

Appendix 2



Recommendation Summary

The following recommendation summary provides a complete list of the recommendations made throughout this document. Details on each line item can be found within this document. A major deliverable from the network assessment is to present the following recommendation summary to IT stakeholders during the project closeout session.

Appendix 2

Recommendation summary from independent analysis by Tushaus.

IT Component	Current State	Recommended State
Infrastructure		
NOS Levels for Windows 2003,	Windows 2003 SP2	Windows 2003 SP2 after all application are certified.
NOS Levels for Novell Netware	NW6.5 SP5A	NetWare 6.5 Support Pack 7
File server defragmentation	No	Implement a scheduled maintenance plan
Directory Services Availability	Yes	Redundant DCs are a Microsoft best practice.
Server Functions and software used	Cluster has user applications	Clearly defined usage
Internal Messaging System	GroupWise 7 SP1	GroupWise 7 Support Pack 2
Contract review	MPC warranty -5 yr HP – 5yr	Identify services promised and confirm adherence to contractual obligations.
Group Policy Review	Zen For Desktops policies	Implement basic Group Policy objects for securing workstations and servers.
Desktop & Software Deployment	Zen For Desktops Imaging	Zen or Ghost Imaging
Desktop Management Software version	Zenworks 7	ZENworks 7 SP1 Release 2
Database Review	SQL 2000/ Follett / MS / Web Based Helpdesk Avensoft	No SQL errors apparent on the server. Upgrade from SQL 2000 to 2005 if application requires or is certified to run on 2005
Licensing Review	Educational software done by Pam Lee (tech cord) All other software done by IT dept.	All licensing current and documented
Asset inventory Review	Asset Tags - Avensoft	Implement an inventory model where all IT assets are tracked and filed. Examine the feasibility of an automated inventory tracking tool.

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IT Component	Current State	Recommended State
Operations		
Change Management Policy	No formal policy	Create and maintain binder or electronic documentation on changes made to the IT environment, date, and person making changes.
Tape Backup Review	E-mail each day on completion M-Th + weekly (5) Each server has own tape drive – NovaStor – DLT320 Sync Sort – LTO Library (Quantum) Some server are not backed up No Restore Testing – Full except Cluster – Differential except weekly	No reported problems. Monitor daily. Do Monthly restore testing on each tape drive with various file types and sizes.
High Availability Review	Netware Cluster – Everything except Skyward (Data- GW-Zen- NDPS)	Novell 6.5 Cluster or Windows 2003 Cluster
Hardware Lifecycle Practice	Server until they drop 5 yr WS	Identify an official hardware lifecycle strategy outlining workstation aging and a tracking method. Align with budgetary constraints. The Tushaus recommended HW lifecycle is 3 to 4 yrs with warranty coverage.
UPS	APC 3000 XLM w/ Extra battery pack	APC or comparable UPS
Monitoring & Alerting	What's Up Gold ver. 11	Implement Managed Services to track and notify IT personnel of system warnings and errors on critical devices
Disaster Recovery Planning	No	Begin a Disaster Recovery initiative

Appendix 2 cont'd

IT Component	Current State	Recommended State
Security		
Proactive Patch Management	WSUS for WS	Setup WSUS or institute a schedule of testing and implementation
Anti-Virus Strategy	None	Zen no files written to local machine

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COMPUTER SERVICES

This information is proprietary and confidential

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Spyware review	None	Symantec & Trend Micro have capabilities with its Antivirus. Windows Defender is available.
Desktop Security Model	ZFD 7 desktop policies	Standardize on a security model with group policy, password policies and inventory tools
NTFS and Data Access Review	NSS / NTFS	Review least privilege digital access
Secure the data center \ server area	Key – 3 APC UPS for each 2 racks	Power conditioning for the server room. Key guard access to closets and building.
Password Policy	Teachers 6 digit # no-change. Student's given as locker combination type. Password change must be requested	Implement a periodic password change policy that fits the culture of the organization.
Incident Response	Avensoft Helpdesk	Develop a simple incident response procedure.
Administrator Credentials	Static – only one top level admin – Manual sync between e-dir & AD	Make password more secure, change it at regular intervals, document the primary password and file it in a secure location.

IT Component	Current State	Recommended State
Management		
IT Training Model	No training – but may purchase books	Review the IT Training model to determine adequacy
End User Support Model	Tickets come in through Avensoft. Staff resolves and tracks through Avensoft.	Conduct an independent survey of end users to determine their level of satisfaction with support. Remediate as necessary.
HR Interaction	School HR Sec. sends a ticket thru Avensoft. Students change requests done by attendance sec.	Review the procedure for employee adds\changes\deletes in order to streamline.

Appendix 2 cont'd