Information Technology Standards Policy

Introduction: How to Use This Tool

Establishing technology standards sends a clear message to the business of what IT will, and can, support. It is an invaluable tool for controlling rogue IT spending and containing costs. For the purposes of policy and procedure development, it provides a solid reference point for setting policy rules and procedural steps.

To use this tool, fill in the spaces provided. Replace all sample text (in grey) in the tables with your own data.

Purpose

To establish standards and guidelines for the [company name] Information Technology (IT) environment to ensure the confidentiality, integrity, and availability of company computing resources. This document outlines the technology options supported by [company name] and provides guidelines for appropriate use, acquisition, and implementation.

Scope

This document applies to all IT hardware, software, facilities, applications, and networks that are a part of [company name]'s computing resources. The specific technology categories addressed in this policy include:

- Information Protection
- Information Management
- Information Distribution
- Applications
- Network Facility and Environment
- Computing Resources
- Voice Communications

Responsibilities

The VP of Finance at [company name] has the overall responsibility for the confidentiality, integrity, and availability of corporate data.

The VP of Finance at [company name] has delegated the execution and maintenance of IT and Information Systems (IS) to the Director, Information Technology.

Other IT and IS staff under the direction of the Director, Information Technology are responsible for following the procedures and policies within IT and IS.

All [company name] employees have the responsibility to act in accordance with company policies and procedures.

Designations

Each product listed in the tables below is assigned a designation of Standard Product (S), Preferred Product (P), or Guidance Information Only (G).

- **Standard Product:** A product that is in place in most or all instances. It should be the first choice when selecting a product, barring mitigating circumstances (such as plans to upgrade to the next version, for example). It is the product actively supported by the IT department.
- **Preferred Product:** A product that is the target product of a planned upgrade or transition. While not widely deployed, it will become the future Standard Product. IT support exists, but may be immature or in transition.
- **Guidance Information Only:** A product for which no clear standard exists due to the role or pervasiveness of the product in the enterprise, or due to immature or fluctuating market conditions.

Information Protection

This section includes technologies related to network, data, server, and client machine security.

*S=*Standard* Product(s), P=*Preferred* Product(s), G=*Guidance* Information Only

If the Information Technology Standards and Guidelines policy does not address a specific technical area, the user should seek guidance from the Director, Information Technology.

Information Protection	Policy or Product	S/P/G	Remarks
Enterprise Firewall	CP FW-1 NG w/ Application Intelligence	P	Network Firewall.
	CP FW-1 NG FP3	S	Application Layer Gateway.
	Cisco IOS Firewall	S	See "IT Firewall and VPN Policy" for guidance.
Personal Firewall	Symantec Endpoint Security	S	Laptops and devices beyond the network perimeter.

See "IT Firewall and VPN Policy" for guidance. |
Virtual Private Network (VPN)	CheckPoint Secure Client NG w/AI	S	IPsec deployed from head office.
	Cisco VPN Client	S	IPsec deployed from branch office.
Anti-Virus for E-mail	GFI MailSecurity for Exchange/SMTP	S	Deployed at head office.
	GFI MailEssentials	S	Deployed at branch office.

See "Corporate Anti-Virus Policy" for guidance. |
| Anti-Virus for Servers/Networks | Symantec Endpoint Protection | S | See "Corporate Anti-Virus Policy" for guidance. |

Information Protection	Policy or Product	S/P/G	Remarks
Anti-Virus for Clients	Symantec Endpoint Protection	S	
Network Access Controller	RADIUS	S	
Routing Table Protection	Cisco	S	
Network Intrusion Detection (NID)	NitroGuard	S	
	EtherApe 0.9.7	S	Head office "Green Zone" and "Blue Zone" deployment.
	Snort	S	
	Net-Probe	S	Deployed at branch.
	NetBoy	S	
Internet Content Filtering and Traffic Monitoring	iPrism	S	See "Network Monitoring and Filtering Procedures" for guidance.
Public Key Infrastructure	GeoTrust	S	SSL Site certificates for Outlook Web Access, Web File Share, etc.

Information Management

This section includes technologies related to databases and data warehousing, data management, file formats, messaging, and data interfaces.

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Information Management	Policy or Product	S/P/G	Remarks
Relational Database Management Systems • ISO SQL • ISO RDA • ODBC 2.0 • TOG SQL • TOG RDA • TOG XA • TOG SQL CLI	Oracle 11*g* Enterprise Edition	S	Enterprise and large-scale systems with high capacity, complex design, and/or high volume transactional requirements.
	Oracle 11*g* Standard Edition	S	Mid-scale systems with moderate capacity and/or transactional volume requirements.
	MS SQL	G	
	Oracle 11*g* Named Users	S	Small-scale systems with small to moderate capacity, design complexity, and/or transactional volume requirements. Typically workgroup systems.
	MS SQL	G	
	MS Access	G	Personal use systems with

Information Management	Policy or Product	S/P/G	Remarks
			relatively small capacity, design complexity, and/or transactional volume requirements.

Database Access
• ISO/IEC 9075:1989
  o ANSI X3.168-1989
  o ISO/IEC 9579-1
  o ISO/IEC 9579-2
  o ISO/IEC 9075:199x Database Language SQL
	SQL*Plus
	
	Oracle Direct Connect
	
	TOAD Suite
		S
		
		G
		
		G	

Data Model and Persistence Engines	SQL*Plus	S	
Document Exchange Standards • SGML • XML • CALS • EDIFACT	IT guidance	G	
File Formats	IT guidance	G	Follow IT guidance for recommended file extensions.
Data Administration Implementation		G	IT is currently evaluating the use of additional tools in this area.
Information Architecture Implementation		G	Follow IT guidance.
Data Quality and Data Interoperability	Data Cleaning Tools MS Access	G S	Follow IT guidance. IT is currently evaluating the use of additional tools in this area.
Data Warehousing and Mining	SAP Crystal Reports Server 2008	S S	IT is currently implementing with ERP team.
Messaging	IBM Lotus Sametime Spark Client	S G	
Presentation and Interface Standards • Application Standard Interfaces • Mobile Devices	 IT guidance IT guidance	 G G	 IT is currently evaluating the use of Java standards, .NET standards, and Web Services in this area. WAP, WML, Java.

Information Distribution

This section includes technologies related to e-mail transmission and file transfer.

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Information Distribution	Policy or Product	S/P/G	Remarks
E-Mail with Attachments • SMTP	MS Exchange with Outbound SMTP	S	
• IMAP	Supported with "smartphones"	S	
• POP3 (all others)	BlackBerry Enterprise Server for MS Exchange	S	See IT and the Computing Resources section for guidance.
File Transfer Service • HTTP • FTP	Follow IT guidance	G	
Run Time Operation Status Information	RemoteControl	S	See "Remote Data Collection and Control Procedures" for guidance.
	WonderWare Suite	P	

Applications

This section includes technologies related to all enterprise applications and client applications.

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Applications	Policy or Product	S/P/G	Remarks
Enterprise Resource Planning	SAP	S	Production implementation date was May 2007. The application is accessible from any site or client VPN within the corporate network. Current access methods include: client server run-time objects and Terminal Server. The corporation does possess Web Portal licenses, but implementation will be completed in a future scope of

Applications	Policy or Product	S/P/G	Remarks
			work.
			As currently configured SAP no automated internal or external data feeds.
			SAP is running within the following defined instances: • PROD7 – Production environment • DEMO7 – Copy of PROD used primarily for final acceptance testing • TEST7 - Testing, implementation environment • DIAG7 – Development environment
Document Management	OpenText LiveLink ECM	S	Anticipated production date is June 2004.
CRM	SAP Sales Tools Modules	S	ERP and Sales Team implementation underway.
Cooperative Work Applications			
• Collaborative Processing	MS Exchange 2003 MS-Exchange 2007	S P	At head office. To be deployed by end of calendar year.
• Workflow	MS-Exchange 2003	S	At branch office.
• Time Tracking	OpenText	S	
• Work Request Tracking	Time Sheets v1.1 Time Sheets v1.2	S P	
• External File Sharing	NumaraTrack-IT! V8.5	S	Web-based helpdesk request ticketing system. See "Helpdesk Procedures" for guidance.
	Corporate Web File Share	S	See IT for guidance.
Content Management	SiteCore CMS	G	See IT for guidance.
Web Portal	SAP	P	Outside current scope of integration.
	Citrix Presentations Server 4.5	P	IT is currently evaluating Citrix for functionality and cost-effectiveness.
Office Automation			
• Tier 1	MS Office 2003 Standard	S	Excludes MS Access.

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Applications	Policy or Product	S/P/G	Remarks
• Tier 2 & Tier 3	MS Office 2007 Standard	P	
	MS Internet Explorer 7	S	
	Firefox (latest stable)	S	See IT for guidance on "extensions."
	MS Outlook 2003	S	
	MS Outlook 2007	P	
	WinZip 11.2	S	
	Jaws .PDF Server Suite	S	
	Acrobat Reader 9	S	
	OpenOffice 2.0 for W32	S	IT has evaluated and supports OpenOffice for Win32 application functionality.
	MS Project 2007	G	Not applicable for base Tier 1 desktop configuration.
	MS Visio 2007 Standard	G	Not applicable for base Tier 1 desktop configuration.
	MS Office 2007 Professional	G	Not applicable for base Tier 1 desktop configuration.
	PaperPort Professional 11	G	
Engineering and Design	AutoCAD 2007	S	Referenced tools have been effectively used by the corporation activities for the listed functions. They may not be the only tools that can be effectively used for these purposes.
	AutoCAD 2008	P	
	Mathcad 14.0	S	
	Solid Edge	S	
	WSCAD	S	
	COSMOSWorks 2008	S	
	COSMOSMotion 2008	S	
	SmartSketch 2007	S	
	Autodesk Inventor 2009	S	
	Autodesk Volo View 3	S	
Simulation	flexiSim	G	De-installed product.
	Phoenix	S	Follow IT guidance for recommended hardware requirements.
Risk Management	PHA Pro 7		De-installed product.
Web Development Tools	MS Visual Studio 2008	S	See "HTML Publishing Policy" for guidance.

Applications	Policy or Product	S/P/G	Remarks
	Dreamweaver CS3	S	
	WebTrends Analytics 8.5	S	
Computer Graphics	Adobe Illustrator CS3	S	
	Adobe Photoshop CS3	S	
	Adobe InDesign CS3	S	
Digital Signature	Pending	G	
Application Development Tools	MS Visual Studio 2008	S	Follow IT guidance for configuration in conjunction with "IT Application Architecture Standards and Requirements."
	HexEdit	G	
	ScriptLogic	G	
Report Writers	Crystal Reports Server 2008	S	Follow IT guidance for data integrity and access.
Accessibility	IBM ViaVoice Release 10	S	Follow IT guidance for hardware configuration requirements.

Network Facility and Environment

This section includes technologies related to physical connectivity, wired and wireless networking protocols, naming services, and directory services.

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Network Facility & Environment	Policy or Product	S/P/G	Remarks
Cable Media	UTP CAT-6	P	
Patch Panels Interconnection Boxes and Connects	RJ45 for UTP Cable	S	
	Any product meeting ANSI Standards	G	
Physical and Data Link for LANs	Switched Ethernet to desktop	S	10/100Mbps Ethernet backbone.
		P	Gigabit Ethernet backbone.
Network and Transport Layer	IP TCP PPP DHCP	G	
Network Routing Protocol	DHCP	G	
Wireless Access Points (WAP)	802.11i	S	See "IT Wireless Network Policy" for guidance in conjunction with NIST 800-48.
	Wi-Fi Protected Access (WPA)		
	Advanced Encryption Standard		No procurement or deployment

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Network Facility & Environment	Policy or Product	S/P/G	Remarks
	(AES) VPN Non-DHCP Routing Non-Default SSID hardware configuration Cisco Aironet Firewall separation between wireless and fixed network segments.		without IT guidance is permissible.
Network Time Service	NTP	G	Follow IT guidance.
System Monitoring and Control	SNMPv1 Servers Alive Kiwi Syslog	G S S	Follow IT guidance.
Naming Services Standards • DNS	Follow IT guidance Windows Server 2008 (internal)	G	
Directory Service • LDAP	Active Directory	P	Follow IT guidance.

Computing Resources

This section includes technologies related to client device hardware and operating systems, server hardware and operating systems, storage devices, data backup and recovery solutions, and configuration management.

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Computing Resources	Policy or Product	S/P/G	Remarks
CPU • Tier 1 • Tier 2 • Tier 3	 Intel Celeron Intel Celeron Intel Core Duo, Intel Celeron	 S P G	In general, current IT standards provide a minimum baseline. IT will provision best value desktops that efficiently support the Cascading Refresh Policy. For specialized requirements (e.g. CFD modeling) seek IT guidance.
Bus Standards	PCI CardBus	G	
Memory (RAM) Standards (EDO,			In general, current IT standards provide a minimum baseline. IT

Computing Resources	Policy or Product	S/P/G	Remarks
SDRAM, DRAM) • Tier 1 • Tier 2 • Tier 3	256MB 256MB 2GB	S P G	will provision best value desktops that efficiently support the Cascading Refresh Policy. For specialized requirements (e.g. CFD modeling) seek IT guidance.
I/O Interface Standards • SCSI-2 • SCSI-3 • FC-PH • ESCON • IPI • PC Card • CardBus • Serial • Parallel • USB • FireWire		G	Follow IT guidance for configuration in conjunction with "IT Application Architecture Standards and Requirements."
Storage Device Media • CD-ROM • DVD • USB Key • 4mm DAT • DLT Tape	 Not applicable for Tier 1 or Tier 2 configurations Not applicable for Tier 1 or Tier 2 configurations	S G G G	Follow IT guidance in conjunction with "Removable Media and Information Access" policies.
Disk RAID Levels • RAID 1,3,4,5,6 • Tier 1 • Tier 2 • Tier 3	 Not applicable Not applicable Follow IT guidance	 S S G	
Server Hardware Configuration	Multiple processors w/ RAID Follow IT guidance for configuration in conjunction with "IT Application Architecture Standards and Requirements"	P	
Personal Workstation Operating Systems	Windows XP Professional Windows Vista Professional Fedora 9 (or Red Hat Enterprise WS w/RHN)	S P G	Referenced tools have been effectively used by the corporation activities for the listed functions. They may not be the only tools that can be effectively used for these purposes. Deployed on specific notebook computers. See IT for guidance. Follow IT guidance for Linux deployment.
Server Operating			

Computing Resources	Policy or Product	S/P/G	Remarks
Systems • General File & Print Servers	Windows Server 2003 Windows Server 2008 Proprietary OS appliances	S P G	 Follow IT guidance.
• Application Servers	Windows Server 2003 Windows Server 2008 Red Hat Enterprise Linux Server 5 VMware	S P G G	Follow IT guidance. Follow IT guidance. Follow IT guidance.
• Network Edge Servers & Appliances	Secure Unix variants Proprietary OS appliances	G G	Network edge devices must follow IT guidance for network security.
Remote Procedure Call • DCE RPC • TxRPC • ONC RPC • TransAccess RPC	Avoid use of Remote Procedure Calls (RPCs)	G	RPCs have been shown to cause serious security problems and should not be used in corporate developed applications.
File Service • DCE DFS	Follow IT guidance	G	
Object Service • CORBA	CORBA Spec/Std	G	IT is currently evaluating the use of additional tools in this area.
Inter-Process Communication	Communication Middleware Integration Brokers	G G	IT is currently evaluating the use of additional tools in this area.
Configuration Management	ScriptLogic Symantec Norton Ghost 14.0	S S	
Data Backup & Recovery • Backup & Recovery Software	CA ARCserve R12 Symantec Backup Exec 12 Veritas NetBackup 6.5	S S S	For guidance visit, IT Network Backup Procedures.
• Backup & Recovery Hardware	Compaq 40/80 DLT Compaq 110/220 SDLT Exabyte Model EZ17-LVD	S S S	Tapes: Native/compressed 40/80 DLT single 100/220 SDLT single 60/150 Mammoth 8 mm 7 tapes
PDAs & Handhelds	BlackBerry 8800 BlackBerry Desktop Software v4.2	S S	Requires specific configurations effecting user and enterprise gateways.

Computing Resources	Policy or Product	S/P/G	Remarks
	All Palm Handhelds	G	The corporation does not supply Palm or other handhelds.

Voice Communications

This section includes technologies related to telephony hardware, software, and devices.

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Voice Communication	Policy or Product	S/P/G	Remarks
PBX	Meridian 1	G	At head office.
	Siemens HiPath 3000	G	At branch office.
Desktop Sets	Nortel M3903	S	
	Nortel M3902	G	
	Nortel M3904	G	
VoiceMail Systems	Nortel CallPilot	G	
Cellular Handsets	Nokia 6061	S	See "IT Cellular Phone Policy" for guidance.
	Sony Ericsson J220a	G	
	Siemens M55	S	
	BlackBerry 8800	G	Requires specific configurations effecting user and enterprise gateways.

Non-Compliance

The (i) Vice-President of Finance, (ii) Chief Operating Officer, and (iii) immediate Manager or Director will be advised of breaches of this policy and will be responsible for appropriate remedial action which may include disciplinary action, including suspension or termination of employment.

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