

# How to Better Manage the Capacity of Virtualized IBM AIX Server Environments

*Part 2 of 4*

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**TeamQuest**

- Determine Capacity Requirements
- Determine Current Capacity
- Plan for the Future “What-if” Scenarios

# Determine Capacity Requirements

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- Determine if there are any bottlenecks or constraints on the P595 system
- Make recommendations to resolve any constraints

# Determine Current Capacity

TeamQuest Model - [Model Description: AIX\_CMG-2007.mdl]

File Edit Calibrate Modify What-if Predict Window Help

Model Title: Selection : <04/16/2007 06:00-18:00>

Frame Name: Baseline Frame 1 of 2

Systems		Active Resources		Workloads		Passive Resources			
User Notes		ARWL Matrix		Steps		PRWL Matrix			
	Physical System Name	System Type	System Model	Logical System Name	OS Type	CPU Type	Mode	Entitled Capacity	Share Weight
1	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52						
2	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	vio3	AIX_SERIES	SHARED	UNCAPPED	0.2	128
3	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	vio2	AIX_SERIES	SHARED	UNCAPPED	0.2	128
4	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	vio1	AIX_SERIES	SHARED	UNCAPPED	0.2	128
5	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	vio4	AIX_SERIES	SHARED	UNCAPPED	0.2	128
6	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar3025	AIX_SERIES	SHARED	UNCAPPED	0.2	128
7	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar3024	AIX_SERIES	SHARED	UNCAPPED	0.2	100
8	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar3023	AIX_SERIES	SHARED	CAPPED	0.2	
9	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar3022	AIX_SERIES	SHARED	UNCAPPED	0.2	128
10	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar2023	AIX_SERIES	SHARED	UNCAPPED	0.2	128
11	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar2022	AIX_SERIES	SHARED	UNCAPPED	0.2	128
12	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar2021	AIX_SERIES	SHARED	UNCAPPED	0.4	148
13	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar2020	AIX_SERIES	SHARED	UNCAPPED	0.4	148
14	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar1025	AIX_SERIES	SHARED	UNCAPPED	0.4	148
15	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar1024	AIX_SERIES	SHARED	UNCAPPED	0.4	128
16	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar1023	AIX_SERIES	SHARED	UNCAPPED	0.4	100
17	9119-595-SN161024A	AIX_SERIES	IBM,9119-595 AIX 5.3.0.52	lpar1022	AIX_SERIES	SHARED	UNCAPPED	0.4	128
18	9119-595-SN161024A	AIX_SERIES							100
19	9119-595-SN161024A	AIX_SERIES							128

AIX 5.3 P595 with 42 CPU's  
4 VIO LPARs  
14 LPARs  
All Running AIX 5.3

System name can be any 51 characters.

# Determine Current Capacity

TeamQuest Model - [Model Description: AIX\_CMG-2007.md]

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Frame Name: Baseline Frame 1 of 2

Systems		Active Resources		Workloads		Passive Resources	
User Notes		AR/WL Matrix		Steps		PR/WL Matrix	
	System Name	Workload	Type	Measured Throughput	Throughput Adjustment Active Resource	Environment	
1	lpar3029	HER5	OPEN	0.0008601		TRANSACTION	
2	lpar3029	HERA4	OPEN	0.0001162		TRANSACTION	
3	lpar3029	HERA5	OPEN	0.0001395		TRANSACTION	
4	lpar3029	OTHER	OPEN	2.3159		TRANSACTION	
5	lpar1021	DPOA4	OPEN	0.007671		TRANSACTION	
6	lpar1021	CUSTA1	OPEN	12.522		TRANSACTION	
7	lpar1021	lpar1021 OTHER	OPEN	8.4482		TRANSACTION	
8	lpar1021	Oracle Stuff	OPEN	0.06376		TRANSACTION	
9	lpar1021	Oracle BackGround	OPEN	1.368		TRANSACTION	
10	lpar1021	PACK221	OPEN	0.002348		TRANSACTION	
11	lpar1021	PACKARD13	OPEN	0.001604		TRANSACTION	
12	lpar1021	TQ	OPEN	0.009972		TRANSACTION	
13	lpar1021	aioserver	OPEN	0.0186		TRANSACTION	
14	lpar1021	PACK202	OPEN	0.003905		TRANSACTION	
15	lpar1022	PACK114	OPEN	0.003673		TRANSACTION	
16	lpar1022	lpar1022 CUSTA1	OPEN	78.523		TRANSACTION	
17	lpar1022	lpar1022 OTHER	OPEN	57.019		TRANSACTION	
18	lpar1022	WAP15	OPEN	0.00006973		TRANSACTION	
19	lpar1022	lpar1022 TQ	OPEN	0.00006973		TRANSACTION	
20	lpar1022	MS14	OPEN	0.00251		TRANSACTION	
21	lpar1023	HER1	OPEN	0.0005114		TRANSACTION	
22	lpar1023	HER3	OPEN	0.0001162		TRANSACTION	
23	lpar1023	HER8	OPEN	0.0001627		TRANSACTION	
24	lpar1023	MIXER30	OPEN	0.00006973		TRANSACTION	
25	lpar1023	lpar1023 OTHER	OPEN	1.8262		TRANSACTION	
26	lpar1023	COTS19	OPEN	0.00006973		TRANSACTION	
27	lpar1024	HMM1	OPEN	0.00009311		TRANSACTION	
28	lpar1024	HMM12					
29	lpar1024	HMM3					
30	lpar1024	HMM8					
31	lpar1024	MIXER40P					
32	lpar1024	lpar1024 OTHER					
33	lpar1024	COTS18					
34	lpar1025	HARP2					
35	lpar1025	HIARP4	OPEN	0.03729		TRANSACTION	
36	lpar1025	HARP9	OPEN	0.03054		TRANSACTION	

Workload name can be any 51 characters.

Many different workloads for each LPAR



For more discussion on this topic, please contact Jim Smith at: [jim.smith@teamquest.com](mailto:jim.smith@teamquest.com)

To view demos on how to better manage the capacity of virtualized VMware ESX and Sun Solaris server environments, simply close this video and return to the TeamQuest website

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