

IT Best Practices Audit™

TCS offers a wide range of IT Best Practices Audit content covering 15 subjects and over 2200 topics, including:

1. IT Cost Containment — 84 topics
2. Cloud Computing Readiness — 225 topics
3. Networks — 185 topics
4. Desktops and Printers — 208 topics
5. Storage — 130 topics
6. Microsoft Servers — 191 topics
7. iSeries Servers — 116 topics
8. Web Servers — 119 topics
9. Unix and Linux Servers — 134 topics
10. Database — 115 topics
11. Software Licensing — 24 topics
12. Telephony — 82 topics
13. Data Center — 253 topics
14. IT Leadership and Governance — 185 topics
15. Compliance and Security — 296 topics

IT Best Practices Audit™

Desktops and Printers™ Audit Categories and Topics

Category	Audit Topic
General	Name(s) of client resources providing data for this subject
General	Title(s) of client resources providing data for this subject
General	Collect General Desktop Info -
General	Types of Desktops (laptop, tablet, netbook, desktop pc, Panologic type device, Wyse Winterm type device, IT, etc.) in organization
General	Desktop Configuration and Operational Documentation
General	Change management process - - controlled changes, documentation updates; acceptance and regression testing; changes are introduced during non production hours; backups or rollback plan
General	Change management logs
General	Hypervisor name if applicable (VMware, Xen, HyperV, etc.)
General	Use of desktop management/data collection tools
General	Virus checking software used: Microsoft, Trend Micro, Norton/Symantec, AVS, CA, etc.
Cost Metrics	IT Cost Metrics - Total Annual Cost Per Desktop
Cost Metrics	IT Cost Metrics - Number of Desktops supported per Desktop Support Staff FTE
Desktop Support Staffing	Desktop Staffing
Desktop Support Staffing	Desktop Staff Training
Staffing	Staff Certifications
Staffing	Staff Selection practices
Desktop Support Staffing	Support hours
Executive Support	Executive Support Staffing
Executive Support	Spare Equipment
Executive Support	Backups of Executives PC's and data
Executive Support	Maintenance of Executives PC's
Hardware	% of desktops and thin clients less than 24 months old
Hardware	% of desktops and thin clients 25-48 months old
Hardware	% of desktops and thin clients more than 48 months old
Hardware	RAM provisioned/installed
Hardware	Available (unallocated) memory
Hardware	Virtual memory file reads and writes per second

Category	Audit Topic
Hardware	Physical memory - Pool Nonpaged Bytes Counter.
Hardware	Physical memory - Pool paged Bytes Counter.
Hardware	Physical memory - Pool paged Failures Counter.
Hardware	Memory - Committed Bytes Counter - this is the systems total memory demand
Hardware	FSB speed/Chipset
Hardware	CPU Speed in GHz
Hardware	Total CPU Cores in desktop
Hardware	CPU utilization for each Core
Hardware	If virtualized, does desktop shares same hardware platform with other users
Hardware	Addressing capability of Virtualization software (Vmware, Hyper-V, Zen, etc.)
Hardware	CPUs that are used in desktops support VT (Virtualization Technology) - may be required for 64 bit VMware host and guest operating system support.
Hardware	Hardware Firmware (BIOS) levels
Hardware	Use of UPS or backup power systems (generator)
Hardware	Dedicated power circuits for Desktop components
Hardware	Wireless mouse and keyboards
Hardware	PC Test Environments
Hardware	Spare equipment inventory
Operating System	Operating System in use - Windows 98 or older
Operating System	Operating System in use - Windows 2000
Operating System	Operating System in use - Windows XP
Operating System	Operating System in use - Windows Vista
Operating System	Operating System in use - Windows 7
Operating System	Operating System in use - Apple based OS
Operating System	Operating System in use - Linux Based OS
Operating System	Use of 32 bit desktop operating systems
Operating System	Use of 64 bit desktop operating systems
Operating System	Network Operating System functions
Operating System	Windows 7 deployment Strategy
Operating System	Application readiness for Windows 7 deployment
Operating System	32 or 64 bit desktop operating system
Operating System	Patch levels

Category	Audit Topic
Operating System	Patch Application/Management
Operating System	Desktops are identically configured and patched
Operating System	Creation of desktops
Operating System	Unused OS Services and Applications
Operating System	Unused (or old versions) of Applications
Operating System	Page file configuration and management
Operating System	Location of Page Files
Operating System	Location of OS files
Operating System	Location of user data files - My Documents" folder, the "Shared Documents" folder, the Outlook Express store folder or Outlook pst file, the Windows Address Book file, Firefox profile folder, etc.
Operating System	Desktop tuning
Operating System	Scheduling of when services (defrag, Google updater, HW health checks, Indexing, etc) run
Operating System	Desktop change monitoring
Operating System	Use of common time service for desktop devices
Operating System	Appropriate use of specific base versions of software (OS, DB, tools, etc.) 32 or 64 bit, etc.
Operating System	Size and configuration of error logs
Operating System	Any compatibility issues with current desktop applications?
Operating System	Use of DW20.exe – Dr Watson
Operating System	.Net software
Operating System	Application error checking/logging
Operating System	Device Drivers
Operating System	Power settings
Operating System	Use of password protected screen savers
Operating System	Monitor/Display power settings
Citrix/Term Servers/VDI	Citrix and Remote Desktop - use of Remote Assistance or "shadowing"
Citrix/Term Servers/VDI	Monitoring of remote client network latency and current network paths/hops in use
Citrix/Term Servers/VDI	Citrix and Remote Desktop - local printer mapping onto Citrix and Terminal servers
Citrix/Term Servers/VDI	Citrix and Remote Desktop - local drive mapping onto Citrix and Terminal servers
Citrix/Term Servers/VDI	Citrix and Remote Desktop - printing
Citrix/Term Servers/VDI	Citrix and Remote Desktop - local cache and keystroke optimization settings
Citrix/Term Servers/VDI	Citrix and Remote Desktop - "animated" applications
Citrix/Term Servers/VDI	Citrix and Remote Desktop - Screen resolution and color depth and wallpaper

Category	Audit Topic
Citrix/Term Servers/VDI	Citrix and Remote Desktop - Audio and Video streaming capabilities
Citrix/Term Servers/VDI	Citrix and Remote Desktop - Screen Savers
Citrix/Term Servers/VDI	Citrix and Remote Desktops - Active Web Applications
Desktop Reliability	Overall Availability (% of planned uptime)
Reliability	Tracking of Hardware Failures
Desktop Reliability	Tracking of Software Failures
Reliability	Tracking of Other failures (unknown)
Desktop Reliability	Capture and review of PC reliability data from Vista/Win 7 using computer management console
Applications	Web Browsers in use
Applications	Active Web Applications
Applications	Proactive meetings/communication with vendor representatives
Applications	Use of Skype, Google Talk, etc.
Applications	Use of remote control tools (VNC, Citrix shadowing, RDP Remote Assistance, etc.)
Applications	Destination of backups
Applications	Backup Software Priority
Applications	Spybot Search and Destroy
Applications	CCleaner
Applications	Instrumentation of key applications
Applications	Internet Radio (Pandora, Live 365, Jango, SHOUTcast, Slacker, etc)
Applications	Use of email to deliver business critical information
Applications	Large email boxes and/or shared email boxes
Anti Virus Protection	Anti-Virus software
Anti Virus Protection	Status of AV software subscriptions
Anti Virus Protection	Frequency of AV pattern updates
Anti Virus Protection	Frequency of scans
Anti Virus Protection	Timing of scans
Anti Virus Protection	AV configuration - are scans of certain directories selectively enabled or disabled
Anti Virus Protection	Automatic, scheduled scanning or real-time scans of databases and email databases/PST type files
Networking	NIC speed
Networking	NIC utilization during "normal" business use/hours (not during backups, etc.)
Networking	TCP/IP Tuned - Selective acknowledgement, max packet sizes, receive window size, and auto tuning in Vista and Win7, etc.

Category	Audit Topic
Networking	NIC power management settings
Networking	Number of send and receive buffers for each NIC
Networking	DNS servers/services
Printing	Use of Print Servers for print queues
Operating System	Printer drivers
Printing	Logging of print traffic
Printing	Restart of printing/restart of print queues
Disks/Storage	C Free disk space as percent of drive size
Disks/Storage	C Volume Size
Disks/Storage	# of logical volumes that share the same physical disks
Disks/Storage	# of physical drives per logical volume
Disks/Storage	Disk drive type
Disks/Storage	Individual disk drive capacity
Disks/Storage	Drive form factor
Disks/Storage	Drive rotation speed in RPM
Disks/Storage	Aligning the start of disk volumes on physical RAID stripe boundaries
Disks/Storage	Format Size of Data drives (non system C: drives)
Disks/Storage	Average Response time in MS for Drive C
Disks/Storage	Average Response time in MS for Drive D (data drive)
Disks/Storage	Average disk busy % for Drive/volume C
Disks/Storage	Average disk busy % for Paging drive/volume
Disks/Storage	Average disk busy % for Data Drive/volume
Disks/Storage	Write caching on volumes
Disks/Storage	Number of files on a PC or in a single directory (local to the desktop)
Disks/Storage	Clean up unnecessary system, log, and temporary files
Disks/Storage	Limiting of the size of the web browser cache, and cleanup of old web files
Disks/Storage	Defragmenting PC Storage
Disks/Storage	Use of disk cleanup tools
Disks/Storage	Indexing of files by OS for fast searching
Disks/Storage	Updating the date/time of last file access
Disks/Storage	Creation of 8.3 DOS file names and NTFS names
Disks/Storage	Data Backup Policy

Category	Audit Topic
Disks/Storage	Backup frequency of desktops with data stored locally
Disks/Storage	Defined Data Recovery window
Disks/Storage	Backup location
Disks/Storage	Testing of backups and restore procedures and speeds
Disks/Storage	USB and Removable Storage Policies
Disks/Storage	USB Storage - Use of Chipset level features to disable some or all USB ports
Disks/Storage	eSATA and SATA disk ports - Use of Intel X58 Chipset level features to disable some or all SATA ports
Disks/Storage	Use of PGP - WDE (Pretty Good Privacy - Whole Disk Encryption)
Operations	Review of error logs
Operations	Capture utilization of key components (CPU, mem, disk, Network) using Perfmon or agent
Desktop Support Operations	Alerts to IT staff and management when utilization is beyond defined thresholds
Desktop Support Operations	PC Disaster Recovery Plan
Desktop Support Operations	PC Load tests
Maintenance	Defragmentation
Maintenance	Cleanup of un-needed files (obsolete, temp, install files, logs, etc.)
Maintenance	Use of the DSKCHK utility
Maintenance	Cleanup of un-needed Registry entries
Maintenance	Snapshot Files
Maintenance	Temporary files
Maintenance	Installation file cleanup
Maintenance	System Diagnostics
Maintenance	Cleaning of components
Maintenance	Reseating of components
Maintenance	Check condition of cables
Maintenance	Check operation of Fans/Cooling of box
Maintenance	Inspect software loaded (not just running) on system
Maintenance	Inspect running software to identify unauthorized software, virus, spyware, run-away processes, etc.
Maintenance	Monitor and minimize startup tasks
Legal/Discovery	Quarantine of any PC's involved in any investigation or lawsuits
Printers - Documentation and Processes	Printer Configuration and Operational Documentation
Printers - Documentation and	Inventory of printer manufacturers and models in use

Category	Audit Topic
Processes	
Printers - Documentation and Processes	Who provides support of printer hardware
Printers - Documentation and Processes	Use of printer management tool(s) utilized (HP, etc.)
Printers - Hardware	% of printers less than 24 months old
Printers - Hardware	% of printers 25 - 48 months old
Printers - Hardware	% of printers more than 48 months old
Printers - Hardware	Amount of Printer RAM
Printers - Hardware	Count of color pages printed per month by printer or user
Printers - Hardware	Count of black and white pages printed per month by printer or user
Printers - Hardware	NIC speed of printers
Printers - Acquisition	Matching of printers and expected/actual duty cycles
Printers - Acquisition	Purchase of Printer supplies
Printers - Acquisition	Printer standards
Printers - Acquisition	Standards for Warranty/support contracts
Printers - Configuration	Desktop connected printers
Printers - Configuration	Network connected printers
Printers - Configuration	Use of Print Servers
Printers - Configuration	Location of Print Servers
Printers - Configuration	Where is printer output rendered - on the client PC/server or print server or printer?
Printers - Configuration	Printer Firmware levels
Printers - Configuration	Printer driver software
Printers - Configuration	Logging of print traffic
Printers - Configuration	Engineered printer configurations
Printers - Configuration	Labeling of Printers
Printers - Configuration	TCP/IP address management/policies of printer devices
Printers - Operations	Printer maintenance
Printers - Operations	Spare printers/redundant printers
Printers - Operations	Disposal of used supplies and end of life equipment
Printers - Operations	Printer supplies inventory