Government of Ontario

Information

&

Technology

Standards

Government of Ontario IT Standard (GO-ITS)

GO-ITS Number 1.11

Client Workstation Platform Standard

Version #: 1.0

Status: Approved

Prepared for the Information Technology Standards Council (ITSC) under the delegated authority of the Management Board of Cabinet

Copyright & Disclaimer

Government of Ontario reserves the right to make changes in the information contained in this publication without prior notice. The reader should in all cases consult the Document History to determine whether any such changes have been made.

Template Info

Template Name	Template #	Template Version No.	Template Author	Template Completion Date
GO-ITS Template	09.03.25	1.0	Design: PMCoE Boilerplate: TAB/OCCTO	2009-03-26

Document History (including ITSC and ARB approval dates)

Date	Summary
2009-08-24	**Created**: Draft number set to 0.10
2009-09-01	Updates based on consultation with Desktop Service/Field Services Branch
2009-09-03	Updates based on consultation with OCCTO – Technology Adoption Branch Standard number assigned: GO-ITS 1.11; Version set to draft #1
2009-10-21	Updates based on ITSC member feedback Change version number to draft #2
2009-11-18	**Endorsed:** o IT Standards Council endorsement

2009-12-03	**Approved:**
	   o Architecture Review Board approval
	   o Approved Version number set to V1.0

Table of Contents

1. Foreword

Government of Ontario Information Technology Standards (GO-ITS) are the official publications on the guidelines, preferred practices, standards and technical reports adopted by the Information Technology Standards Council (ITSC) under delegated authority of the Management Board of Cabinet (MBC). These publications support the responsibilities of the Ministry of Government Services (MGS) for coordinating standardization of Information & Information Technology (I&IT) in the Government of Ontario. Publications that set new or revised standards provide enterprise architecture guidance, policy guidance and administrative information for their implementation. In particular, GO-ITS describe where the application of a standard is mandatory and specify any qualifications governing the implementation of standards.

2. Introduction

2.1. Background and Purpose

Infrastructure Technology Services (ITS) delivers the Desktop Service (DS) that offers computing workstation hardware and software products and services to end-users of the Ontario Public Service (OPS).   The DS' end-to-end service of the OPS desktop computing environment includes:

- Lifecycle Management including:
    - Client services
    - Acquisition, delivery and installation of desktop hardware and software
    - Technology retire/refresh management
    - Relocation of desktop hardware and software
    - Asset management
    - Deployment of certified business-specific applications

- Support and Maintenance including:
    - On-site and remote support of desktop hardware and software
    - Anti-virus and patch management

- Certification and Test Lab:
    - Software certification and test lab services

- Technology Planning:
    - Evergreen the desktop product software and hardware offerings to
        - provide the OPS with robust, secure, reliable, resilient and cost effective desktop platforms
        - maximize productivity of OPS workers
        - recognize that since the Desktop Service is the primary contact OPS workers have with the I&IT organization and its services – it is a primary shaper of customer satisfaction about I&IT, hence Desktop Service and I&IT should consistently be positioned as progressive, and responsive to user requirements.

The OPS DS desktop computing environment is defined as all activities associated with the planning, provisioning and support of:

- Personal computers (i.e. desktops, laptop, tablet PC)
- Peripheral devices (i.e. printers, scanners, etc.)
- Personal computing software (i.e. operating system, office automation applications, software suites and utilities that provide functionality to the hardware components)

This standard shall define the operating platform for the end-user productivity hardware.   This hardware, consisting of Desktop, Notebook and Tablet PC's operates with a standard platform as listed in Appendix "A" for the Operating System, Productivity Suite, core security and management software.   The components of this operational platform (i.e. base image) are defined within this standard.

2.2. Scope

2.2.1. In Scope

- Desktop, notebook and tablet PC delivered through the ITS Desktop Managed Service

- Software identified as part of the workstation base image

2.2.2. Out of Scope

- Workstation software that are not part of the base image

- Infrastructure devices (e.g. servers, network switches, storage, backup devices, load balancers, firewalls, etc.)

- Cluster specific Custom-developed and/or Commercial Of The Shelf (COTS) application deployed into the desktop, notebook and tablet PC provided through the ITS Desktop Managed Service

- Legacy desktop, notebook and tablet PC are out of scope and will be addressed by the normal refresh cycle.

2.3. Applicability Statements

2.3.1. Organization

Government of Ontario IT Standards and Enterprise Solutions and Services apply (are mandatory) for use by all ministries/clusters and to all former Schedule I and IV provincial government agencies under their present classification (Advisory, Regulatory, Adjudicative, Operational Service, Operational Enterprise, Trust or Crown Foundation) according to the current agency classification system.

Additionally, this applies to any other new or existing agencies designated by Management Board of Cabinet as being subject to such publications, i.e. the GO-ITS publications and enterprise solutions and services - and particularly applies to Advisory, Regulatory, and Adjudicative Agencies (see also procurement link, OPS paragraph). Further included is any agency which, under the terms of its Memorandum of Understanding with its responsible Minister, is required to satisfy the mandatory requirements set out in any of the Management Board of Cabinet Directives (cf. Operational Service, Operational Enterprise, Trust, or Crown Foundation Agencies).

As new GO-IT standards are approved, they are deemed mandatory on a go-forward basis (Go-forward basis means at the next available project development or procurement opportunity).

When implementing or adopting any Government of Ontario IT standards or IT standards updates, ministries and I&IT Cluster must follow their organization's pre-approved policies and practices for ensuring that adequate change control, change management and risk mitigation mechanisms are in place and employed.

For the purposes of this document, any reference to ministries or the Government includes applicable agencies.

2.4. Requirements Levels

Within this document, certain wording conventions are followed. There are precise requirements and obligations associated with the following terms:

Must	This word, or the terms "REQUIRED" or "SHALL", means that the statement is an absolute requirement.
Should	This word, or the adjective "RECOMMENDED", means that there may exist valid reasons in particular circumstances to ignore the recommendation, but the full implications (e.g., business functionality, security, cost) must be understood and carefully weighed before

2.5. Contact Information

2.5.1. Roles and Responsibilities

Accountable Role Definition
The individual ultimately accountable for the process of developing this standard. There must be exactly one accountable role identified. The accountable person also signs off as the initial approver of the proposed standard before it is submitted for formal approval to ITSC and ARB. (Note: in the OPS this role is at a CIO/Chief or other senior executive level)

Accountable Role:
Title: Director, Desktop Managed Services/Field Services Branch
Ministry/Cluster: Ministry of Government Services
Division: Infrastructure Technology Services

Responsible Role Definition
The organization responsible for the development of this standard, There may be more than one responsible organization identified if it is a partnership/joint effort. (Note: the responsible organization provides the resource(s) to develop the standard)

Responsible Organization:
Ministry/Cluster: Ministry of Government Services
Division: Infrastructure Technology Services
Branch: Desktop Managed Services / Field Services Branch

Support Role Definition
The support role is the resource(s) to whom the responsibility for actually completing the work and developing the standard has been assigned. There may be more than one support role identified. If there is more than one support role identified, the following contact information must be provided for each of them. If there is more than one support role, the first role identified should be that of the editor – the resource responsible for coordinating the overall effort.

Support Role (Editor):
Ministry/Cluster: Ministry of Government Services
Division: Infrastructure Technology Services
Branch: Desktop Managed Services / Field Services Branch
Section: Desktop Services Section
Job Title: Senior Manager, Desktop Services
    Name: Brian Combe
    Phone: 519-826-3187
    Email: brian.combe@ontario.ca

2nd Support Role:
Section: Enterprise Strategic Planning, Services & Architecture Section
Job Title: Manager, Enterprise Architecture Office
    Name: Christopher Chua
    Phone: 416-327-4415
    Email: christopher.chua@ontario.ca

3rd Support Role:
Section: Enterprise Strategic Planning, Service & Architecture Section
Job Title: Technical Architect
    Name: David Lin
    Phone: 416-212-3133
    Email: david.lin@ontario.ca

Consulted

Please indicate who was consulted as part of the development of this standard. Include individuals (by role and organization) and committees, councils and/or working groups.

(Note: consulted means those whose opinions are sought, generally characterized by two-way communications such as workshops):

Organization Consulted (Ministry/Cluster)	Division	Branch	Date
Ministry of Government Services	Infrastructure Technology Services	Desktop Managed Services / Field Services Branch	Aug 2009
Ministry of Government Services	Infrastructure Technology Services	ESPDS Branch	Sep 2009
Ministry of Government Services	Corporate Security Branch		Sep 2009

Committee/Working Group Consulted	Date
ITS Architecture Core Team	Sep 2009
Technology Architecture Domain Working Group	Sep 2009
Application Architecture Domain Working Group	Sep 2009
Security Architecture Domain Working Group	Sep 2009

Informed

Please indicate who was informed during the development of this standard. Include individuals (by role and organization) and committees, councils and/or working groups.

(Note: informed means those who are kept up-to-date on progress, generally characterized by one-way communication such as presentations):

Committee/Working Group Informed	Date
Corporate ACT	Sep 2009

2.6. Recommended Versioning and/or Change Management

Changes (i.e. all revisions, updates, versioning) to the standard require authorization from the "responsible" organization.

Once a determination has been made by the responsible organization to proceed with changes, the Standards Section, Technology Adoption Branch, OCCTO, will coordinate and provide assistance with respect to the approvals process.

The approval process for changes to standards will be determined based on the degree and impact of the change. The degree and impact of changes fall into one of two categories:

Minor changes - requiring communication to stakeholders. No presentations required. No ITSC or ARB approvals required. Changes are noted in the "Document History" section of the standard;

Major changes - requiring a presentation to ITSC for approval and ARB for approval (Note: ARB reserves the right to delegate their approval to ITSC)

Below are guidelines for differentiating between minor and major changes:

Major:
- represents a major version change to one or more specifications
- impacts procurement
- requires configuration changes to current solutions
- impacts other standards
- responds to legislative, policy or procurement changes

Minor:
- represents incremental version changes to one or more specifications
- does not impact procurement (other than informational)
- does not require configuration changes to current solutions
- does not impact other standards
- is not related to legislative, policy, or procurement changes

2.7. Publication Details

All approved Government of Ontario IT Standards (GO-ITS) are published on the ITSC Intranet web site. Please indicate with a checkmark below if this standard is also to be published on the public, GO-ITS Internet Site.

Standard to be published on both the OPS Intranet and the GO-ITS Internet web site (available to the public, vendors, etc.)	☒

2.8.   Compliance Requirements

All desktop, notebook and tablet PC that will be deployed to the OPS users will be deployed with base image (which includes products described in Appendix A - based on the type of machine.

If neither product meets the requirements, a justification for exemption must be developed by the Cluster CIO and presented to the Corporate Chief Infrastructure Technology Services (ITS). The Corporate Chief ITS formally requests an exemption from ITELC. If an exemption is granted, ITS will proceeds with a separate procurement.

Technical specifications and version control information for the latest products will be published on an ongoing basis. This set of specifications must be used for the evaluations.

Technical roadmaps will be developed, updated and made available to define the future versions for each one of the categories listed in Appendix "A.". This will be a significant factor that will drives changes to this standards.

Where product version numbers are not specified within Appendix A, the acceptable product/component versions are current version (N) and N-1 and supported by the vendors. Roadmaps will be published on an on going basis to identify future changes to technology standards

Technical Specification:

2.9.   Mandatory Requirements

This standard establishes a common client workstation (desktop, notebook and tablet PC) supported platform software and identifies the software that must be used in Appendix "A." Clusters/Ministries are required to utilize standard workstation platform software and the corresponding services from ITS as they become available. These include a set of standard software for desktop, notebook and tablet PC images within the OPS Desktop Managed Services.

The following section provides descriptions of the categories offered within the OPS Desktop Managed Service according to the Infrastructure Component Catalogue (ICC), by which the complete list of desktop, notebook and tablet PC software platform in Appendix "A" is categorized.

Software in Appendix "A" has been chosen to provide specific functionality by category.

2.10.   Key Categories

The structure of the workstation platform software has been determined by the Infrastructure Component Catalogue (ICC) which is an integral part of the Technical Reference Model (TRM). The ICC is comprised of categories of components. The following chart outlines the categories within the ICC. It is software agnostic and applies to all software technology environments under consideration for use within the OPS.

2.11.   Infrastructure Component Catalogue Generic Categories

Category	Description	Category Details
Operating System (OS)	An interface between hardware and user. An OS is responsible for the management and coordination of activities and the sharing of the resources of the computer.	• Desktop OS • Notebook OS • Tablet PC OS
Office Productivity Suite	A collection of programs intended to be used by typical knowledge workers. The components are generally distributed together, have a consistent user interface and usually can interact with each other, sometimes in ways that the operating system would not normally allow.	• Email/Calendar Client • Word Processing • Spreadsheet • Presentation Program • Database • Communication • Personal Information Manager • Note-taking Program • Graphic Suite
Office Productivity Suite Compatibility Pack	Allows the user of Office Productivity Suite the ability to open, edit, and save files using the new file formats of the latest Office Productivity Suite from the same vendor or from other vendors	N/A

Note Taking Software	A software package for free-form information gathering, and multi-user collaboration. It is used on pen-enabled Tablet PCs, in environments where pen, audio or video notes are more appropriate than an intensive use of keyboards.	N/A
Web Browser	A software application for retrieving, presenting, and traversing information resources on the World Wide Web. Although browsers are primarily intended to access the World Wide Web, they can also be used to access information provided by web servers in private networks or files in file systems.	• Web Browsing • Secure Web Browsing • File Transfer Protocol
Anti-Virus	A software used to prevent, detect, and remove malware, including computer viruses, worms, and trojan horses. Such programs may also prevent and remove adware, spyware, and other forms of malware.	• Anti-Virus • Anti-Malware • Anti-Spyware
Media Player	Software used for playing back multimedia files. Most software media players support an array of media formats, including both audio and video files.	N/A
Flash	A multimedia platform for adding animation and interactivity to web pages. Flash is commonly used to create animation, advertisements, and various web page components, to integrate video into web pages, and more recently, to develop rich Internet applications.	N/A
Patch Management Agent	An active software component (Agent) installed on the workstation and enabled from a supporting common patch management infrastructure that provides the mechanism to deploy patches, hot fixes, virus signature files	N/A
Workstation Management Agent	An agent installed on the workstation and enabled from a supporting common monitoring and management infrastructure that provides the mechanism to perform monitoring and automation type activities	• Server Monitoring / Support • OS Monitoring / Support • Event Monitoring

Runtime Environment Library	A special program library used by a compiler, to implement functions built into a programming language, during the runtime (execution) of a computer program. This often includes functions for input and output, or for memory management. A runtime library is a collection of utility functions which support a program while it is running, working with the operating system to provide facilities such as mathematical functions, input and output.	• .NET Runtime Libraries • Java Runtime Libraries
Portable Document File (PDF) Reader	Software that views a Portable Document Format (PDF) to representing two- and/or three-dimensional documents in a manner independent of the application software, hardware, and operating system.	N/A
Installer/Packager	A computer program that installs files, such as applications, drivers, or other software, onto a computer. Some installers are specifically made to install the files they contain; other installers are general-purpose and work by reading the contents of the software package to be installed.	N/A
Public Key Infrastructure (PKI)	Public Key Infrastructure. - A computerised form of message encryption using two *keys* (small files); one is public and used by the sender to encrypt the message, the other is private and used by the recipient to decrypt the message.	Encryption

3. Related Standards

3.1.   Impacts to Existing Standards

GO-IT Standard	Impact	Recommended Action
GO-ITS 1.10 Network Operating Systems (NOS) and Desktop Operating Systems	Standard no longer applies	*Obsolete/Retire GO-ITS 1.10*
GO-ITS 32.0 Desktop Operating System (DOS) Windows 2000 Implementation Guideline Standard	Standard no longer applies	*Obsolete/Retire GO-ITS 32*
GO-ITS 34 Desktop Operating System (DOS) Windows XP Functional Specification	Standard no longer applies	*Obsolete/Retire GO-ITS 34*

3.2.   Impacts to Existing Environment

Impacted Infrastructure	Impact	Recommended Action
N/A	N/A	N/A

4.   Appendix A – Product List

Category	Workstation
Operating System (OS)	Microsoft Windows XP – SP2[1]
Office Productivity Suite	Microsoft Office 2003 – SP2
Office Productivity Suite Compatibility Pack	Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats
Note Taking Software[2]	Microsoft OneNote 2003 – SP2
Web Browser	Internet Explorer 6.0
Anti-Virus	McAfee Virus Scan Enterprise Workstation 8.5.0
Media Player	Windows Media Player 10
Flash	Adobe 10
Patch Management Agent	HP Radia Client 4.0.6
Workstation Management Agent	HP Radia 4.0.6
Runtime Environment Library	• .NET Framework 1.1 SP1 • Java Runtime Edition 1.5.0.12
Portable Document File (PDF) Reader	Adobe Reader 8.0
Installer/Packager	InstallShield InstallScript 11.5
PKI	Entrust Direct 6.0

---

[1] The OS for Tablet PC requires the Microsoft Windows XP SP2 Tablet PC Edition.

[2] Note Taking Software is only available on Tablet PC.