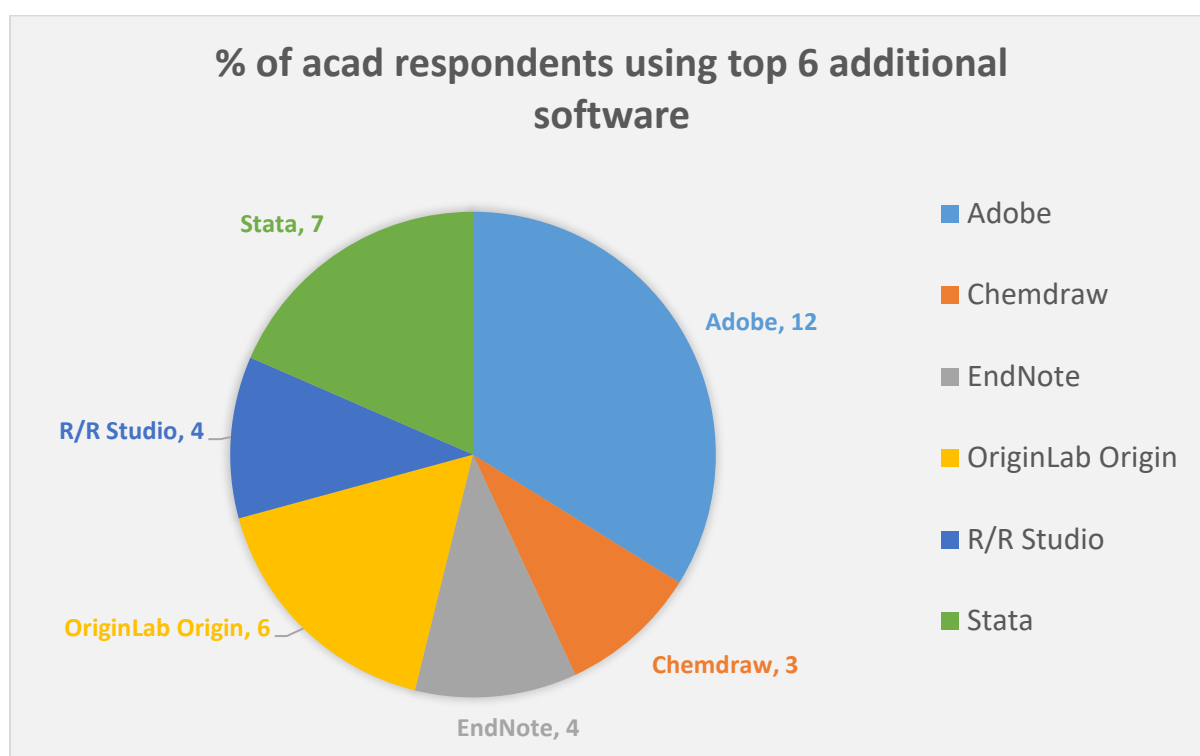
The above also demonstrates the inconsistencies in software licensing administration and funding in Trinity.

4. Additional software

The software in this category was not listed by name in the survey questions. The entry of up to five additional applications was enabled in responses and a wide variety of software was entered by respondents under this heading. These are listed in [Appendix 2](#).

Usage

The use of the top six other applications used at Trinity is shown in the chart below. Microsoft products were excluded from the results.



Proposed investigation of site licence

Based on the survey results it is proposed to investigate whether, subject to funding and/or agreed contributions, it would be beneficial to Trinity to license the following software on a site wide basis:

- Adobe software

Trinity currently benefit from a HEAnet scheme for Adobe licensing, however licences are purchased individually by departments through the reseller Micromail. Given the annual spend reported by Micromail, IT Services and Procurement Office plan to review the options.

Funding

The software above is purchased as follows:

- Adobe software, e.g. Creative Cloud, Dreamweaver, etc. is purchased by individuals and departments under the HEAnet scheme. Adobe is moving to a subscription model for licensing. Trinity would have purchased perpetual licences in previous years and these are not administered centrally in Trinity.
- Stata (data analysis, management and graphics software) is purchased by individuals and departments. There are eight types of licence available for Stata (more information is available [here](#)). Some of the main licence types have additional options including maintenance for upgrading perpetual licence types.
 - Single user
 - Network
 - Volume purchase
 - Compute-server
 - One year term
 - Site
 - Student Lab
 - GradPlan
- OriginLab Origin (data analysis and graphing software) is purchased by individuals and departments
- R/R Studio (programming language/environment for developing statistical software and data analysis) is free (if Affero GPL licence is permitted; there are commercial editions, more information is available [here](#))
- EndNote (bibliographic reference software tool) is administered and funded by the Library as a site licence
- [Chemdraw](#) (chemistry software for drawing molecule structures, reactions, etc.) is purchased by individuals and departments - there are a variety of options

This also demonstrates the inconsistencies in software licensing administration and funding in Trinity. The lack of a central service and system for software licensing in Trinity makes it difficult to:

- establish easily whether a requirement exists to site license particular software
- investigate whether a site licence would deliver better value for money and/or other benefits

- investigate whether other licensing options could deliver better value than current licensing arrangements
- establish how new site licences are to be funded

Based on experience with Matlab software, funding a site licence through contributions which have to be agreed annually is inefficient, time consuming, and doesn't allow the savings available through multi-year agreements.

5. Survey Comments

Some of the comments made by respondents to the survey are included below:

"Funding of software licenses within College needs to be overhauled. In engineering we tend to use our own computer rooms for timetabling reasons, and so IT Services have very little sight into the software used. As a result, it is my impression that the School of Engineering is carrying a significant burden of software costs that perhaps should be a central cost."

"ChemDraw licence was bought by TBSI for the past number of years and is very widely used by Science and Pharmacy students and staff - I would strongly urge College to buy the site licence. SurveyMonkey is probably being used by every School in College and we should really get a college-wide licence and not buy our own for every single user."

"...Harvard University and other institutions use a free licensing alternative to Survey Monkey. <https://projectredcap.org/partners/> TCD currently spends €5,000 per year on Survey Monkey, according to data provided to me by central procurement. There is also a lot of unrecorded spending on Survey Monkey (e.g. my department spent around €800, but this was classed as personal expenses and not recorded on the central procurement system). An implementation of RedCAP could save TCD a lot of money. It would be of immediate benefit for our research I was wondering if TCD ISS can advise on whether we can implement this free licensing software? A little institutional support is required but the perception of my colleagues and I is that this is a worthwhile step..."

"I appreciate software is expensive and the value isn't always obvious, but in the responses I've given I can honestly say that the software we use in Biochemistry and Immunology ensures the student gets the best learning experience and the lecturer and researchers save time and can be more productive."

"MS Pulse is free version of turning point and could be used easily by staff if supported by college. I have only started using Panopto because I saw an email saying that the college podcasting service was being phased out. It is excellent and should be used by more staff"

"Software for Mac systems available through TCD IT are lacking"

"We need software for creating high quality files for research and publication purposes. This includes (for my applications) Graphpad Prism. ... "

“We have been asking for basic software for years, esp Graphpad, Comsol and Adobe.”

“It is really essential in my view for TCD to provide the full Adobe Cloud software suite through ISS. Now that they have moved to a subscription only model it has become prohibitively expensive to maintain access to this software for individuals - perhaps ISS has the bargaining power to get reduced rates, or to secure non-subscription versions, as they have done for MS Office.”

“Basic Adobe systems available should be expanded on in order to keep academic and administrative staff up-to-date with the latest systems of communication and to put Trinity forward as a progressive institution. Fall behind regular systems updating means that inter- varsity and recruitment becomes harder with lack of access to software that is the standard in other universities.”

“Please can you get an institutional licence for NVivo? It is standard qualitative software and I have never worked in a university where it is not available as standard to staff and students. I was really shocked to find TCD doesn't have an institutional licence. It means our students are missing out on being taught how to use a core software and as a researcher I cannot currently access my data! “

“I think that there is a strong need to provide NVivo qualitative data analysis software (other HE institutions have site licences for this). It appears as though there is a bias towards quantitative analysis software here.”

“I feel that the lack of provision of NVIVO software by TCD highlights the emphasis of the college on quantitative work rather than giving equal merit to quantitative and qualitative work. I've been told that TCD is the only university in Ireland that does not provide free access to this software”

“would use NVIVO but cost involved”

“I'm a fairly new member of staff and I frankly had no idea what most programs that were listed are for and that we have access to them. Thus, it would be very helpful to make new members of staff aware of the possibilities.”

“Some of the software I am not familiar with, I wonder if a list of all the available resources could be linked to from the information that is offered to new staff.”

“It is hugely helpful to have site licenses for things like Matlab and Endnote.”

“Stata is probably the single most used piece of software by academics in Economics. Available training in R and Python would be excellent for all social scientists.”

“Students and some faculty from both Schools are regularly asking for training on SPSS and NVIVO and it is really an important part of research...., we need access and training as a urgent priority.”

“Some courses in Stata would be beneficial”

“There are a plethora of bits and bobs of software floating around. For years college has refused to aid schools so this fractured approach has grown up.”

“1. Something that would allow easy recording of lectures including lecturer, slides and audio in one would be useful...”

“As online learning is in the College's strategic plan, academic staff need access to suitable software to develop online material e.g. Articulate Storyline or 360; adobe presenter etc”

The comments above demonstrate the need for improved communication and a review of the model for licensing software. In order to get the most benefit from the software that Trinity licenses appropriate training would be useful. A central repository of software would assist with this as it would be apparent which software is most widely used.

Appendix 2: Additional software

Aclands Anatomy	IBM CPLEX	SAS
Adobe	Igor Pro	SimBio
Amos	ImageJ	Simi Motion
ANSYS	infer	Skype
AntConc	InStat	Socrative
Apache Jena	Intel Fortran Compilers	Solidworks
Ape	iolite	SourceTree
ARBIL	Isabelle/HOL	SPICE
Artemis		Spike2 (CED)
Articulate	JabRef	SPSS
AutoCAD	Jobteaser	Stata
		Storyline
Berkeley Madonna	Kaleidagraph	Superlab
BioNumerics	Kiel Microvision IDE	Survey Monkey
Bloomberg		Surveygizmo
BlueJeans	LabChart (AD instruments)	
Boardmaker	Logger pro	Tarski's World
	LogicPalet	TexnicCenter
Cadsoft Eagle		Topspin (NMR analyse software Bruker)
Camstudio (freeware capture program for lectures)	MadyMo	TouchCopy
Camtasia	Maestro protein modelling suite	Turnitin
ChemDraw	MathType (TypeSetting Equations in MS Office)	
ChemDraw Ultra	MaxQDA	UltraEdit
Citavi	MaxTraQ Motion analysis	Unity
clang	Mendeley (citation organizer)	
Clone Manager	Mentimeter	Unscramber + DOE (Multivariate/PCA Analysis)
COMSOL	MestReNova	USEPA stormwater management model (SWMM)
COMSOL Multiphysics	Microsoft Office (installed on machine)	
CorelPaintdraw	Microsoft Office 365	Vissim
CREO (PTC) & MathCAD University Site License	Microsoft Project	Visual Studio

	Molecular dynamics simulation software	
Delta Graph	Mplus	winnonlin
Dropbox	MS Pulse	Xara
Dragon Naturally Speaking	MS Visio	XML Spy
Eduroam	NAG Fortran Library	
ELAN	NetDrive 2 (Cloud Drive Mounting)	
EndNote	NI Multisim	
Epanet	Origin	
Eviews	Overleaf	
excel		
	Paintshop Pro	
FDR3	Papers	
FlowJo, TreeStar Inc	PAST (http://folk.uio.no/ohammer/past/)	
FPGA sotware, currently xilinx ISE	PC-Ord	
	Poll Everywhere	
gcc	powerpoint	
Gene pattern	Presentation	
Gitlab & Git	Protege	
Google applications	PyMol	
GoReact		
Grapher (golden software)	Quark Xpress	
Grid 2	Qwizdom Actionpoint and QVR	
Haskell	R/R Studio	
HYDRUS	RasMol	
	Reuters	
	Revit	
	Robot	