



# Mandatory and Recommended IT Services and Solutions University of Otago

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## University Operations

### Information Technology Services

Campus and Collegiate Life Services | Campus Development | Chief Operating Officer  
Health and Safety Compliance | Project Management | Property Services  
Risk, Assurance and Compliance | Shared Services | Sustainability



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## Document Version Control

Version No.	Date	Revision Details	Author	Endorsed	Approved
0.1	26 Sept 2018	Initial document	Gareth Wood	-	-
0.2	24 Oct 2018	Introduction written, formatting and wording made more consistent	Gareth Wood	-	-
0.3	28 Nov 2018	Review and feedback	Dave Maclaurin		
0.4	14 Jan 2019	Additional Solutions and wording.	Gareth Wood	-	-
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0.92	13 August 2019	Review and feedback.	Dave Maclaurin		
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0.95	2 Sept 2019	Check and update Client Consultation list.	Dave Maclaurin		
0.96	16 Sept 2019	Final checks and fixes.	Dave Maclaurin		
0.97	3 Oct 2019	Fix LMS to include Kura Cloud as per ITGB Sept meeting	Dave Maclaurin		
0.98	11 Nov 2019	Incorporate ITGB feedback on the Introduction from David Evers	Dave Maclaurin		
0.99	22 Nov 2019	Make document name and headings consistent with mandatory and recommended use cases	Dave Maclaurin		
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0.992	23 January 2020	Final edit to the latest version of the Introduction	Dave Maclaurin		
1.5	21 May 2020	Update version number and Service Management Entry	Gareth Wood		
1.6	28 May 2020	Minor edits following IT Governance Board meeting	Gareth Wood	IT Governance Board	28 May 2020

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# Introduction

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## *Purpose*

*The purpose of this document is to provide clear guidance to University staff on mandatory and recommended, campus wide IT services and solutions; to ensure all staff are working in a cohesive way with the same toolsets, and to ensure interoperability, economies of scale and a defined University wide security and data footprint.*

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This document lists the current, mandatory and recommended IT services and solutions, that all University staff are expected to use in the first instance.

Where there are multiple, recommended IT Services and Solutions available to use, it is expected that staff will choose the most appropriate one for the task they are performing at the time.

Where there is only one recommended IT service or solution available, it is expected that staff will not use any other solution without prior approval. If the solution doesn't appear to meet the requirements for use, then consultation with Desktop Support and/or IT Advisory is recommended as a first step.

**The 'Mandatory and Recommended IT Services and Solutions' document is not intended to be a 'one size fits all' exhaustive reference manual, rather it comprises a set of services and solutions that have been well researched and considered, and that will improve the way we use IT at the University.**

AskOtago will provide support through the normal channels for the services and solutions listed in this document. The level and type of support will vary and will be detailed in the service catalogue once that is available.

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## *When will this document be refreshed and how do I provide feedback?*

*This document will next be refreshed and re-released during Q4 2020.  
If you wish to participate in this process, please send an email in Q3 2020 to:  
[its.enterprise.architecture@otago.ac.nz](mailto:its.enterprise.architecture@otago.ac.nz) with the subject line:  
"Refresh of Mandatory and Recommended IT Services and Solutions document"*

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## *Will Adoption of New Services, or Changes to Existing Services Listed in this Document Affect Me? How will IT help me?*

*Yes, many of the recommendations in this document may affect staff as we improve our services.*

*When making changes, ITS will minimise client disruption where at all possible.*

*ITS will clearly communicate changes ahead of time, to provide clients with as much lead time as possible.*

*ITS will only make changes in accordance with its change control procedures.*

*Widespread or significant changes to IT services will typically be made within the context of IT Projects that follow the University 3PM and ProSci Change Management frameworks.*

*Future-dated, recommended or mandatory solutions and services should be considered optional for staff until such time as they are available to them, and the timeframe and nature of this availability will be communicated clearly, either in this document or via University IT communications channels.*

*If adoption of new services requires cessation of, or changes to other services, ITS and ITSS will provide transition support where possible and/or guidance materials.*

*It is understood that a proportion of IT service and solution transitions for staff and departments arising from this document, will require planning and will take a mutually agreed length of time to complete. We are here to help with this process.*

*The ITS Director and Enterprise Architect will use information from transition planning discussions with clients to improve and inform future releases of this document.*

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## Audience

The primary audience is Professional staff that provide or support IT services for the University. The secondary audience is other Professional staff and Academic staff.

## How to use this document

- Staff are requested to take all reasonable steps to follow the guidelines in this document.
- [Academic freedom in research and teaching is understood and supported](#). If these freedoms are exercised with respect to the use of IT technologies not listed in this document, please ensure that other University IT services, systems and processes are not adversely impacted, and that cyber security controls are not compromised. If you are unsure, please contact the ITS Director or Enterprise Architect to discuss your situation before proceeding – we are here to help.
- If circumstances arise that may preclude support for any of these Recommended or Mandatory Services and Solutions, please obtain approval from the ITS Director or Enterprise Architect prior to proceeding.

In the following sections, where there is either only one supported solution, or where no other solution can be used, typically the following drivers apply:

- **Clarify Data Ownership** – the University must where possible keep data in locations that are under the University’s control. For cloud services this means data should reside within University owned cloud tenancies and accounts; i.e. where cloud services providers have contracts in place with the University.
- **Comply with Data Security and Regulatory Requirements** – some data are subject to security and regulatory requirements that the University must comply with; as such this data must be stored in approved locations only.
- **Enable Collaboration** – in order to collaborate effectively across our organisation, we must sometimes all use the same underlying IT platforms and toolsets.
- **Control Operational Costs** – supporting multiple solutions, University wide, can result in both duplication of costs and a large operational time and effort investment.
- **Provide ‘Single Source of Truth’ key Information Systems**. Our key University IT Services (such as Student Management, Finance, HR, Research Management and Learning Systems) must not be duplicated.

## Reference Documents

1. Enterprise Architecture Principles and Standards, University of Otago
2. *Register of University of Otago Primary Data Sources*
3. *Register of University of Otago Cloud Providers*
4. University of Otago Cloud Risk Assessment Tool

*Note: January 2020, documents 2 & 3 in this list are in-process and will be published at a later date.*

# University of Otago IT Services and Solutions

## Mandatory IT Services

Key business and administrative IT applications and services that directly support the University. All Services and Solutions in this category are mandatory for all University staff to use for a specific activity or line-of-business. They may be cloud based and here are often referred to as SaaS (Software as a Service) solutions.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Accommodation Management	StarRez	Director, Campus & Collegiate Life Services	Must not use any other product.
➤ Alumni	Blackbaud Raiser's Edge	Deputy Vice-Chancellor External Engagement	Must not use any other product.
➤ Animal Ethics and Management	IARMS	Head, Health and Safety Compliance University of Otago Human Ethics Committee (Health)	Must not use any other product.
➤ Antivirus Software	Sophos	Director, ITS	Must not use any other product.
➤ Bulk Emailing (Ad-hoc)	Staffmail Office365 (using groups, paper groups or dynamic lists) ITS Mailout Service	Director, ITS	Must not use any other product. Must remain aware of data privacy, ownership and classifications.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
	Mailman – lists.otago.ac.nz service		
➤ Corporate University Records including contracts	OurDrive	University Registrar	Final and primary copies of Official University Records must be stored using this service.  Must not store the sole, final copy of any Official University Record in any other services or solutions.
➤ Customer Relationship Management	Microsoft Dynamics 365	Deputy Vice-Chancellor External Engagement	Must not use any other product.
➤ Email Service Provider	Staffmail – Office365	Director, ITS	No other email service providers are permitted.  All work-related email must be sent/received in the Recommended service, no automatic forwarding is permitted.
➤ Email and Calendaring Client	Microsoft Outlook (PC, macOS, iOS, Android) Outlook Web Access (OWA) Apple Mail	Director, ITS	After migration to Office365 (scheduled 2020) solutions must be compliant with Microsoft Modern Authentication.  Minimum MacOS and iOS versions required: (macOS version 10.14 onwards, iOS version 11 onwards)
➤ File Storage – for Departments & Teams	HCS Dept. or Divisional Shared Area Microsoft Teams (in Dept/Divisional Team)	Director, ITS	Must not store data in any other services or solutions.
➤ Financial Management	Finance One	Chief Financial Officer	Must not use any other product.



Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Food Service Management	Jamix	Director, Campus & Collegiate Life Services	Must not use any other product.
➤ Hazardous Chemical Management	Chemwatch	Head, Health and Safety Compliance	Must not use any other product.
➤ Health & Safety Training and Incident Reporting	Vault	Head, Health and Safety Compliance	Must not use any other product.
➤ HR Systems	Ascender Pay – Payroll RedCarpet – Onboarding Taleo – Recruitment Casper – Recruitment	Director, Human Resources	Must not use any other product.
➤ Identity Management (Federation and specialist services)	Tuakiri Microsoft Active Directory Federation Services ORCID RealMe (proposed)	Director, ITS	No other Identity Management federation or specialist solutions are permitted.
➤ Identity Management (User creation and management)	Oracle Identity Management System (OIM) Microsoft Active Directory (ITS Registry and Student AD domains) AuthDB CyberArk (Privileged Account Management)	Director, ITS	No other Identity Management solutions are permitted.  All users must be created and managed through the Recommended solution.  Local device accounts are only permitted for technical support or after prior approval for a specific use case.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
	Azure Multi-factor Authentication		
➤ Learning Management System	Blackboard Moodle Kura Cloud	Director, ITS	Must not use any other products.  Must remain aware of data copyright, privacy, ownership and classifications.
➤ Library Systems	Alma/Primo (Catalogue) Minisis (Archival and Pictorial Collection Management) DAMS (Digital Asset Management & Curation)	University Librarian	Must not use any other product.
➤ Medical Data	Patient Management System Research PACS HCS Dept/Divisional Shared Area Azure or AWS University of Otago managed storage	Director, ITS Pro-Vice-Chancellor, Health Sciences	Must not store data in any other services or solutions without prior approval.  Must remain aware of data privacy, ownership and classifications.
➤ Network	University Managed Network University Approved Lab or Research Network University VPN (Cisco AnyConnect)	Director, ITS	No other internal networks supported.  UO-GUEST is for non-University users only.  EDUROAM is the Recommended service for wireless when roaming.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Operating System (excluding Phones)	Microsoft Windows Apple macOS (OSX)* Linux Distributions (Red Hat Recommended)**	Director, ITS	Must not use any other Operating Systems  *Primarily for academic and IT support use only.  ** Primarily for server use.
➤ Organisational Project Tracking	Sentient (High level project tracking) Microsoft Project (Detailed planning) Aconex (Building Projects)	Manager, Project Management Office	Must not use any other product.
➤ Patient Management System – Dental School	Titanium Sidexis Scancare	Dean, Faculty of Dentistry	Must not use any other product.
➤ Patient Management System – Physiotherapy	MyPractice	Dean, School of Physiotherapy	Must not use any other product.
➤ Patient Management System – Student Health	Medtech	Operations Manager, Student Health	Must not use any other product.
➤ Plagiarism Checking	Turnitin (previously SafeAssign)	Deputy Vice-Chancellor Academic	Must not use any other product.
➤ Point of Sale (POS) & EFTPOS	SwiftPOS Paymark/Verifone EFTPOS Terminal	Chief Financial Officer Chief Operating Officer	Must not use any other product.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Process Mapping	Promapp	Director, ITS	Must not use any other product.
➤ Recruitment Advertisement and Management	Taleo	Director, Human Resources	Must not use any other product.
➤ Research Management	MyResearch REDS	Director, ITS University Librarian Deputy Vice-Chancellor Research and Enterprise	Must not use any other product. Recommended solution for Research Information pending RFP in Q4 2019 Recommended solution for Research Data Management pending RFP in Q1 2020
➤ Security Systems	Avigilon (CCTV) Gallagher Command Centre and Devices InformaCast Fusion (Emergency Speakers)	Proctor	Must not use any other product.
➤ Service Management	Microsoft Dynamics / Provance Oracle Service Cloud (AskOtago) AskIT	Director, Shared Services	Must not use any other product.
➤ Student Management System	eVision	Deputy Vice-Chancellor Academic	Must not use any other product.
➤ Student Placements	Sonia	Director, ITS	Must not use any other product.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Surveys	Qualtrics REDCap inFORM (teaching evaluation)	Director, ITS	Must not use any other product.
➤ Timetabling (Academic)	Scientia - Syllabus Plus	Director, ITS Committee for the Advancement of Learning and Teaching (CALT)	Must not use any other product.
➤ Unified Communications (Phone, presence, location)	University Provided Mobile Phone Office/Desk Phone: Cisco VOIP, Nortel PABX and Microsoft Teams (Pilot)	Director, ITS	Must not use any other product, except as required when collaborating with external organisations (e.g. Webex).
➤ University Website	Otago CMS	Director, Marketing	Must not use any other product.

## Recommended IT Services

Where you may use an alternative solution/product in certain circumstances - these are University wide IT Services and Solutions that provide basic functionality that is broadly applicable to a range of tasks and activities. They may be cloud based and here are often referred to as SaaS (software as a Service) or PaaS (Platform as a Service) solutions.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Citation Management and Academic Paper Editing	Endnote	University Librarian	May use other solutions.
	Microsoft Word		
	Overleaf		
	Mendeley		
	Zotero		
➤ Data Analysis	Amazon Rekognition	Director, ITS	May use other solutions.  The listing here is not in preferential order and some solutions do not have University wide licenses.
	Azure Cognitive Services		
	ATLAS.ti		
	Geneious		
	GraphPad Prism		
	MATLAB		
	Microsoft Excel		
	Minitab		

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
	<p>Microsoft PowerBI</p> <p>NZ eScience Infrastructure (NeSI) – Karas, PyTorch, Pandas, TensorFlow frameworks and libraries.</p> <p>NVivo</p> <p>RStudio</p> <p>SAS</p> <p>SPSS</p> <p>Stata</p>		
➤ Desktop Virtualization	<p>Virtual box</p> <p>VMware Workstation</p> <p>Parallels</p>	Director, ITS	<p>May use other solutions.</p> <p>Must use either host-only or NAT for networking configuration.</p> <p>Bridged networking can be supported however this requires approval from ITS on a case by case basis.</p>
➤ File Storage – Individual	<p>OneDrive (Office365)</p> <p>HCS Home Drive</p> <p>Syncplicity (deprecated 2020)</p>	Director, ITS	<p>May use other solutions as required when collaborating with external organisations.</p> <p>Must remain aware of data privacy, ownership and classifications.</p>
➤ File Storage – Research Data	<p>HCS Divisional/Department Shared Area</p> <p>OneDrive (Office365)</p> <p>NeSI as required to perform analysis</p>	<p>Deputy Vice-Chancellor Research and Enterprise</p> <p>University of Otago Human Ethics Committee (Health)</p>	<p>May use other solutions as required when collaborating with external organisations.</p> <p>Must remain aware of data privacy, ownership and classifications.</p>

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
	Azure or AWS University of Otago managed storage		
➤ Instant Messaging and Online Group Forums	Microsoft Teams Yammer	Director, ITS	May use other solutions as required for collaboration with external organisations.
➤ Internal Shared Documentation/Procedures	Confluence Microsoft Teams Otago Blogs	Director, ITS	May use other solutions.
➤ Office Productivity	Microsoft Office/Office365 (Recommended) iWork	Director, ITS	May use other solutions.
➤ Personal Password Vault	Bitwarden KeyPass LastPass	Director, ITS	May use other products.
➤ Presentations	Microsoft PowerPoint (Recommended) Keynote	Director, ITS	May use other solutions.
➤ Printing System	Uniflow/Uniprint	Director, ITS	May only use other solutions (direct print) when using domain/teaching specific printers (e.g. 3D printing).



Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Research Outputs	OJS (Journals) PKP – OCS conferencing OurArchive (Thesis) ORCID My PBRF Research Outputs Database	University Librarian Deputy Vice-Chancellor Research and Enterprise	May use other solutions for domain specific requirements. Must remain aware of data privacy, ownership and classifications.
➤ Spreadsheet Editing	Microsoft Excel iWork Numbers	Director, ITS	May use other solutions.
➤ Team & Personal Task Management	Jira/Confluence Planner Outlook	Director, ITS	May use other solutions.
➤ Personal Timetabling	Outlook Calendar (team/group meetings and non-centrally managed resources). Doodle Polls FindTime (Office365)	Director, ITS Committee for the Advancement of Learning and Teaching (CALT)	May use other products as required for collaboration with external organisations.
➤ Version Control System (IT code)	Bitbucket GitLab GitHub	Director, ITS	May use other products, but support will only be provided for Recommended solution.

Category of Service or Task	Services and Solutions	Business Owner	Notes and Guidance
➤ Virtual Conferencing (teleconference / video conference)	Zoom (Recommended) Microsoft Teams	Director, ITS	May use other solutions as required for collaboration with external organisations.
➤ Web Browser	Google Chrome Microsoft Edge Microsoft Internet Explorer Mozilla Firefox Safari	Director, ITS	May use other solutions.  Note some applications may require use of a specific browser, the listing here is not in preferential order.
➤ Wiki/Blogs	Otago Blogs/Podcasting Service (WordPress) Otago Wiki Service (MediaWiki)	Director, ITS	May use other solutions.

# Client Consultation

Approximately 60 person-hours were spent during the consultation / information gathering phase, including 10 meetings and three feedback cycles.

Clients consulted during creation of the Mandatory and Recommended IT Services and Solutions document:

- Clare Adams Otago Postgraduate Committee
- Mathew Anderson Engineer, Systems Services, IT Infrastructure, ITS
- Howard Amos University Librarian, eRAG, CALT
- Cate Bardwell Associate University Librarian, eRAG
- Gavin Bainbridge Head of IT Information Systems, ITS
- Assoc. Prof. Mik Black Dept of Biochemistry and Genomics Aotearoa, eRAG
- Prof. Richard Blaikie DVC R&E, eRAG, CALT
- Prof. Blair Blaikie Deputy Head of Department, Physics, eRAG
- Assoc. Prof. Rhiannon Braund Preventative & Social Medicine, CALT
- Helen Brownlie Group Leader Business Systems, Information Systems, ITS
- Mark Brunton Manager IT Advisory, ITS
- Dr. Russell Butson Senior Lecturer, HEDC, eRAG
- Burcu Cakmak IT Projects Manager, IT Projects Unit, ITS
- Mike Conroy Senior Manager Applications Development, Information Systems, ITS
- Daryl Clarkson Head of IT Infrastructure, ITS
- Dr. Michele Coleman Research Development Manager, Health Sciences, eRAG
- Assoc. Prof. Pat Cragg DVC Academic, CALT Chair
- Jason Cushen International Office, Director International, CALT
- Assoc. Prof. Ben Daniel HEDC, CALT
- Jackie Dean Manager, Career Development Centre
- Will Dreyer Education Officer, OUSA
- Justin Elliot Team Leader Desktop Support, Shared Services
- Luke Erickson Adviser IT, ITS
- Dr. John Egenes Senior Lecturer, Music, eRAG
- Assoc Prof David Eyers Dept of Computer Science, eRA Group Chair
- Richard Feist Senior Manager IT Assurance and Cyber Security, ITS
- Andrew Foster Team Leader – Systems Operations, IT Infrastructure, ITS
- Peter George Team Leader Desktop Support, Shared Services
- Prof. Anthony Harland HEDC, CALT
- Lorraine Harris Information Systems Officer, Research and Enterprise, eRAG
- Mike Harte Director, ITS
- Gordon Hudson Group Leader Business Systems, Information Systems, ITS
- Nicholas Innes Engineer, Systems Services, IT Infrastructure, ITS
- Dr. Rebecca Laurie Senior Business Analyst, Information Systems, ITS
- Assoc. Prof. William Levack Associate Dean Research, Health Sciences, eRAG
- Michael Light Group Leader Systems Services, IT Infrastructure, ITS
- Tricia McNaughton Senior Manager Business Systems, Information Systems, ITS
- Dr. John Milnes Research Information Co-ordinator, Research and Enterprise, eRA
- Katey Mitchell Customer Service Representative, AskOtago
- Margaret Morgan Director, University Quality Advancement Unit, CALT
- Dr. Bruce Norris Senior Manager IT Projects Unit, ITS
- Gary Peacock Team Leader Desktop Support, Shared Services
- Nick Phillips IT Manager, Otago Medical School
- Emerson Pratt Senior Manager IT Services, Shared Services
- Annemarie Senior IT Projects Manager, IT Projects Unit, ITS
- Prof. Sheila Skeaff Consumer & Applied Sciences Programme, Human Nutrition, CALT
- Shiobhan Smith Library Research Support Manager, eRAG
- John Steele AskOtago IT Manager
- Dr. Sarah Stein Distance Learning, Academic Division, CALT
- Grant Taylor Manager IT Advisory, ITS
- Karyn Thomson Director, Student & Academic Services, CALT

- Kathryn D. Tsikanovski                      Team Leader Desktop Support, Shared Services (WTN)
- Nicola Walmsley                              Manager IT Advisory, ITS
- Dr. Zach Weber                                Philosophy, Humanities, CALT
- Assoc. Prof. Peter Whigham                Associate Professor, Information Science, eRAG
- Dr. John Williams                            Marketing, Commerce, CALT
- Terry Wilson                                  Senior Manager Systems Services, IT Infrastructure, ITS
- Tim Young                                      Team Leader Desktop Support, Shared Services (CHCH)
- Assoc. Prof. Rachel Zajac                    Psychology, Sciences, CALT

*Note that some staff were not able to respond during the consultation process.*