Standard Compaq NT/Intel and Tru64/Alpha Sizings for Oracle Applications

Compaq North America eApplications Solutions Center

Version 2.07 – Q3 2000

ABSTRACT

This document provides Oracle Applications sizing estimates for Compaq Servers. This sizing information is based on Compaq and Oracle sizing experience, and specific usage assumptions.

Further information about Compaq technologies for Oracle Applications may be obtained from the Compaq Oracle Solution Partner website at http://www.compaq.com/partners/oracle, the Oracle for Compaq website at http://platforms.oracle.com/compaq, and the Oracle-focussed sections available on the Compaq Active Answers website at http://www.compaq.com/activeanswers.

Should you require assistance with the use of this document, or have any feedback on it's content, please contact one of our Solution Center Program Managers. Please ensure you always use the most recent copy of this document - expect it to be updated quarterly:

Compaq North America eApplications Solution Center

Phone Toll-free 1-877-778-3838

US West and Great Lakes Program Manager: Don Dean – don.dean@compaq.com

US Central and South East Program Manager: Jim Bell - jim.bell@compaq.com

US North East and Canadian Program Manager: Diana Proulx – diana.proulx@compaq.com

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This document contains sizings for Compaq Server configurations to support varying numbers of concurrently active users of Oracle Applications software.

The assumption and guiding principles used in preparation of these sizings were as follows:

- Based on Oracle Applications 11.0.3 on Oracle Database Server 8.0.x;
- Currently no sizing information exists for Oracle Applications 11i on Oracle Database Server 8i. For Apps 11i planning purposes, the conservative recommendation is for customers to choose a user count at least 40% larger than these 11.0 sizings;
- The active user counts were divided equally between Financials and Order Entry;
- Where possible, one server was used to support the Oracle8 Database Server component as well as the Applications Server component. This provides a smaller implementation with an initial single server solution, for lowered costs, easier installation and ongoing management;
- Even where a single cpu would suffice for the database server, two CPU's were configured for reasons of scalability and availability, in accordance with North American Enterprise Applications Engineering Best Practices;
- Where the document recommends a dedicated Database Server, this server will host the Oracle8 Server plus the Concurrent Manager Server components;
- The recommended sizings include limited capacity for batch work concurrent with the online users, plus online backups. If there is a lot of batch required and if it can't be done off-peak, recommend a dedicated batch server, which can, perhaps, be used as fail-over database server if the relevant Server clustering components are included as well;
- Where necessary, the load on the database server can be reduced by perhaps 25% by removing the concurrent manager server to its own dedicated Batch server. This has been proposed for certain high-end solutions in this document;
- Where one quad-processor Application Server would suffice, two dual-processor servers are proposed, in order to provide higher availability, and cpu scalability without a server swap or additional Application Servers having to be installed;
- It is possible to mix and match platforms, such as using NT/Intel application servers with a Tru64/Unix database layer;
- Except where stated, 9GB (8.6GB formatted) disks are used throughout. The database Tables and Indexes area may be on 9GB (8.6GB formatted), 18GB (17GB formatted) or 36GB (34GB formatted) drives;
- Recommended entry-level disk subsystems are the SCSI-based StorageWorks RA4254 (up to 14 drives split on 2 buses), and Fibre-based RA4100 (up to 12 drives on 1 bus) and MA6000 (up to 24 drives on 2 buses). Recommended enterprise-class disk subsystems are the MA8000 and EMA12000 D14 models;
- The database may be a different size from the one recommended in this document. The column "Min. # of drives for database" is included so that, where there is a requirement for a smaller database, please ensure that it is stored on at least that number of drives. The number of drives stated is before any additional disks for RAID configurations;
- In the NT/Intel sizings, the actual computer model proposed is not specified. It will be up to the person doing the sizing to decide on which server suits the situation. A price concern may dictate that the cheapest server be used, even at the expense of high availability features like redundant hot swap fans, or power supplies. The NA eA SC recommends the Proliant DL580 (newest iteration of the Proliant 6400R) or Proliant ML570 (newest iteration of the Proliant 5500) for 4-cpu capable servers, and the Proliant 8500 or Proliant 8000 for 8-cpu capable servers;
- Generally, the Intel solutions have been configured with CPU's containing 1MB cache. The 2MB cache roughly doubles the price yet only increases CPU performance (wrt Oracle Applications) by approximately 20%. Increased CPU performance alone does not translate into an equivalent increase in throughput for the computer running those applications. Hence the choice of CPU's with 1MB cache represents a compromise between cost and performance. Customers may choose to purchase extra CPU capability by using the 2MB cache CPU's. At the top end of the sizing range, we have, in most cases, recommended CPU's with 2MB of cache as we approach the maximum capabilities of the database server;

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- A chosen config from this document can be used to generate complete Bill of Materials, Racking and optionally Pricing (USA only), from the ActiveAnswers System Configurator. Browse to http://www.compaq.com/activeanswers, look down the left-hand side under Tools, and click on "ActiveAnswers System Configurator".
- Do not hesitate to contact the NA eA SC to have any sizing validated. Contact details are on the cover page.

In situations where these standard sizings are unsuitable, certain 'rules-of-thumb' will be required in order to formulate suitable configurations to support the requested load. Here are some such guidelines.

- Resource utilization on the database server should be kept to a maximum of 60%, in order to allow for Concurrent (batch) Processing.
- At the Database Server layer, each Tru64/Alpha CPU is capable of supporting about 100 users. A less conservative estimate might go as high as 150 users. An additional CPU should be added to handle system software functions. At the Application Server layer, for Tru64/Alpha a number of CPU's equal to the number of Gigabytes of RAM is very conservative – the CPU's can often be 1 less.
- CPU usage under Windows NT seems to warrant at least as many CPU's as there are Gigabytes of memory, but often more, particularly when we get to the higher numbers of CPU's and scaling declines. On the database server this effect is more pronounced.
- For Tru64 Unix sizings, each user connection should be allowed about 2 MB of memory on the Database Server, and about 11 MB of memory on the Application Server layer. Allow an additional 128MB for the system software, about 128MB for the Oracle software and, on the database server, between 250MB and 1GB for the SGA, depending on the database size.
- For Windows NT sizings, each user connection should be allowed about 2MB on the Database Server, and about 21MB of memory on the Application Server layer. Allow an additional 128MB for the system software, 128MB for the Oracle software and, on the database server, between 250MB and 1 GB for the Oracle SGA. Finally, remember that the overall virtual addressing limit under WNT4.0 EE is 3GB.
- FYI. The Compaq ISC recently stated that the limiting factor on the Forms server is memory. Each logged in client requires 21MB on an NT Forms server. Thus, allowing a generous amount of memory for the operating system and the Oracle software, an NT Forms server with 4GB and 4 CPU's could support 175 clients. A more conservative figure of 150 users has been the basis of the new NT Forms server sizings.

Did you know that ActiveAnswers provides an online Oracle Applications sizer, which provides conservative NT/Intel and Tru64/Alpha sizings in less than 5 minutes? Full Bill of Materials (part numbers and quantities) and Racking layouts can be generated, as the sizer links directly into the ActiveAnswers System Configurator. Pricing Info is also available for USA Customers. Browse to http://www.compaq.com/activeanswers, look down the left-hand side under Tools, click on "ActiveAnswers Solution Sizers", click on "Compaq Sizer for Oracle Applications".

Should sufficient time be available to allow the NA eA SC to respond with a 25+page Custom Solution document, please complete the NA eA SC Oracle Apps questionnaire (separately available from the NA eA SC Program Managers) and return it to them. Full custom solution proposals are intended to show customers in detail how much hardware their final production environment should require. These proposals typically include background information on the sizing approach taken, logical and rack layouts of all servers and storage units, server and storage disk drive layout recommendations, and full Bill of Materials. The NA eA SC can start to work on a Custom Proposal once the completed questionnaire is received, with a typical turnaround time of 3 business days.

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25-User, Windows NT, 25 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server + Apps server	2	PIII-700-1MB	2 GB	2

Function	# of disks	Raid	Useable space
O/S + Page-file	2	1	8.6 GB
Oracle software + archived redo logs	4	1+0	17 GB
Active redo logs	2	1	8.6 GB
Temporary tablespaces + Rollback segments	2	1	8.6 GB
Tables + indexes	6	1+0	25 GB

50-User (Single server), Windows NT, 43 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server + Apps server	4	PIII-700-1MB	3 GB	3

Function	# of disks	Raid	Useable space
O/S + Page-file	2	1	8.6 GB
Oracle software + archived redo logs	4	1+0	17 GB
Active redo logs	2	1	8.6 GB
Temporary tablespaces + Rollback segments	2	1	8.6 GB
Tables + indexes	10	1+0	43 GB

50-User (Multiple servers), Windows NT, 43 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	2	PIII-700-1MB	1 GB	3
Apps server	2	PIII-700-1MB	2 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S + Page-file	2	1	8.6 GB
Oracle software + archived redo logs	2	1	8.6 GB
Active redo logs	2	1	8.6 GB
Temporary tablespaces + Rollback segments	2	1	8.6 GB
Tables + indexes	10	1+0	43 GB
Applications server			
O/S + Page-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

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75-User, Windows NT, 60 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	2	PIII-700-1MB	2 GB	5
Apps server	3	PIII-700-1MB	2 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S + Page-file	2	1	8.6 GB
Oracle software + archived redo logs	2	1	8.6 GB
Active redo logs	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Tables + indexes	14	1+0	60 GB
Applications server			
O/S + Page-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

100-User, Windows NT, 102 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	2	PIII-700-1MB	2 GB	5
Apps server	3	PIII-700-1MB	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S + Page-file	2	1	8.6 GB
Oracle software + archived redo logs	2	1	8.6 GB
Active redo logs	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Indexes	6 * 17	1+0	51 GB
Tables	6 * 17	1+0	51 GB
Applications server			
O/S + Page-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

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150-User, Windows NT, 136 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	3	PIII-700-1MB	3 GB	7
Apps server	4	PIII-700-1MB	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S + Page-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Indexes	8 * 17	1+0	68 GB
Tables	8 * 17	1+0	68 GB
Applications server			
O/S + Page-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

200-User, Windows NT, 170 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	4	PIII-700-1MB	4 GB	9
Apps server	3	PIII-700-1MB	3 GB	
Apps server	3	PIII-700-1MB	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Page-file	4	1+0	17 GB
1	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Indexes	10 * 17	1+0	85 GB
Tables	10 * 17	1+0	85 GB
Applications servers (2)			
O/S + Page-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

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250-User, Windows NT, 272 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	6	PIII-700-2MB	4 GB	11
Apps server	4	PIII-700-1MB	3 GB	
Apps server	4	PIII-700-1MB	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Page-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Indexes	8 * 34	1+0	136 GB
Tables	8 * 34	1+0	136 GB
Applications servers (2)			
O/S + Page-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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300-User, Windows NT, 272 GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	6	PIII-700-2MB	4 GB	14
Batch server	4	PIII-700-2MB	4 GB	
Apps server	4	PIII-700-1MB	4 GB	
Apps server	4	PIII-700-1MB	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Page-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Indexes	8 * 34	1+0	136 GB
Tables	8 * 34	1+0	136 GB
Batch server			
O/S	2	1	8.6 GB
Page-file	4	1+0	17 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (2)			
O/S + Page-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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350-User, Windows NT, 340GB

Function	# of CPU's	CPU specs	Memory	Min. # of drives for database
Database server	8	PIII-700-2MB	4 GB	14
Batch server	4	PIII-700-2MB	4 GB	
Apps server	4	PIII-700-1MB	3 GB	
Apps server	4	PIII-700-1MB	3 GB	
Apps server	4	PIII-700-1MB	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Page-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Indexes	10 * 34	1+0	170 GB
Tables	10 * 34	1+0	170 GB
Batch server			
O/S	2	1	8.6 GB
Page-file	4	1+0	17 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (3)			
O/S + Page-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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50-User, Tru64 UNIX, 43 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server + apps server	ES40 /667	2	2 GB	2

Function	# of disks	Raid	Useable space
O/S + Swap-file	2	1	8.6 GB
Oracle software + archived redo logs	4	1+0	17 GB
Active redo logs	2	1	8.6 GB
Temporary tablespaces + Rollback segments	2	1	8.6 GB
Tables + indexes	10	1+0	43 GB

100-User (Single server), Tru64 UNIX, 85 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server + apps server	ES40 /667	3	3 GB	3

Function	# of disks	Raid	Useable space
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software + archived redo logs	4	1+0	17 GB
Active redo logs	2	1	8.6 GB
Temporary tablespaces + Rollback segments	2	1	8.6 GB
Tables + indexes	10 * 17 GB	1+0	85 GB

100-User (Multiple servers), Tru64 UNIX, 85 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	ES40 /667	2	2 GB	3
Apps server	ES40 /667	2	2 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	2	1	8.6 GB
Oracle software + archived redo logs	2	1	8.6 GB
Active redo logs	2	1	8.6 GB
Temporary tablespaces + Rollback segments	2	1	8.6 GB
Tables + indexes	10 * 17 GB	1+0	85 GB
Applications server			
O/S + Swap-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

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150-User, Tru64 UNIX, 136 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	ES40 /667	3	3 GB	4
Apps server	ES40 /667	2	2 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	2	1	8.6 GB
Oracle software + archived redo logs	2	1	8.6 GB
Active redo logs	2	1	8.6 GB
Temporary tablespaces + Rollback segments	2	1	8.6 GB
Indexes	8 * 17 GB	1+0	68 GB
Tables	8 * 17 GB	1+0	68 GB
Applications server			
O/S + Swap-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

200-User, Tru64 UNIX, 170 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	ES40 /667	3	3 GB	5
Apps server	ES40 /667	2	2 GB	
Apps server	ES40 /667	2	2 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	2	1	8.6 GB
Oracle software + archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	10 * 17 GB	1+0	85 GB
Tables	10 * 17 GB	1+0	85 GB
Applications servers (2)			
O/S + Swap-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

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250-User, Tru64 UNIX, 272 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS80 /731	4	4 GB	6
Apps server	ES40 /667	2	2 GB	
Apps server	ES40 /667	2	2 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	8 * 34 GB	1+0	136 GB
Tables	8 * 34 GB	1+0	136 GB
Applications servers (2)			
O/S + Swap-file	2	1	8.6 GB
Oracle software	2	1	8.6 GB

300-User, Tru64 UNIX, 272 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS80 /731	4	4 GB	7
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	8 * 34 GB	1+0	136 GB
Tables	8 * 34 GB	1+0	136 GB
Applications servers (2)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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350-User, Tru64 UNIX, 340 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS80 /731	4	6 GB	8
Apps server	ES40 /667	2	4 GB	
Apps server	ES40 /667	2	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	10 * 34 GB	1+0	170 GB
Tables	10 * 34 GB	1+0	170 GB
Applications servers (2)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

400-User, Tru64 UNIX, 340 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS80 /731	6	6 GB	9
Apps server	ES40 /667	2	4 GB	
Apps server	ES40 /667	2	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	10 * 34 GB	1+0	170 GB
Tables	10 * 34 GB	1+0	170 GB
Applications servers (2)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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450-User, Tru64 UNIX, 408 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS80 /731	6	6 GB	10
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	12 * 34 GB	1+0	204 GB
Tables	12 * 34 GB	1+0	204 GB
Applications servers (3)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

500-User, Tru64 UNIX, 408 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS80 /731	6	6 GB	11
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	12 * 34 GB	1+0	204 GB
Tables	12 * 34 GB	1+0	204 GB
Applications servers (3)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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550-User, Tru64 UNIX, 476 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS160 /731	8	8 GB	12
Batch server	GS80 /731	4	4 GB	
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4* 17GB	1+0	34 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	14 * 34 GB	1+0	238 GB
Tables	14 * 34 GB	1+0	238 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (3)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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600-User, Tru64 UNIX, 476 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS160 /731	8	8 GB	13
Batch server	GS80 /731	4	4 GB	
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	
Apps server	ES40 /667	2	3 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4* 17GB	1+0	34 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	14 * 34 GB	1+0	238 GB
Tables	14 * 34 GB	1+0	238 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (3)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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750-User, Tru64 UNIX, 612 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS160 /731	10	10 GB	16
Batch server	GS80 /731	4	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4* 17GB	1+0	34 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	18* 34 GB	1+0	306 GB
Tables	18* 34 GB	1+0	306 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (3)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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900-User, Tru64 UNIX, 748 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS160 /731	12	12 GB	20
Batch server	GS160 /731	6	6 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4* 17GB	1+0	34 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	22* 34 GB	1+0	374 GB
Tables	22* 34 GB	1+0	374 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4	1+0	17 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (4)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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1200-User, Tru64 UNIX, 884 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS320 /731	16	16 GB	24
Batch server	GS160 /731	8	8 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4* 34GB	1+0	68 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	26* 34 GB	1+0	442 GB
Tables	26* 34 GB	1+0	442 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4* 17GB	1+0	34 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (5)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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1500-User, Tru64 UNIX, 1020 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS320 /731	20	20 GB	28
Batch server	GS160 /731	10	10 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	4* 34GB	1+0	68 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	30* 34 GB	1+0	510 GB
Tables	30* 34 GB	1+0	510 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4* 17GB	1+0	34 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (6)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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2000-User, Tru64 UNIX, 1224 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS320 /731	28	28 GB	34
Batch server	GS160 /731	14	14 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	6* 34GB	1+0	102 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	36* 34 GB	1+0	612 GB
Tables	36* 34 GB	1+0	612 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4* 34GB	1+0	68 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (8)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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2500-User, Tru64 UNIX, 1428 GB

Function	Model	# of CPU's	Memory	Min. # of drives for database
Database server	GS320 /731	32	32 GB	40
Batch server	GS320 /731	16	16 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	
Apps server	ES40 /667	3	4 GB	

Function	# of disks	Raid	Useable space
Database server			
O/S	2	1	8.6 GB
Swap-file	6* 34GB	1+0	102 GB
Oracle software	2	1	8.6 GB
Archived redo logs	2	1	8.6 GB
Active redo logs #1 & #3	2	1	8.6 GB
Active redo logs #2 & #4	2	1	8.6 GB
Temporary tablespaces	2	1	8.6 GB
Rollback segments	2	1	8.6 GB
Indexes	42* 34 GB	1+0	714 GB
Tables	42* 34 GB	1+0	714 GB
Batch server			
O/S	2	1	8.6 GB
Swap-file	4* 34GB	1+0	68 GB
Oracle software & report files	4	1+0	17 GB
Applications servers (10)			
O/S + Swap-file	2 * 17	1	17 GB
Oracle software	2	1	8.6 GB

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