



IT Services Management

Data Center Consolidation Technical Questionnaire

White Paper

Prepared by:

[Rick Leopoldi](#)

May 25, 2002

This questionnaire is based on a single system configuration. It is possible that various applications might be running on a single system and more than one disk technology is being used with that system. To accommodate this, duplicate the application and disk technology sections. Alternately, a large application might run on multiple systems and will need repetition in the single system section on the questionnaire. Duplicate sections as needed to accommodate all systems.

If system performance data is unavailable, complete the remaining sections of the questionnaire to understand the environment and the applications running on each system.

System Assessment Questionnaire for the Evaluation Stage		
System Information		
	System Name	
	Model	
	Number of Processors and Process Type	
	RAM	
	OS Version	
Logistics		
	Owner	
	Location	
Application Characteristics (Duplicate this section for each application on the system)		
	Application Name	
	Type (homegrown, vendor supplied)	
	Transaction Type (OLTP, DSS, on-line or batch, etc.)	
	Transaction Rate	
	Database Type/Version	
	Database Size	
	Uptime/availability requirement	
	Is the application a "legacy" application that should be left alone? Are there any maintenance issues?	
	Does the application require frequent system rebooting?	
	Does the application require kernel parameter modification?	
	Does the application require isolation due to security reasons?	
	Is there a business/political sensitivity or any other known reason to prevent the application's consolidation with others?	

System Performance Characteristics		
Peak time	% of peak CPU utilization	
	% of peak memory utilization	
	Peak disk IO utilization, throughput	
	Peak network load volume	
Overall average (24 x 7)	% of overall average CPU utilization	
	% of overall average memory utilization	
	Overall average disk IO utilization, throughput	
	Overall average network load volume	
Workday Average (8 x 5)	% of average workday CPU utilization	
	% of average workday memory utilization	
	Average workday disk IO utilization, throughput	
	Average workday network load volume	
Disk IO characteristics	% of read operations, % of write operations, rate of operations	
Mass Storage Information (Duplicate this section for each storage type)		
	Type	
	Raw capacity, usable space, consumed space in GB	
	Data protection, RAID mode	
	Growth pattern over next 12 or 24 months	
	Root disk type, volume, mirrored or not?	
Network Information		
	Types of network this system is in (Secure, Intranet, Internet, etc.)	
	Types of network this system needs to support (10/100BT, FDDI, Token Ring, ATM, etc.)	
System High Availability Requirements		
	Service Level Agreement: Service response time, availability %, planned downtime, etc.	
	Uptime requirement	
Backup Information		
	Backup frequency (full/incremental)	
	Backup windows	
	Backup devices (DLT, etc.)	
	Backup volume (GB)	
	Local or network backups	
	Backup software	
Interface Cards		
	Network type, number of interface cards	
	IO type, number of interface cards	
Costs		
	Annual HW/SW support cost	
	Software license cost	
General Questions		
	What application on this system would you consider consolidating with others?	