



## Government Standard on Information & Communication Technology

### OCIO/S 6.2.1

### Technology - Client Devices -

### Personal Computers and Notebooks

**Confidentiality:** Public  
**Version:** 6.1F

**Approver's Name:** Andrew Mills  
**Title:** Chief Information Officer and  
A/Chief Technology Officer

**Signature:** Original Signed

**Date Approved:** 5<sup>th</sup> September 2008

## Government Standard on Information & Communication Technology

### OCIO/S6.2.1

### Technology – Client Devices – Personal Computers and Notebooks

---

Confidentiality: Public Version: 6.1F Status: Draft

Audience: SA Government Agencies  
Compliance: Mandatory  
Creator: Office of the Chief Information Officer  
Mandate/Authority: State Chief Information Officer  
Original Authorisation Date: 1 September 1996  
Last Updated and Approved: 5 September 2008  
Issued: 8 September 2008  
Expiry Date: 30 March 2009  
Primary Contact: Strategy & Innovation Directorate, Office of the Chief Information Officer,  
Tel: 8226 5573

---

#### Coverage:

The South Australian public authorities required to adhere to this Policy are defined in OCIO/P1.1 Government Policy on Information & Communication Technology – Governance – Compliant Authorities.

This policy or standard is intended for use by South Australian Government agencies only. Reliance upon this policy or standard by any other person is entirely at their own risk and the Crown in the right of South Australia disclaims all responsibility or liability to the extent permissible by law for any such reliance.

---

Managed and Maintained by  
[Office of the Chief Information Officer](#)

[Copyright](#) © Office of the Chief Information Officer  
1998, 2004, 2005, 2006, 2007, 2008  
[Disclaimer](#)  
This page was last modified 8 September 2008

---

## TABLE OF CONTENTS

<b>1.</b>	<b>PURPOSE.....</b>	<b>4</b>
<b>2.</b>	<b>STANDARD STATEMENT .....</b>	<b>4</b>
2.1	Standard Details.....	4
	<i>Desktop Computers – Functional and Technical Specifications.....</i>	<i>4</i>
	<i>Notebook Computers – Functional and Technical Specifications.....</i>	<i>6</i>
	<i>Desktop and Notebook Computer Operating Software .....</i>	<i>7</i>
2.2	Rationale.....	8
<b>3.</b>	<b>IMPLEMENTATION .....</b>	<b>8</b>
3.1	Implementation Considerations .....	8
3.2	Exemptions .....	8
3.3	Responsibilities .....	9
<b>4.</b>	<b>REFERENCES &amp; LINKS .....</b>	<b>9</b>

## 1. PURPOSE

The South Australian Government has undertaken to consolidate, rationalise and standardise public sector ICT infrastructure. This standard supports that initiative, advising agencies of the hardware requirements for desktop and notebook computers that align with the Client Computing and Server Equipment Purchase Agreement. It also identifies the operating software to be run on desktop and notebook computers.

## 2. STANDARD STATEMENT

### 2.1 Standard Details

<b>S1. Desktop Computers – Functional and Technical Specifications</b>
<b>S1.1 Standard Desktop Configurations</b>
<p>There are three Standard Desktop Hardware Configurations, being the:</p> <ol style="list-style-type: none"><li>1. Basic/Education Desktop Configuration;</li><li>2. Corporate Desktop Configuration;</li><li>3. Specialist Desktop Configuration.</li></ol>
<b>S1.2 Basic/Education Desktop Standard PC – Functionality</b>
<p>The Basic/Education Desktop Configuration must enable network connection and support the following functionality:</p> <ol style="list-style-type: none"><li>1. Word processing;</li><li>2. Spreadsheet operation;</li><li>3. Simple desktop database operations;</li><li>4. Web browsing;</li><li>5. Electronic messaging;</li><li>6. Terminal emulation;</li><li>7. Low-end desktop publishing;</li><li>8. Basic graphics and multimedia work; and</li><li>9. Anti-virus support.</li></ol>
<b>S1.3 Corporate Desktop Standard PC – Functionality</b>
<p>The Corporate Desktop Configuration must support the functionality of the Basic/Education Desktop Configuration plus the following:</p> <ol style="list-style-type: none"><li>1. Operation of large complex spreadsheets, for example utilising data modelling features; and</li><li>2. Operation of large complex database using advanced queries.</li></ol>
<b>S1.4 Specialist Desktop Standard PC – Functionality</b>
<p>The Specialist Desktop Configuration must support the functionality of the Corporate Desktop Configuration plus the following:</p> <ol style="list-style-type: none"><li>1. Multimedia authoring;</li><li>2. Video capture (with additional hardware if required);</li><li>3. Highly complex 3D modelling; and</li><li>4. Use of spatial information systems.</li></ol>

**S1.5 Desktop Minimum Technical Specifications**

**Standard Desktop Configurations**

	<b>Basic/Education Desktop Standard PC</b>	<b>Corporate Desktop Standard PC</b>	<b>Specialist Desktop Standard PC</b>
<b>CPU Architecture</b>	Single Core Processors	Dual Core Processors	Dual Core Processors
<b>CPU Performance</b>	Celeron/Pentium 4 3.0Ghz or AMD CPU of equivalent or higher performance	Core 2 Duo E4600 2.4 Ghz or AMD CPU of equivalent or higher performance	Core 2 Quad Duo Q6600 2.4 Ghz or AMD CPU of equivalent or higher performance
<b>RAM</b>	1024Mb DDR2 SDRAM	2Gb (2 x 1024Mb) DDR2 SDRAM	2Gb (2 x 1024Mb) DDR2 SDRAM
<b>Storage</b>	80Gb SATA 8Mb Cache	80Gb SATA II 8Mb Cache	80Gb SATA II 8Mb Cache
<b>Video Adaptor</b>	Integrated Shared Memory	Integrated Shared Memory	256Mb PCI Express Card

**Components Common to All Desktop Configurations**

<b>Component</b>	<b>Description</b>
<b>Memory</b>	The board must be able to support the doubling of RAM without requiring the replacement of existing RAM or adversely affecting the performance of the machine.
<b>Chipset</b>	Chipset Brand & Model must be current technology, with minimum 6-month window life. Changes only permitted at end-of-life or change in Desktop Model/Series.
<b>I/O Systems</b>	PCI - One free PCI slot after full configuration, Enhanced IDE, ATA-133 (where applicable), Serial ATA II (where applicable), Minimum of 4 USB version 2 ports, at least 2 front preferred, Network, minimum Integrated 10/100/1000 Ethernet (including wake on LAN functionality)
<b>Video</b>	Integrated on motherboard or separate PCI-Express slot dependant on configuration.
<b>Sound</b>	Industry Standard (in-built speakers preferred).
<b>Optical Drive</b>	Current Industry Standard DVD ROM.
<b>Mouse</b>	Minimum Two-button Optical with Wheel.
<b>Keyboard</b>	Standard 104 key Microsoft® Windows compliant
<b>Case</b>	Minimum exposed drive bays one 3½ inch, one 5 ¼ inch. Desktop and tower options are required (including small form factor where available).
<b>Power Supply</b>	Must be able to support all internal peripheral devices.
<b>Monitor</b>	Flat Panel Display with viewable area: 17 inches Brightness: 200 cd/m or better Contrast Ratio: 300:1 or better Response Time: 16 ms or better Resolution: 800 x 600 / 1024 x 768 / 1280 x 1024 Number of colours supported: 16 million Total allowable faults: Comply with ISO standard 13406-2

<b>S2. Notebook Computers – Functional and Technical Specifications</b>
<b>2.1 Standard Notebook Configurations</b>
<p>There are four Standard Notebook Hardware Configurations, being the:</p> <ol style="list-style-type: none"><li>1. Basic/Education Notebook Configuration;</li><li>2. Corporate Notebook Configuration;</li><li>3. Ultra-Portable Notebook Configuration; and</li><li>4. Tablet Configuration.</li></ol>
<b>S2.2 Basic/Education Notebook – Functionality</b>
<p>The Basic/Education Notebook Equipment Configurations must:</p> <ol style="list-style-type: none"><li>1. Enable network connectivity</li><li>2. Include battery power for not less than four (4) hours;</li><li>3. Be portable (weight of less than 3 Kg)</li></ol> <p>The configuration must also support the following functionality without the attachment of external devices:</p> <ol style="list-style-type: none"><li>1. Word processing</li><li>2. Spreadsheet operation;</li><li>3. Simple desktop database operations;</li><li>4. Web browsing;</li><li>5. Electronic messaging;</li><li>6. Terminal emulation;</li><li>7. Low-end desktop publishing;</li><li>8. Basic graphics and multimedia work; and</li><li>9. Anti-virus support.</li></ol>
<b>S2.3 Corporate Notebook – Functionality</b>
<p>The Corporate Notebook Configuration must support the functionality of the Basic/Education Notebook Configuration together with the following:</p> <ol style="list-style-type: none"><li>1. Battery power of not less than 5 hours;</li><li>2. Operation of large complex spreadsheets for example utilising data modeling features; and</li><li>3. Operation of large complex databases using advanced queries.</li></ol>
<b>S2.4 Ultra-Portable Notebook – Functionality</b>
<p>The Ultra-Portable Notebook Configuration must at a minimum (with the connection of external devices) support the same level of functionality as the Basic Notebook Configuration, but must also have a higher level of portability, not weighing more than two (2) Kg.</p>
<b>S2.5 Tablet – Functionality</b>
<p>The Tablet Notebook Configuration must at a minimum support the same level of functionality as the Basic Notebook Configuration, together with the following:</p> <ol style="list-style-type: none"><li>1. Capability to convert written text to digital image; and</li><li>2. Capability to use screen in “book form”.</li></ol>

**S2.6 Notebook and Tablet Minimum Technical Specifications**

**Standard Notebook and Tablet Configurations**

	<b>Basic/Education Notebook</b>	<b>Corporate Notebook</b>	<b>Ultra Portable</b>	<b>Tablet</b>
<b>CPU Architecture</b>	Single Core Processors	Dual Core Processors	Dual Core Processors	N/A
<b>CPU Performance</b>	Celeron M 1.86Ghz or AMD CPU of equivalent or higher performance	Core 2 Duo 2.0Ghz or AMD CPU of equivalent or higher performance	Core Duo 1.2Ghz or AMD CPU of equivalent or higher performance	Core Duo 1.2Ghz
<b>RAM</b>	1Gb	2Gb	2Gb	1Gb
<b>Storage</b>	80GB	80GB	Current entry level	Current entry level
<b>Screen Size</b>	15.1"	15.1"	12.1"	10.4"

**Components Common to All Notebook and Tablet Configurations**

<b>Component</b>	<b>Description</b>
<b>Chipset</b>	Chipset Brand & Model must be current technology, with minimum 6-month window life. Changes only permitted at end-of-life or change in Desktop Model/Series.
<b>BIOS Compatibility</b>	Must have compliant & enabled Advanced Configuration and Power Interface (ACPI).
<b>Sound</b>	Industry Standard.
<b>Video</b>	Integrated on motherboard or dedicated card.
<b>I/O Systems</b>	Minimum of 2 USB version 2 ports, 1 x VGA Port, 1 x IEEE 1394 (optional), Bluetooth (optional), PC Card Type 2 (minimum). <b>Notebook Computers Only</b> - WiFi (optional with capability to be turned off at the BIOS level)),
<b>Optical Drive</b>	Current Industry Standard DVD-ROM.
<b>DMI</b>	DMI version 2.0 or greater support. LAN wake-up and management required
<b>Monitor</b>	<b>Tablet Computer Only</b> - Resolution: 800 x 600 / 1024 x 768 / 1280 x 1024, Number of colours supported: 16 million, Total allowable faults: Comply with ISO standard 13406-2

**S3. Desktop and Notebook Computer Operating Software**

The following operating software is to be used on Government desktop and notebook computers that conform to the functional specifications identified in 1. and 2. above.

n Standard

Windows XP Professional  
Windows XP Tablet Edition (in respect of the Tablet Notebook Configuration)

n-1 Standard

Windows 2000 Professional  
Windows XP Tablet Edition (in respect of the Tablet Notebook Configuration)

## 2.2 Rationale

Information technology platform standards support the public service ICT strategies by facilitating:

- Consolidation, rationalisation and standardisation of IT infrastructure;
- Whole-of-government purchasing to obtain best pricing for IT goods and services.

South Australian Government agencies procure personal computers through the Client Computing and Software Equipment Purchase Agreement that is managed by the Contract Management Group, OCIO, Department for Transport, Energy and Infrastructure. Hardware processors form part of the Agreement's technical specifications. The specifications for the hardware are periodically reviewed and revised.

The South Australian Government has standardised on a common Microsoft-based software platform, using Windows desktop operating systems to provide a common operating environment across Government. The desktop/notebook operating systems specified in this standard are supported by industry and deliver the maximum benefit to Government.

## 3. IMPLEMENTATION

### 3.1 Implementation Considerations

This standard applies to systems that are new or being upgraded or replaced.

Agencies are advised that information regarding the Client Computing and Software Equipment Purchase Agreement is available from the Contract Management Group, Shared Services Reform Office, Department of Treasury and Finance. Information provided includes:

- Current specifications for three desktop configurations and four notebook configurations;
- Supplier contracts;
- Ordering and delivery advice;
- Warranty and repairs information;
- Upgrading guidelines; and
- Other advice/recommendations.

Agencies operating non-standard platforms are advised that new software and modifications to existing applications must avoid employing operating system-specific functions in their implementation. All software development should facilitate the eventual switchover to government standards.

### 3.2 Exemptions

Advice regarding exemptions from these standards is provided in the Government Policy on Information and Communications Technology entitled 'OCIO/P1.2 Government Policy on Information and Communication Technology - Governance – Exemptions'.

All purchases outside full configurations of personal computers as specified in under the Client Computing and Software Equipment Purchase Agreement will require an exemption form to be completed.

Agencies wishing to implement expired operating systems at the desktop level must apply for an exemption.

### **3.3 Responsibilities**

Chief Executives are responsible for ensuring the compliance of their organisations with this standard. Chief Information Officers are responsible for ensuring that the standard is implemented within their agencies.

## **4. REFERENCES & LINKS**

1. OCIO/P1.1 Government Policy on Information and Communication Technology – Governance – Compliant Authorities
2. OCIO/P1.2 Government Policy on Information and Communication Technology - Governance – Exemptions
3. OCIO/P6.1 Government Policy on Information and Communication Technology - Technology – Information and Communication Technology (ICT) Infrastructure Standards.