STANDARD OPERATING ENVIRONMENT GUIDELINE

This guideline outlines the scope and approach to the Computer Desktop Standard Operating Environment (SOE) implemented by Massey University.

This guideline is intended to apply to computers and devices owned by Massey University and supported by Information Technology Services.

Standard Operating Environment Guideline

Purpose

Massey University Information Technology Services (ITS) support a Standard Operating Environment (SOE) for desktop and notebook computers. The SOE is designed to ensure that the large number of desktop and notebook computers provide the necessary functionality to staff and students; can be loaded with a standard software image, maintained, updated, audited and repaired by ITS staff in a manner that improves availability and reliability, with a minimum disruption to staff and students; and at a cost that is appropriate to the University.

The delivery of the Standard Operating Environment (SOE) to client computers is achieved through automated deployment and management tools. The expanded use of automation tools across all levels of ITS infrastructure, systems and services is designed to minimise support costs. The maintenance of desktop computers is most efficiently managed and delivered through the deployment of operating systems, software applications, patches and updates via online desktop management applications and tools.

As part of its objective to provide cost effective and efficient management of ICT resources, Information Technology Services (ITS) maintains a Standard Operating Environment (SOE) comprising a preferred minimum specification of hardware and software products, configurations and management tools.

The purpose of the Standard Operating Environment (SOE) is to ensure:

- That the operating systems, applications and associated software are reliable and consistent
- That the software component of the University desktop computer systems meets Massey University statutory obligations with regard to usage and copyright
- That the hardware procured by the University is of high quality to maintain reliability, availability and consistency, thus increasing productivity and lowering total cost of ownership (TCO)
- That data stored by clients is secure and protected from tampering by non-authorised persons, misuse or theft
- That there is compliance with MU policy and NZ legislation

The Standard Operating Environment (SOE) comprises the hardware and the baseline set of applications that will be installed by default on all Information Technology Services (ITS) supported desktop computers. Supplementary or additional applications supported by Information Technology Services (ITS) may be requested by the client. When installing a new computer for a client or rebuilding an existing computer, ITS will install all Standard Operating Environment (SOE) and appropriately licensed applications, will ensure that the computer is patched to the latest approved operating system and virus patch level.

Computer definitions

Standard configurations

- The computer configurations published here are fully compliant with the Standard Operating Environment (SOE)
- **5 day delivery**
- Full ITS support under the ITS Core Services SLA

Extended Configurations and Configure to Order (CTO)

- Extended configurations are available via the Exception Process. These are pre-configured machines operating on tiered basis from 2 - 4. These are designed to meet extended business needs whilst remaining fully compliant with the Standard Operating Environment (SOE) — and are fully supported by ITS under the ITS Core Services SLA

- These devices are **not compliant** with the Standard Operating Environment (SOE), full support from ITS is **not available** via the ITS Core Services SLA. Support and other requirements will be discussed with you via the Exception process and the equipment review group.

- **Standard delivery time frames are not available** for Configure to Order (CTO) configurations and devices. Delivery time frames will be requested and advised as part of an exception request. Configure to Order (CTO) devices often take 6 -8 weeks (sometimes more). We recommend you plan **well in advance** when considering a Configure to Order (CTO) device.

- All computer equipment being purchased with Massey funds regardless of use **must** be considered by the Equipment Review Group via the Exception process. This includes equipment supplied by a vendor to support a piece of lab or plant equipment — including any devices used to support this e.g. network devices. These are considered Configure to Order (CTO) configurations.

- Departmental hosted servers are to be requested and evaluated via the Exception process. These machines are considered Configure to order (CTO) configurations. For information on ITS hosted departmental servers, please see Departmental servers. If ITS is not able to facilitate your server request — or you would like to host the server yourself, a Configure to Order (CTO) request **must** be made via the Exception process. If Standard Operating Environment (SOE) hardware, software or configurations are purchased and re-purposed without ITS approval via the Exception process - the ITS Core Services SLA will no longer apply. Support for these configurations may be facilitated by ITS using an external vendor — at a charge to the department. ITS will not cover the costs of support for non compliant devices

- Changes to these configurations are possible via the exception process — however some changes may exclude a machine from being fully compliant with the Standard Operating Environment (SOE) and therefore may also mean full ITS support cannot be offered under the ITS Core Services SLA. The equipment review group will discuss this with you via your exception request

- Examples of extended configurations include digital signage devices and non-ITS managed labs.

Variations and exceptions

Including Linux, Virtual Machines (VM) and Tablets

Linux

Linux can be installed on Massey Owned machines by exception. This can either be done at purchase time (recommended) in which case this would be a Configure to Order (CTO) request via the Exception process — or via a request to the ITS Service Desk. If requested via the ITS Service Desk, the BIOS on the machine will need to be altered. Information Technology Services (ITS) is able to facilitate this via Fujitsu at a charge. You'll need to let us know which distribution you want to install, what antivirus software will be installed and we expect network credentials are used for logging into the machine and accessing network services. e.g. If you are printing using Linux — this will need to use Massey credentials for each user via FollowMe.

Virtual Machines (VM's)

Virtual machines can be installed on Massey Owned machines by exception. This can either be done at purchase time (recommended) in which case this would be a Configure to Order (CTO) request via the Exception process — or via a request to the ITS Service Desk. If requested via the ITS Service Desk, the BIOS on the machine will need to be altered — Information Technology Services (ITS) is able to facilitate this via Fujitsu at a charge.

For **Linux Virtual Machines** you'll need to let us know which distribution that you want to install, what antivirus software will be installed and we expect network credentials are used for logging into the machine and accessing network services. e.g. If you are printing using Linux — this will need to use Massey credentials for each user via FollowMe.

For **Windows Virtual Machines** you'll need to purchase the Massey Software Bundle which includes Windows 7 Enterprise, Symantec Endpoint Protection and Office 2010. This **is not** the full Massey Bundle installed on new machines — and instead is only to facilitate general use within Virtual Machines. A bundle charge of $145 will apply for this. The Virtual Machine will also need to be joined/bound to the Massey domain to facilitate management, license tracking and security compliance.

Tablets and iPads

Tablets are requested via the Exception process as Configure to Order (CTO) devices. Tablets are expected to be enrolled in Casper our Mobile Device Management system — as of 2015 all tablets will be managed via Casper.

Management of devices allows us to:

- Register your tablet on the Massey network and allocate an IT number
- Pre-configure Massey MUStaff WiFi
- Pre-configure your Massey email account (Exchange)
- Deliver volume purchased apps and books
- Ensure passcodes are used to secure the device (low complexity - 4 digit PIN)
- Remote wipe a lost or stolen device. Information Technology Services (ITS) **does not** have the ability to track a device via features such as Find My iPhone/iPad. This can be enabled by you using the Apple ID you use to sign into the device — and the Find My iPhone/iPad feature in iOS/iCloud.

Other

All other ICT hardware or software not published in the Standard Operating Environment (SOE) is to be requested via Information Technology Services (ITS). For hardware and department hosted servers, this is via the Exception process — software via the ITS Service Desk.

Massey Software Bundle

The Massey software bundle comes with all new standard and extended configuration of computers. Configure to Order (CTO) machines do not include the Massey software bundle. As part of the Configure to Order (CTO) approval process you will be asked to source software equivalent to the Massey software bundle to ensure the computer interacts and operates with Massey's network services. If you need software not in the Massey bundle. See Need other software for more information.

Windows 7 64-bit

Software Name	Publisher	Version Installed
7-Zip	Igor Pavlov	Latest Stable Version (9.20.x.x)
Adobe Flash Player 11 Active X	Adobe Systems Incorporated	Latest Stable Version (15.0.x.x)
Adobe Flash Player 11 Plugin	Adobe Systems Incorporated	Latest Stable Version (15.x.x.x)
Adobe Reader	Adobe Systems Incorporated	Latest Stable Version (11.0.xx)
Adobe Shockwave Player	Adobe Systems Incorporated	Latest Stable Version (12.1.x.xxx)
ConnectIT LogMeIn Rescue Calling Card	LogMeIn	Latest Stable Version (7.x.xxx)
Microsoft Internet Explorer	Microsoft Corporation	Latest Stable Version (11)
Massey University Student Management System	Massey University	Latest Stable Version (1.0.0)
Microsoft .NET Framework	Microsoft Corporation	Latest Stable Version (4.0.xxx)
Microsoft Lync 2010	Microsoft Corporation	Latest Stable Version (4.0.xxxx.xxxx)
Microsoft Office Professional Plus 2010	Microsoft Corporation	Latest Stable Version (14.0.xxxx.xxxx)
Microsoft Outlook Personal Folders Backup	Microsoft Corporation	Latest Stable Version (1.10.x.x)
Microsoft Powershell	Microsoft Corporation	Latest Stable Version (3.0 Build x Revision x)
Microsoft Silverlight	Microsoft Corporation	Latest Stable Version (5.1.xxxxx.x)
Oracle Java Runtime	Oracle	Latest Stable Version (8.x.xxx)
Symantec Endpoint Protection	Symantec Corporation	Latest Stable Version (12.1.xxxx)
VLC Media Player	VideoLAN	Latest Stable Version (2.x.x)
Xerox Global Mode Print Driver PCL6	Fuji Xerox	Latest Stable Version (5377.xxx.x.x)

OS X 10.10 (Mac)

Software Name	Publisher	Version
Adobe Reader	Adobe Systems Incorporated	Latest Stable Version (11.x.xx)
Adobe Shockwave	Adobe Systems Incorporated	Latest Stable Version (12.x.x.xxx)
Apple Safari	Apple	Latest Stable Version (8.x.x)
Apple iLife (*Garage Band, iMovie*)	Apple	Latest Stable Version (10.x.x)
Apple iWork (*Keynote, Numbers, Pages*)	Apple	Latest Stable Version: Keynote (6.x.x) Latest Stable Version: Numbers (3.x.x) Latest Stable Version: Pages (5.x.x)
Applejack	Apple	Latest Stable Version (1.6)
Flip Player	Telestream	Latest Stable Version (3.x.x)
Fuji Xerox Print Drivers	Fuji Xerox	Latest Stable Version (1.71.xxx)
Microsoft Lync	Microsoft Corporation	Latest Stable Version (14.x.x)
Microsoft Office 2011	Microsoft Corporation	Latest Stable Version (2011 14.x.x)
Microsoft Silverlight	Microsoft Corporation	Latest Stable Version (5.x.x)
Oracle Java Runtime	Oracle	Latest Stable Version (7 Update 67)
Symantec Endpoint Protection	Symantec Corporation	Latest Stable Version (12.1.xxxx)
The Unarchiver	Dag Ågren	Latest Stable Version (3.x.x)
VLC Media Player	VideoLAN	Latest Stable Version (2.x.x)

Windows 7 32-bit

Note: Standard Windows desktops and laptops are now shipping with the Windows 7 64-bit software Bundle. The table below is provided for information purposes only and will no longer be maintained.

Software Name	Publisher	Version Installed
7-Zip	Igor Pavlov	Latest Stable Version (9.20.x.x)
Adobe Flash Player 11 Active X	Adobe Systems Incorporated	Latest Stable Version (15.x.x.x)
Adobe Flash Player 11 Plugin	Adobe Systems Incorporated	Latest Stable Version (15.x.x.x)
Adobe Reader	Adobe Systems Incorporated	Latest Stable Version (11.0.xx)
Adobe Shockwave Player	Adobe Systems Incorporated	Latest Stable Version (12.1.x.xxx)
ConnectIT LogMeIn Rescue Calling Card	LogMeIn	Latest Stable Version (7.x.xxx)
Microsoft Internet Explorer	Microsoft Corporation	Latest Stable Version (11)
Massey University Student Management System	Massey University	Latest Stable Version (1.0.0)
Microsoft .NET Framework	Microsoft Corporation	Latest Stable Version (4.0.xxx)
Microsoft Lync 2010	Microsoft Corporation	Latest Stable Version (4.0.xxxx.xxxx)
Microsoft Office Professional Plus 2010	Microsoft Corporation	Latest Stable Version (14.0.xxxx.xxxx)
Microsoft Powershell	Microsoft Corporation	Latest Stable Version (3.0 Build x Revision x)
Microsoft Silverlight	Microsoft Corporation	Latest Stable Version (5.1.xxxxx.x)

Software Name	Publisher	Version Installed
Oracle Java Runtime	Oracle	Latest Stable Version (8.x.xxx)
Symantec Endpoint Protection	Symantec Corporation	Latest Stable Version (12.1.xxxx)
VLC media player	VideoLAN	Latest Stable Version (2.x.x)
Xerox Global Mode Print Driver PCL6	Fuji Xerox	Latest Stable Version (5377.xxx.x.x)

Need other software?

The Standard Operating Environment (SOE) comprises a baseline set of applications that will be installed by default on all Information Technology Services (ITS) supported desktop computers. Some additional applications are now available via the software portals - Casper (*for Mac OS based computers*).

The software portal for distributing software via System Centre Configuration Manager (SCCM) (*for Windows based computers)* is currently under development. SCCM is already in use by some departments. Information Technology Services (ITS) is using SCCM to manage servers, desktops, labs and imaging.

When installing a new computer for a client or rebuilding an existing computer, Information Technology Services (ITS) will install all Standard Operating Environment (SOE) and appropriately licensed applications, will ensure that the computer is patched to the latest approved operating system and virus patch level.

Scope

This guideline is intended to apply to computers and devices supported by Information Technology Services (ITS) that are used by Massey staff and students.

All hardware and software is owned by Massey University unless an exception has been granted by the Exception Review Group via the Exception process. These computers, compliant with the Standard Operating Environment (SOE) are fully supported by Information Technology Services (ITS) under the ITS Core Services SLA. Computers specifically used in a research environment or special-purpose computer laboratory environment may be treated as an exception to this standard.

If Standard Operating Environment (SOE) hardware, software or configurations are purchased and re-purposed without Information Technology Services (ITS) approval via the Exception process — the ITS Core Services SLA will no longer apply. Support for these configurations may be facilitated by Information Technology Services (ITS) using an external vendor — any charges incurred will be the responsibility of the department. Information Technology Services (ITS) will not cover the costs of support for non-compliant devices. All equipment or devices operating within the Standard Operating Environment (SOE) must operate in accordance with this standard.

Expectations

Installation
Machines are delivered and installed by the vendor. 'Box drops' are via exception only.

Installation Guidelines
Fujitsu must ensure that the following functions are performed prior to leaving the customer (unless otherwise detailed in the job request email):

- Physically connect and set-up the device
- Ensure that the Customer can log on to the Massey domain with their username and password
- Ensure that the Customer can connect to the default network home drive
- Connect and set-up any special keyboard and mouse
- Set up Microsoft Outlook, and send a test email
- Verify connection to external web sites
- Set up FollowMe printing
- Take away any packaging (which can be left in Massey recycle bins)

Security
All Massey Standard Operating Environment (SOE) units are padlocked and have their BIOS locked.
Software updates (security) released by Information Technology Services (ITS) are applied as soon as possible.

Software
The standard software bundle will remain in place — including Information Technology Services (ITS) configured firewall rules, management profiles and administrative accounts.

Admin rights
Administrator rights will not be granted at time of installation. These can be requested via the ITS Service Desk — and granted where appropriate.

Antivirus

Enterprise class antivirus software (e.g. Symantec Endpoint Protection or Symantec Antivirus for Linux) is installed, is not prevented in any way from connecting to the management server and updates and patches are installed where manual intervention is required.

Massey Domain

The machine is joined or bound to the Massey domain. This facilitates management of the device and the use of Massey credentials to log in. Devices are not to be removed from the Massey domain unless an exception is granted by ITS.

Logging in

A user code and password must be used to log into the computer **and** Massey systems and services — unless an exception has been granted by ITS.

Policies

All Massey University policies must be adhered to.

Guidelines

Logging in

Local accounts and auto-login are not to be used at Massey without an Information Technology Services (ITS) exception. Multi-user machines which save user code credentials to facilitate internet, printing, shared drives or other access are **prohibited** without an ITS exception. Information Technology Services (ITS) may make use of tools to monitor the use of user codes at Massey including — how long a user code is in use, how many machines it is being used on and where it is in use.

Procurement

The ITS Associate Director, Service Delivery is responsible for the provision of desktop computer hardware and software via preferred supplier agreements, including the All of Government (AOG) agreement.

Information Technology Services (ITS) requires that Massey University staff submit purchase requests for any ICT software or hardware via the standard ITS procurement procedures. ITS procurement procedures are to be followed for all purchasing requests.

The ITS Associate Director, Service Delivery is responsible for managing the MU Desktop Refresh Programme and these devices are to be compliant with the requirements as set out in the Standard Operating Environment (SOE).

Read more on the hardware purchasing and procurement process.

Licensing

The licensing obligation for core software installed on Standard Operating Environment (SOE) computers is the responsibility of Information Technology Services (ITS). The licensing of all non-core applications installed on SOE computers will be the responsibility of the Faculty or Department providing the software to the end-user.

The Faculty or Department will have auditable records of all such software licences. Information Technology Services (ITS) will not install any software without the Faculty or Department providing evidence of the possession of a current end user license.

Support

Information Technology Services (ITS) will provide support as defined in the [Core Service Level Agreement](#). ITS will not provide support for non-SOE applications or hardware. All requests for support are to be directed via the ITS Service Desk or [AskIT Self-Service](#).

Data storage

Information Technology Services (ITS) is not responsible for data stored on the staff member's local hard drive or external storage device. Staff are required to store important information on ITS data centre hosted network storage devices.

Information Technology Services (ITS) encourages staff to make regular backups and copies of all data and information.

In the event of lost or damaged files, a reasonable attempt will be made to recover information but the University and ITS staff cannot guarantee recovery of data stored outside ITS data centre. A charge will apply for this service and may be facilitated via an external vendor.

Re-imaging

Re-imaging of computers can be facilitated by Information Technology Services (ITS).

In some cases a charge may apply.

Servicing and repairs

Technical support for computer hardware must be requested via the ITS Service Desk. Information on warranty and non-warranty repairs including quotes for repair can be found at [Servicing and repairs](#).

MigrateIT

The MigrateIT Service is a file copying process that can help you when moving to another/new PC. MigrateIT scans the local hard drive then copies selected files and documents and stores them temporarily on a network server. Once this has been completed the files can be reviewed and; if required can be restored onto a network shared drive or your new PC.

See [MigrateIT](#) for more information.

Renting a computer

When a new computer is requested, user, delivery and charging information will be required to ensure that the setup and delivery of the new computer is efficient. Additionally, in the majority of cases, new computers will be replacing existing computers and it is therefore expected that the disposal of the old computer will occur at the same time new computers are delivered. Information about the old computer will therefore be required when a new computer is requested.

Rental Scheme

On the basis of considerations such as longevity of equipment, usage and warranties, *Rental Periods* have been determined for different categories of equipment. The rental period is synonymous with a lease term, and will apply as follows:

Description	Rental Period
Student Computer Laboratory Computers	3 Years
Lecture Theatre Computers	3 Years
Staff Laptop Computers	3 Years
Staff Desktop Computers	4 Years

Budget Centres will be charged a recurring monthly rental for each computer over the rental period for that computer. At the end of the rental period, the rental charge will cease and the computer will be considered **eligible** for replacement

- 24 months for **tablets**
- 36 months for **laptops**
- 48 months for **desktops** *(excluding labs)*

If however the budget centre wishes to continue using the computer at the end of the rental period, they may continue to do so with no additional rental charges, until the computer reaches the **priority replacement age**:

- 36 months for **tablets**
- 48 months for **laptops**
- 60 months for **desktops** *(excluding labs)*

Computers which remain in use after they have reached the priority replacement age, will incur a monthly charge that will be applied until such time as the aged computer is decommissioned. Support is not available for equipment that has reached or passed its priority replacement age.

Rental Charges

Rental charge rates will be determined by the original purchase price of the computer plus standardised costs for delivery and disposal, charged over the rental period on a monthly basis.

For example:

Price of new computer* $1,000.00

Rental Period (months)   48

Rental rate per month $20.83

Rental charges will be processed on a monthly basis, commencing in the month the new computer is delivered and ceasing at the end of the rental period (36 or 48 months).

Not actual costs. Actual costs will depend on negotiated contract prices at time of purchase.

Note: *The prices shown here and on the MU Computer Catalogue include the "MU Lifecycle fee" (delivery, disposal and warranty), which is currently $200.*

Compliance

Information Technology Services (ITS) staff and the clients utilising Massey University ICT resources are required to adhere to the MU ITS policies, ITS guidelines and procedures and should be familiar with the contents of these policies, guidelines and procedures.

ITS staff and the clients utilising Massey University ICT resources are required to comply with all NZ and international copyright and other intellectual property laws and agreements and other NZ laws.

Any person who wishes to have a computer exempted from the Standard Operating Environment (SOE) must request an exemption via the Exception process. Each submission will be assessed on a case-by-case basis, for appropriateness within the Massey Network environment and to ensure that the hardware carries appropriate support.

Depending on their status, Non-Standard Operating Environment computers may be subject to various network restrictions that restrict access to various administrative services and systems. These restrictions will be communicated to the person who has requested an exemption.

As part of this goal, it is the responsibility of Information Technology Services (ITS) to implement appropriate measures to ensure that all computer devices (including servers, desktop computers, printers, mobile devices) connected to Massey Universities network have appropriate virus and malware protection, virus definition libraries are current, and that the most recent versions of approved operating systems and security patches have been installed. This is achieved through a formal process of patch notification, evaluation and release management.

Related procedures / documents

- [Internet Use and Digital Communications Policy](#)
- [User Code and Password Policy](#)
- [Use and Access to Information Technology Systems Policy](#)