ANTIDOTES TO NAS SPRAWL How well key technologies deal with NAS proliferation

NAS sprawl challenge	Let sprawl continue	Linux/Unix automounters	Microsoft DFS	Shared- path file virtualization	Split-path file virtualization	Clustered NAS systems	Grid or private cloud storage
Multi-NAS management	Extremely poor and very time consuming	Fair if environment is primarily NFS and	Good if using Windows file servers or Windows- based NAS	Very good plus simplifies migration to this environment	Excellent and has exceptional scalability	Good but not heteroge- neous; rip and replace; excellent scalability	Excellent for local and geographically dispersed sites; exceptionally scalable
Client and application file access management	Poor: Frustrating, time consuming and error prone	client/app access is from Linux or Unix	Very good for CIFS, but not available for NFS	Very good for both CIFS and NFS depending on product	Good for both CIFS and NFS depending on product	Very good for both CIFS and NFS depending on product	Excellent: Policy based to meet user and app requirements regardless of location
Storage tiering	Poor: Manual and virtually non-existent	Poor: Manual and virtually non-existent	Fair: Still manual but a little easier	Good to excellent depending on product; much simplified	Good but requires agent on clients and servers or data move- ment is offline	Good to excellent depending on product, much simplified	Good to excellent depending on product, much simplified
NAS load balancing	Poor: Manual and very difficult	Fair: Manual only, no automation	Fair: Manual only, no automation	Excellent	Excellent	Excellent	Excellent: Goes beyond simple load balancing taking into account performance and locality
Data protection, replication, backup and recovery	Poor: Uncoordinated	Poor: Uncoordinated	Good with policy-based replication, VSS integration	Good to excellent depending on product; much simplified	Good to excellent depending on product; much simplified	Excellent	Excellent: Local and geographically dispersed; exceptionally scalable
Total cost of ownership	Poor: Escalating; rapidly out of control	Pretty good with no software costs	Pretty good with no software costs and significant duplicate hardware costs	Very good, although upfront costs may be high, overall costs much reduced	Very good with overall costs much reduced	Very good, although upfront costs may be high, overall costs much reduced	Very good with excellent payback timeframes