

*Return to:*  
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United States

## **IBM Performance Management for Power Systems**

This is the IBM PM for Power Systems report for the server SAMPLE01, month ending November 2011.

For more information about PM reports, visit

<http://www.ibm.com/systems/power/support/perfmgmt/>

**IBM PM Development and Worldwide Operations**

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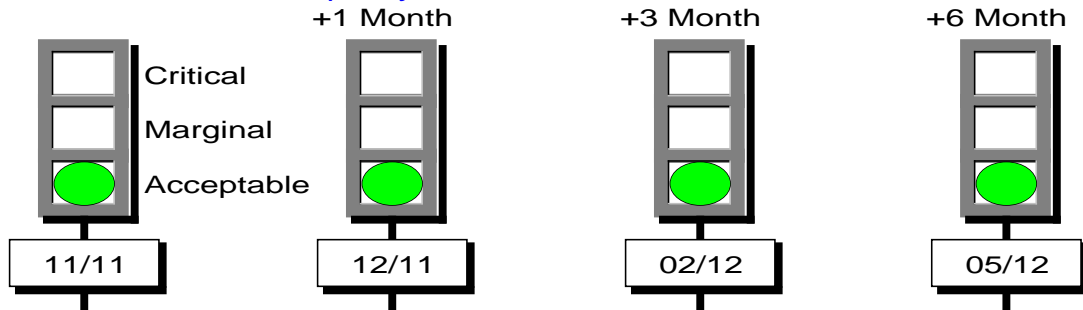
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# Executive Summary

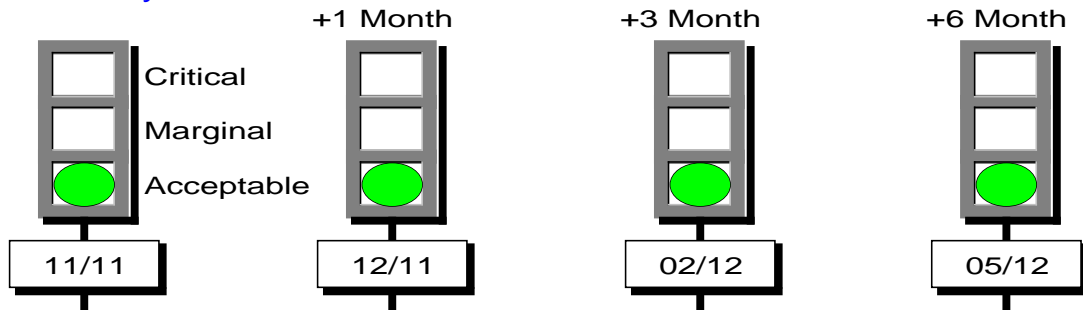
Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

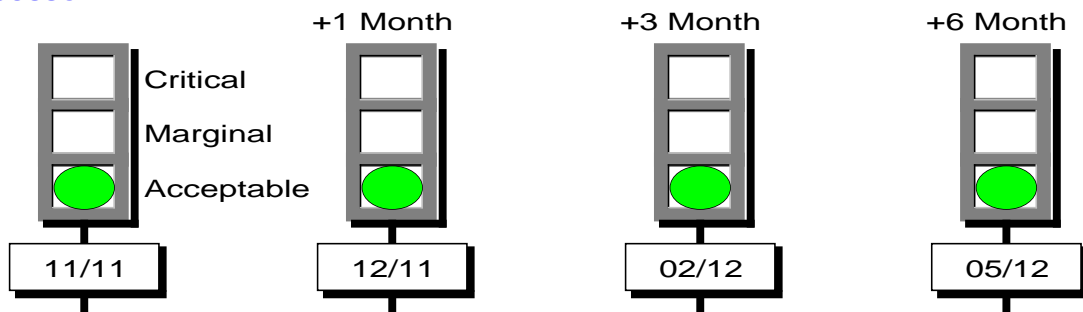
## Processor - Interactive Capacity



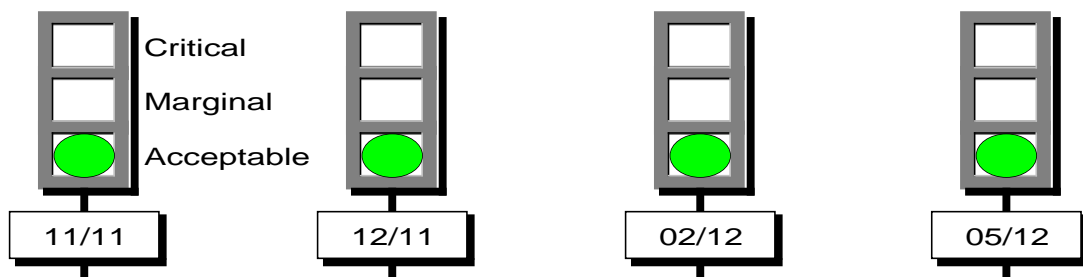
## Processor - System + Interactive



## Processor



## Disk Space

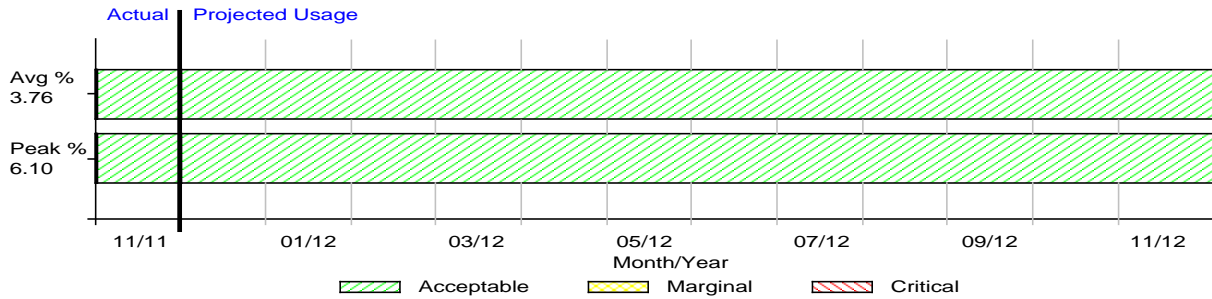


# Management Summary

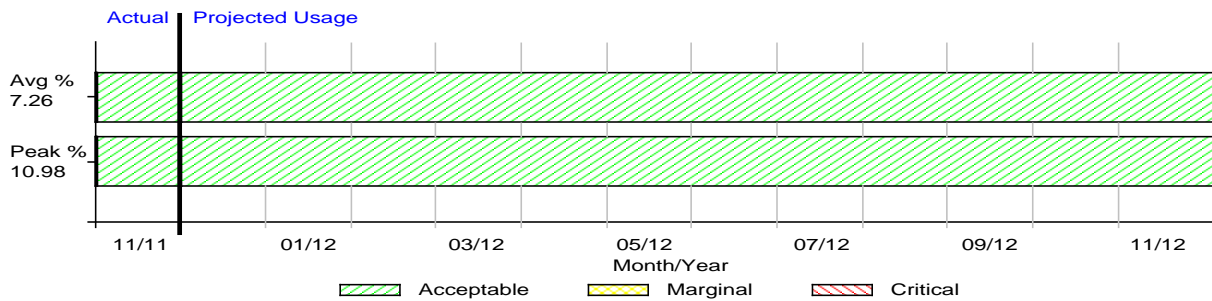
Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

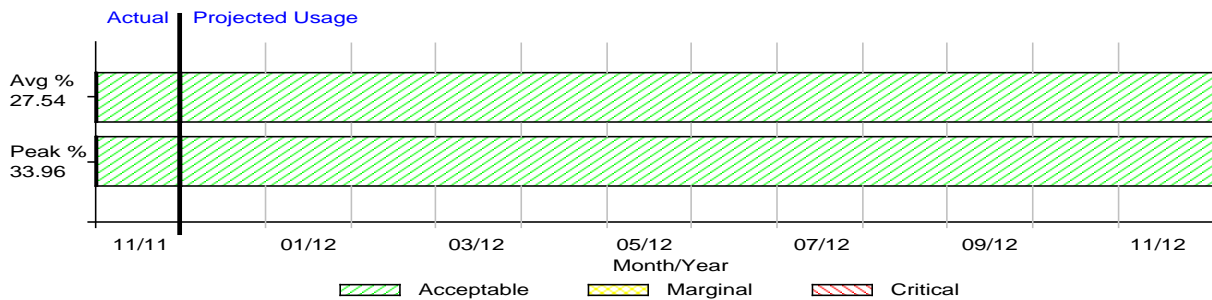
## Processor - Interactive Capacity



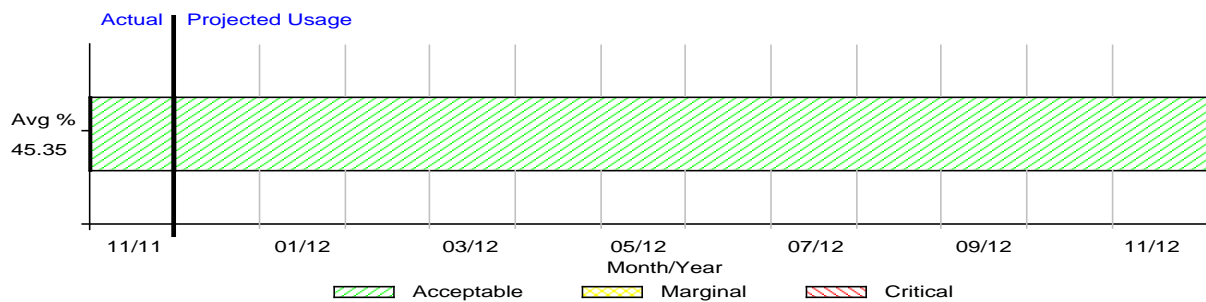
## Processor - System + Interactive



## Processor



## Disk Space

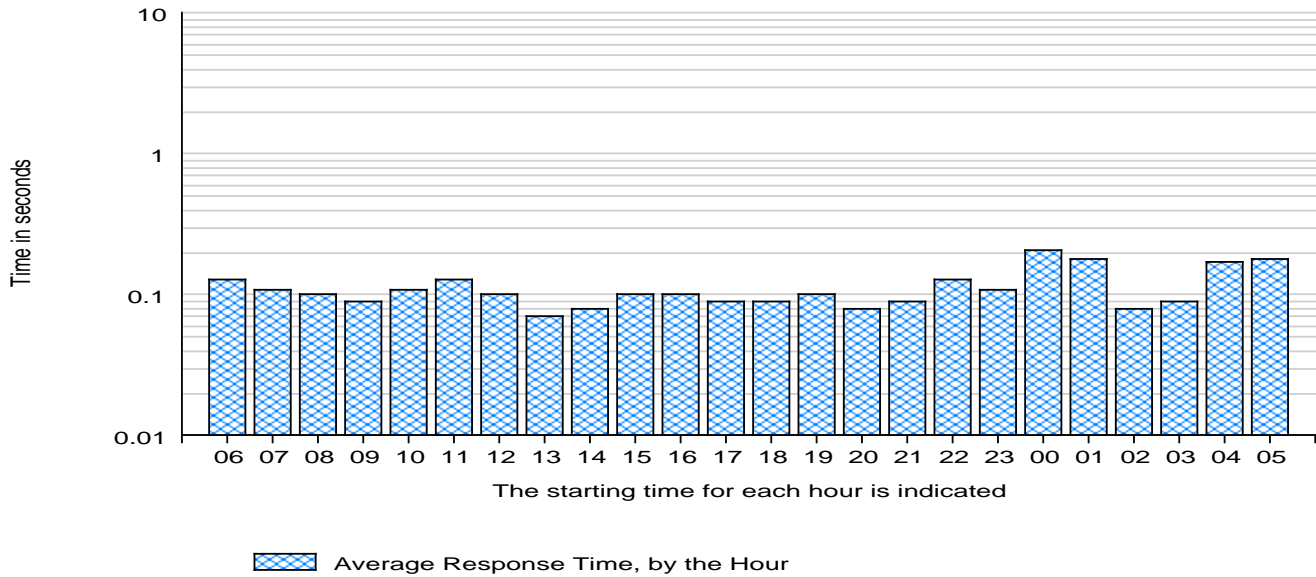


# Response Time

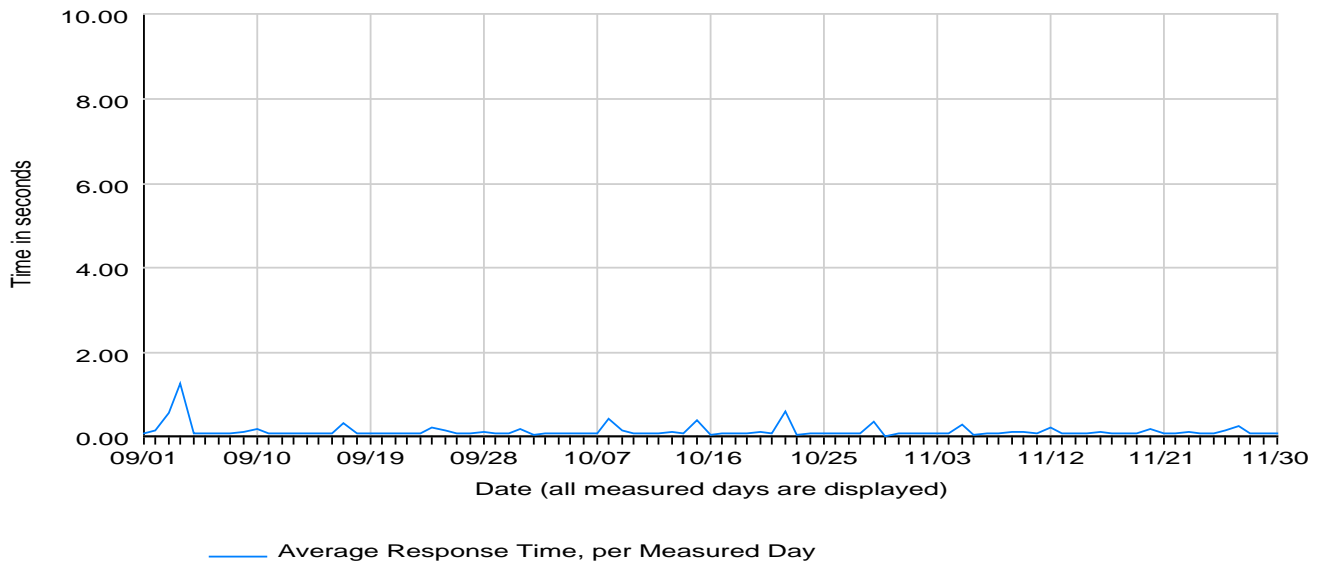
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

## Average Response Time, by the Hour



## Average Response Time, per Measured Day



## Facts

Month	Average Response Time
September 11	.09
October 11	.09
November 11	.09
See Fact Sheet 250	

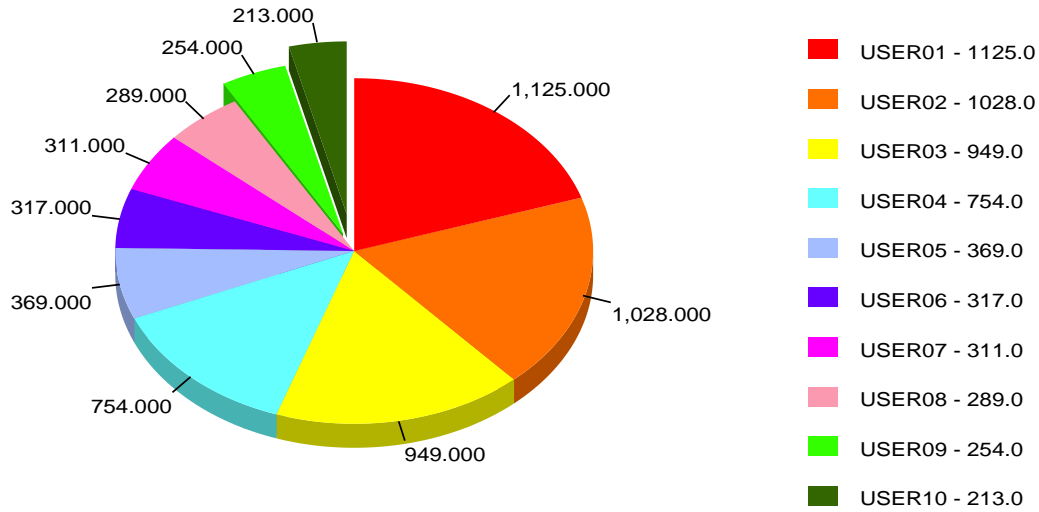
# Response Time - Top 10

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

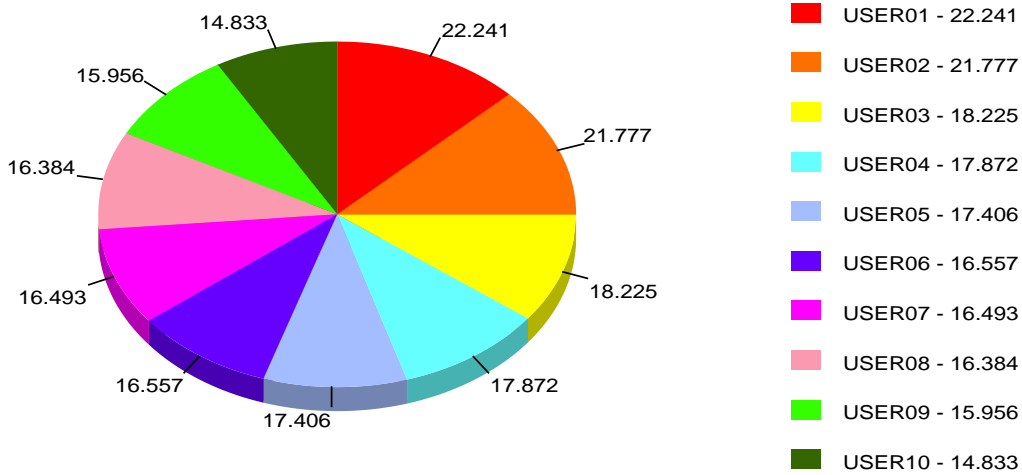
## Response Time

Users with the longest response times



## Response Time - Average

Users with the longest average response time

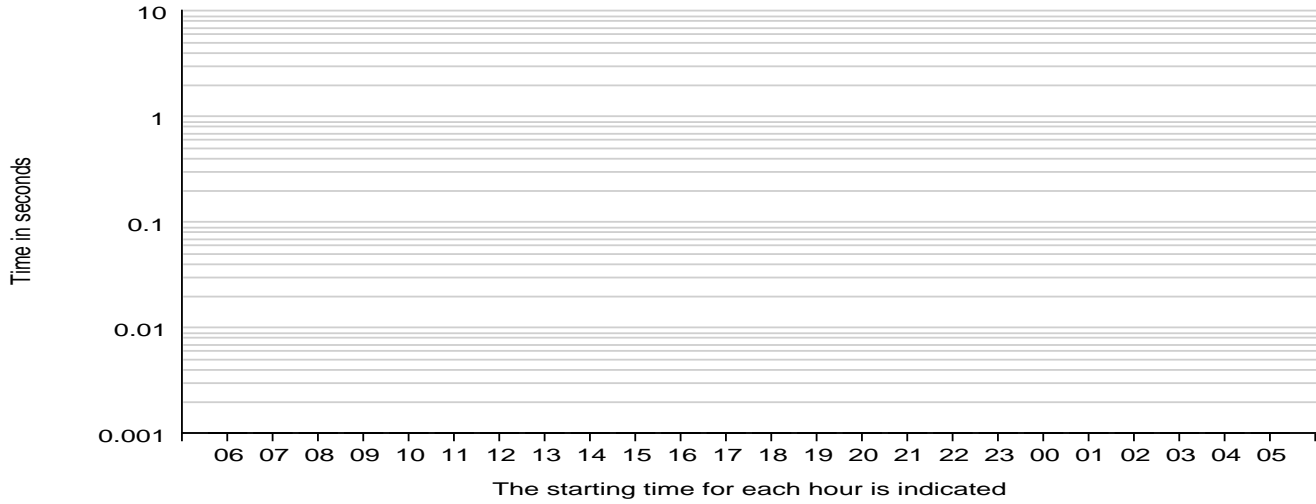


# Response Time, Local Terminals

Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

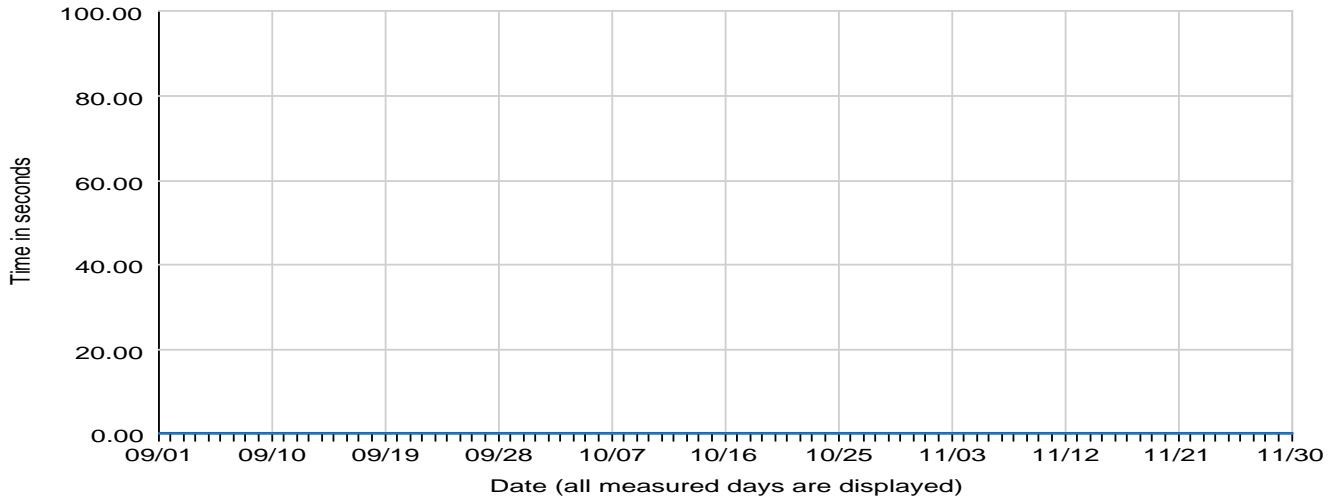
SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

**Average Response Time, by the Hour**  
 Local Terminals



 Average Response Time, by the Hour

**Average Response Time, per Measured Day**  
 Local Terminals



 Average Response Time, per Measured Day

## Facts

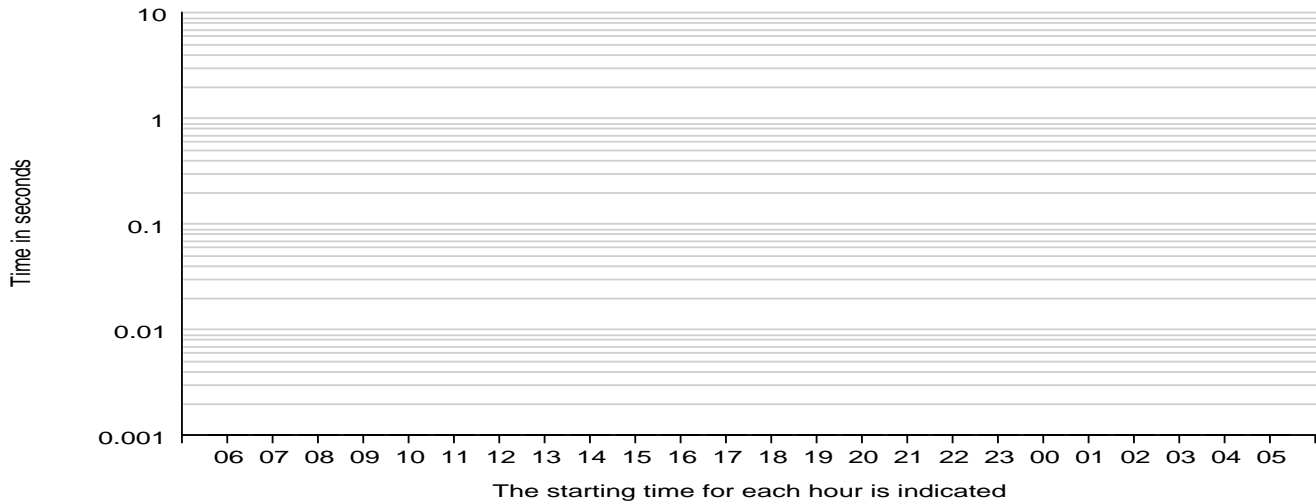
Month	Average Response Time
September 11	.00
October 11	.00
November 11	.00

# Response Time, PC

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

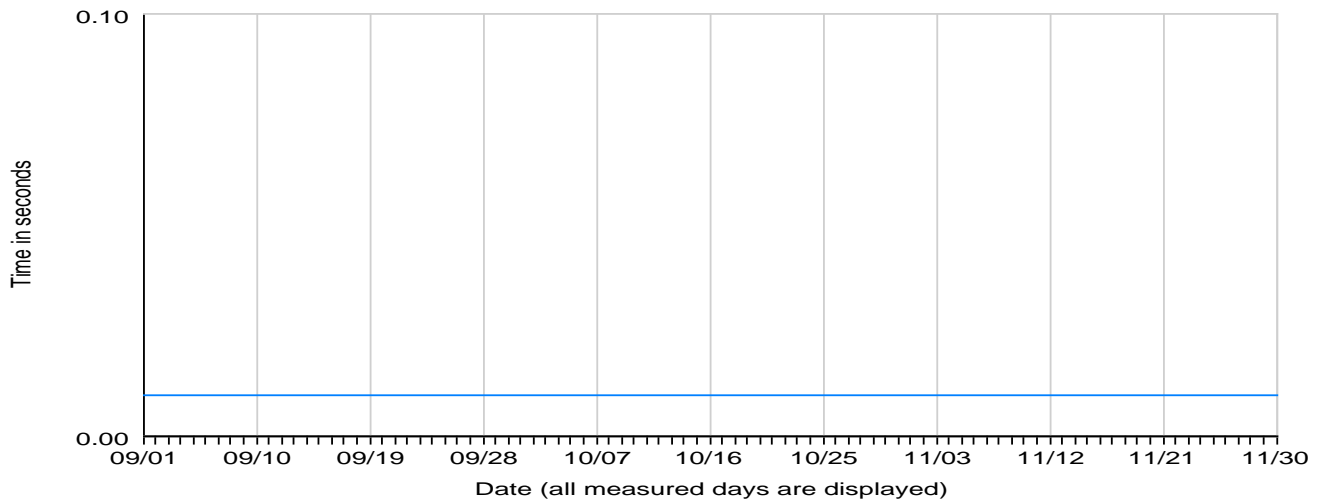
SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB


### Average Response Time, by the Hour PC



 Average Response Time, by the Hour

### Average Response Time, per Measured Day PC



 Average Response Time, per Measured Day

## Facts

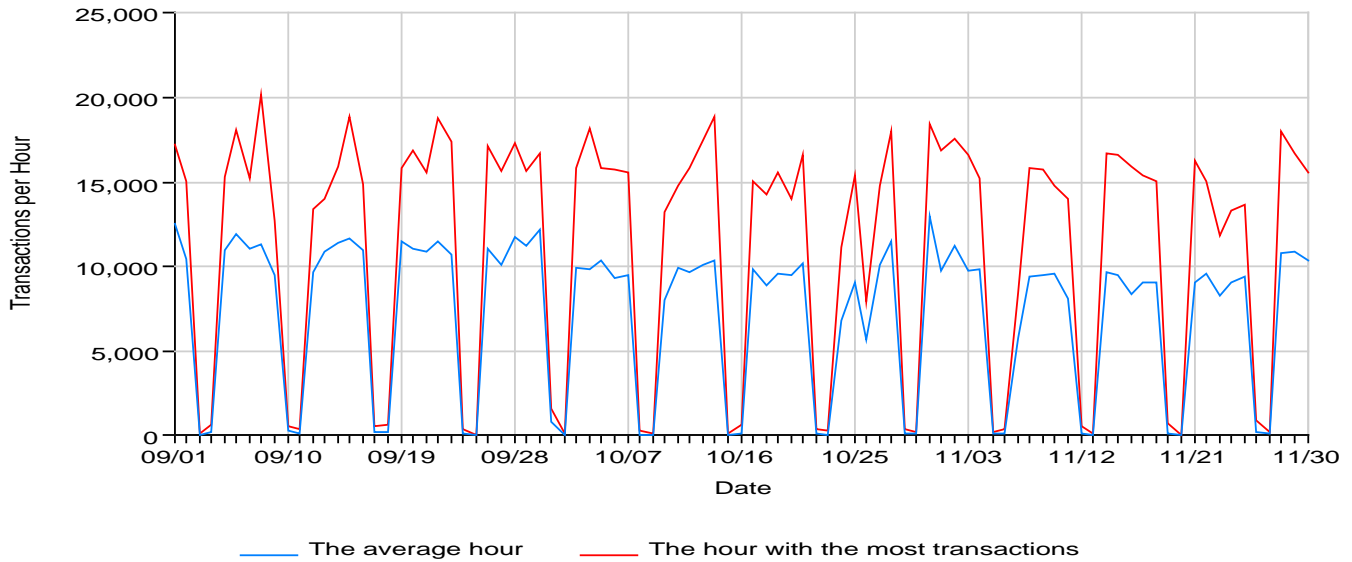
Month	Average Response Time
September 11	.00
October 11	.00
November 11	.00

# Transaction Volumes

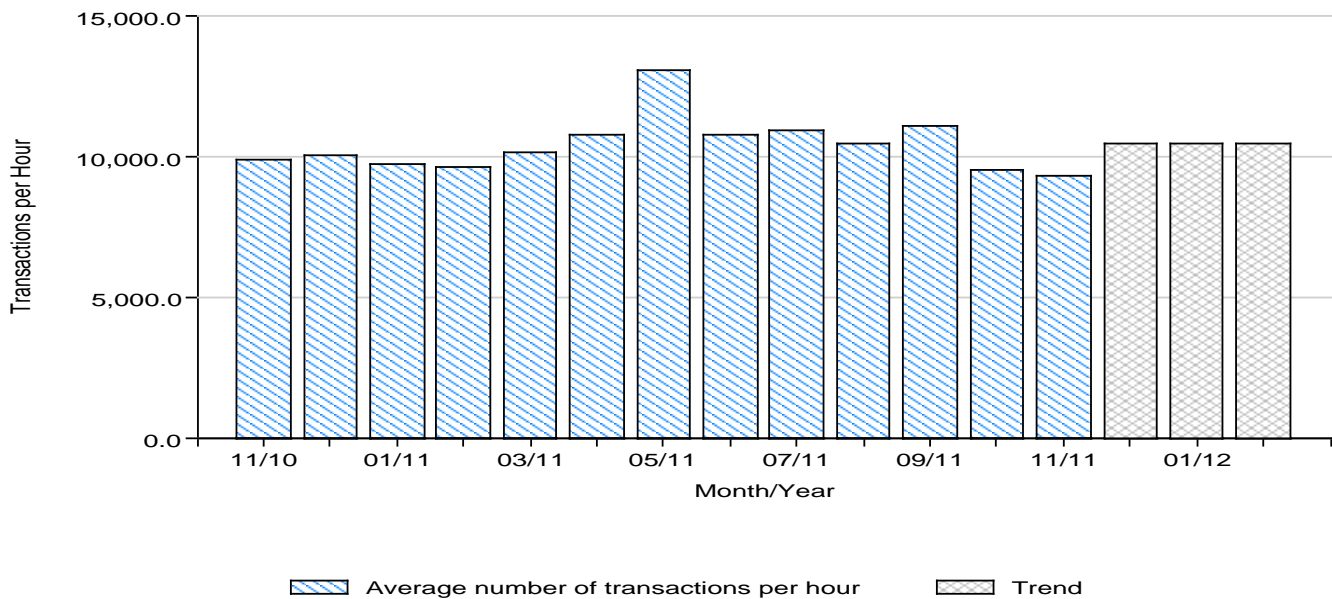
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

### Transaction Volume, per Hour



### Transaction Volume, per Hour - History and 3-Month Trend



## Facts

	Average Transaction Growth in %			
	Last 12 months	Last 6 months	Last 3 months	Last month
	-11.08	-14.88	-9.88	-2.19

See Fact Sheet 350

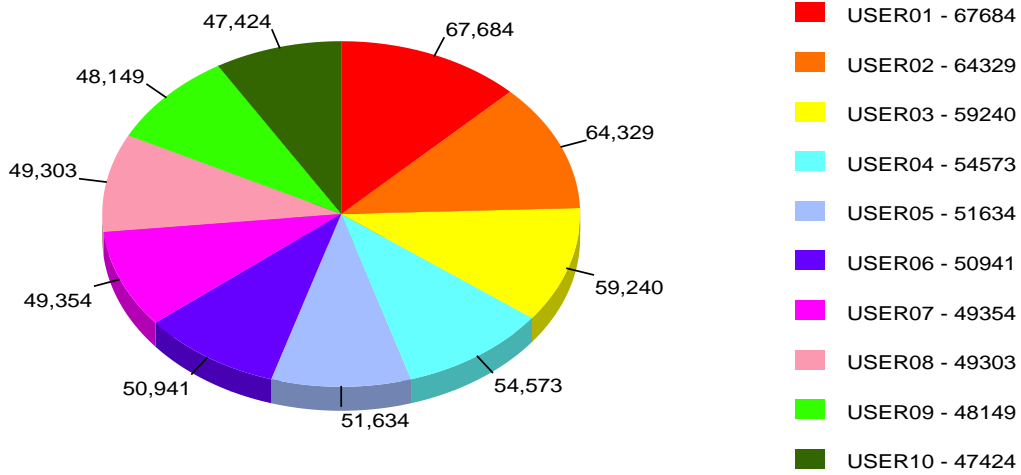
# Transaction Volumes - Top 10

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

## Transaction Volumes

Users with the most transactions during the period

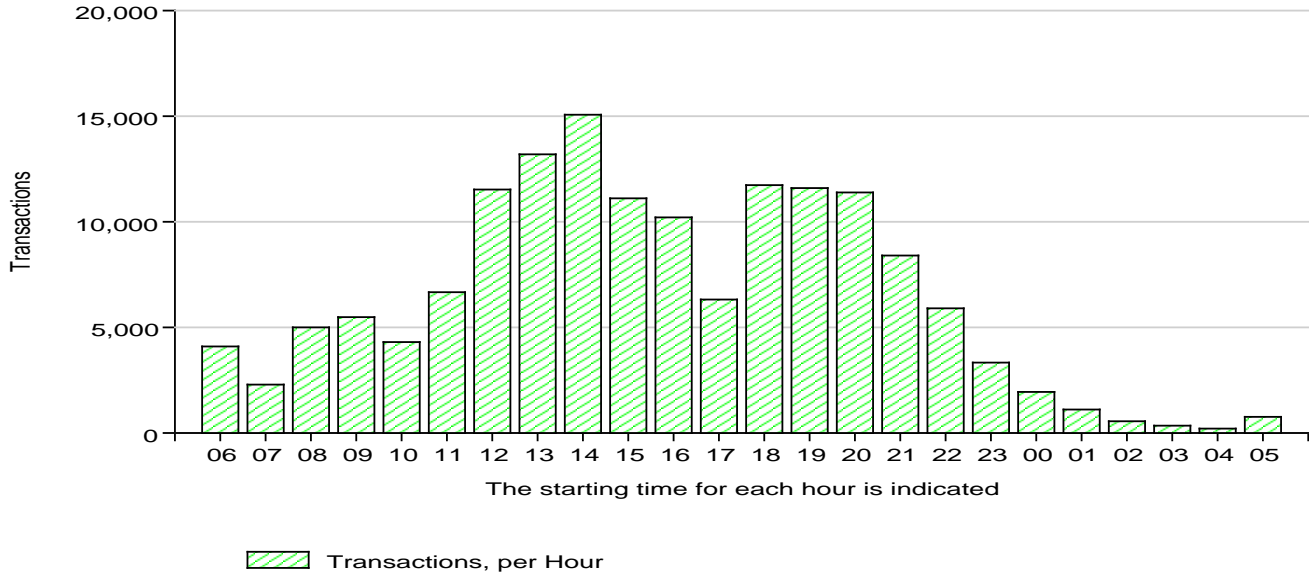


# Transactions

Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

Transactions, per Hour  
 All Users



## Facts

The period's average transaction contains

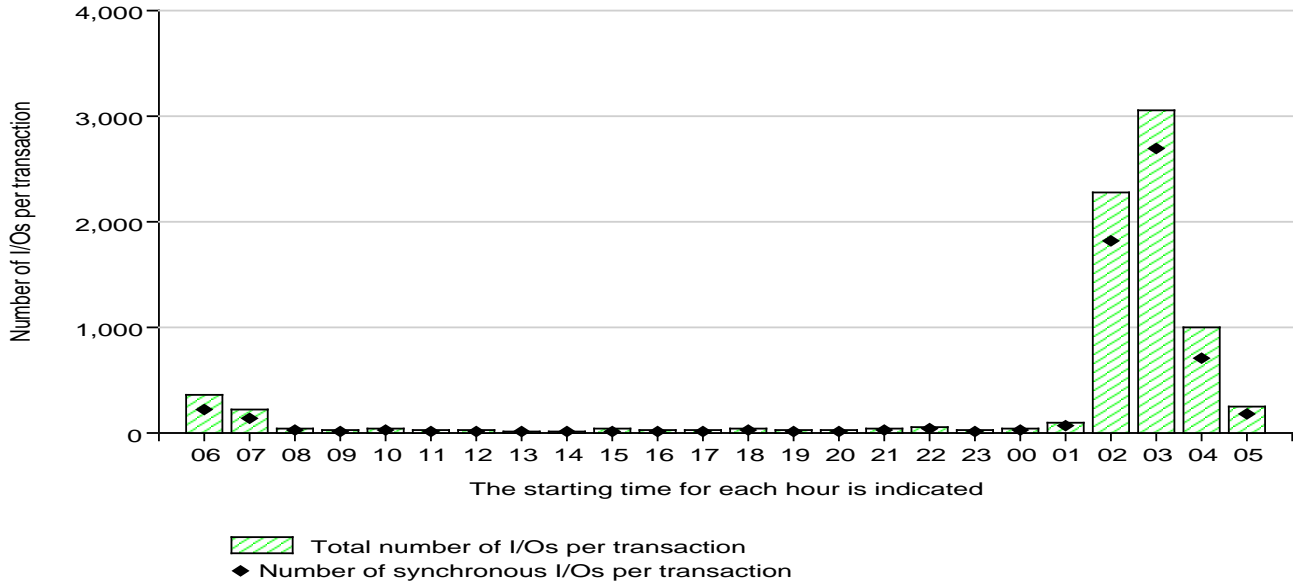
Month	Processor time in seconds	Number of I/Os	Number of synch. I/Os
September 11	0.006	33	23
October 11	0.006	30	22
November 11	0.006	34	23
See Report 376			

# Transaction Analysis - I/O

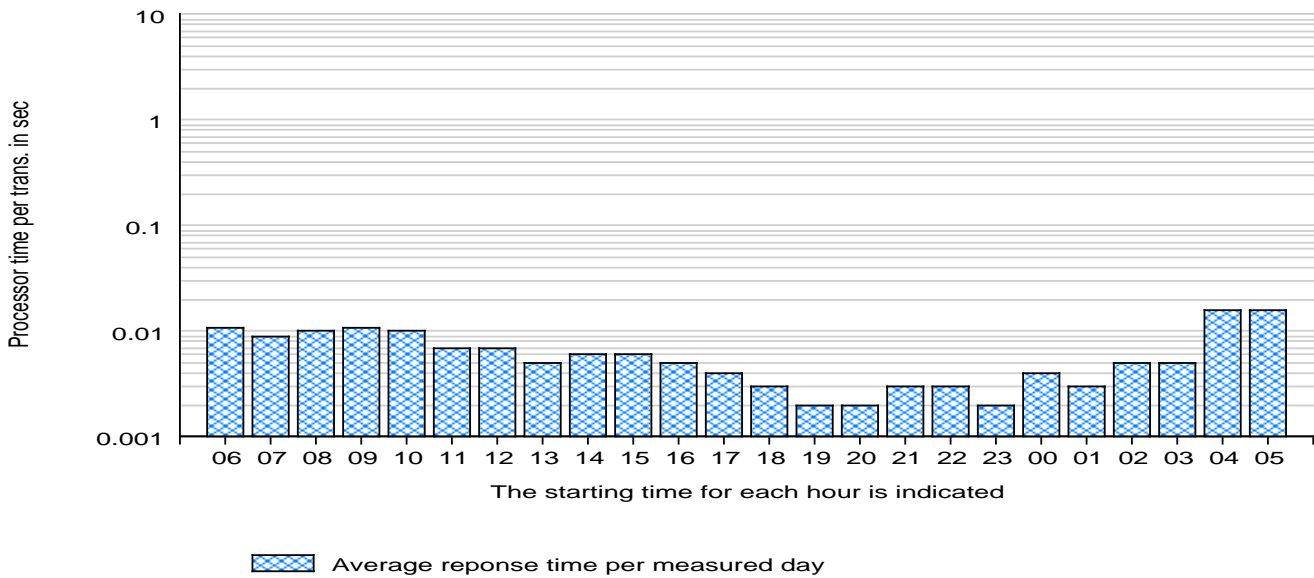
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

The Average Number of I/Os, per Transaction  
 All Users



Average Processor Usage, per Transaction - During the Hour



## Facts

The period's average transaction contains

Month	Processor time in seconds	Number of I/Os	Number of synch. I/Os
September 11	.006	33	23
October 11	.006	30	22
November 11	.006	34	23

See Fact Sheet 376

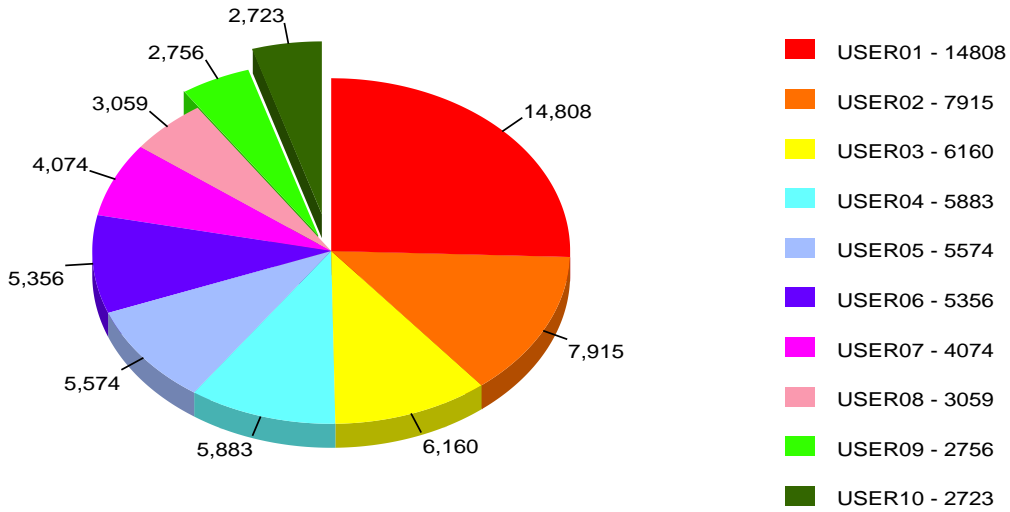
# Transaction Analysis - Top 10

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

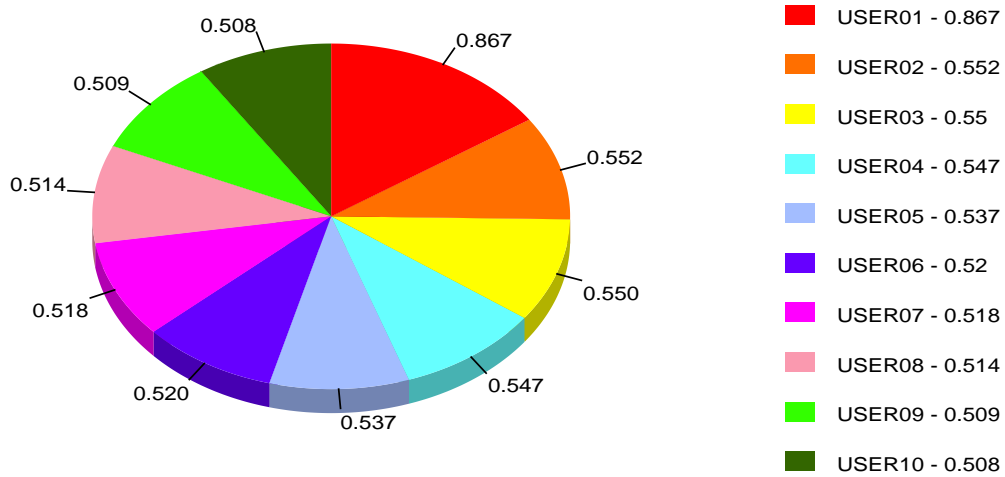
### Transaction Analysis - I/O

Users with the most I/Os per transactions



### Transaction Analysis - Processor Time

Users with most Processor time per transaction



# Jobs

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

### Number of Jobs, per Measured Day



## Facts

Month

Batch jobs during the period containing

	Processor time per	Number of I/Os per	Number of synch.
	I/O	sec	I/Os per sec
September 11	0.0002	371	274
October 11	0.0002	360	270
November 11	0.0002	302	211

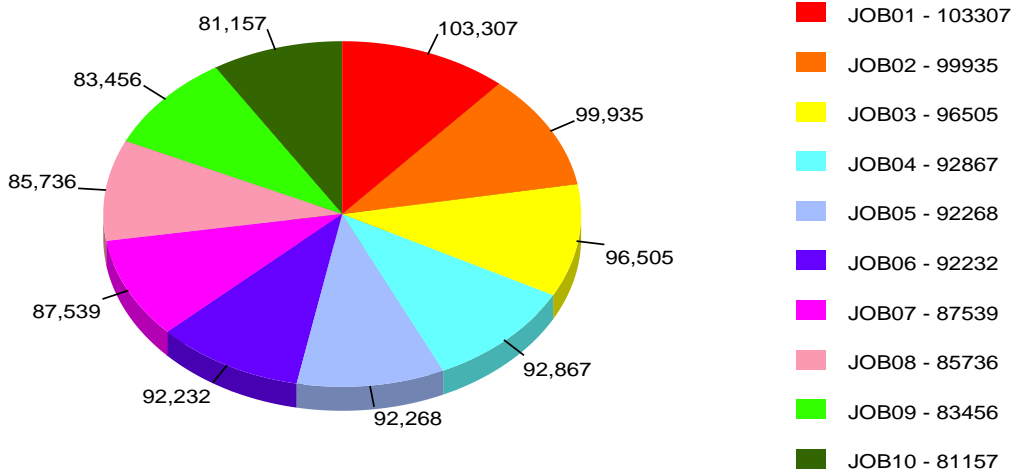
See Fact Sheet 452

# Low Priority Jobs - Top 10

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

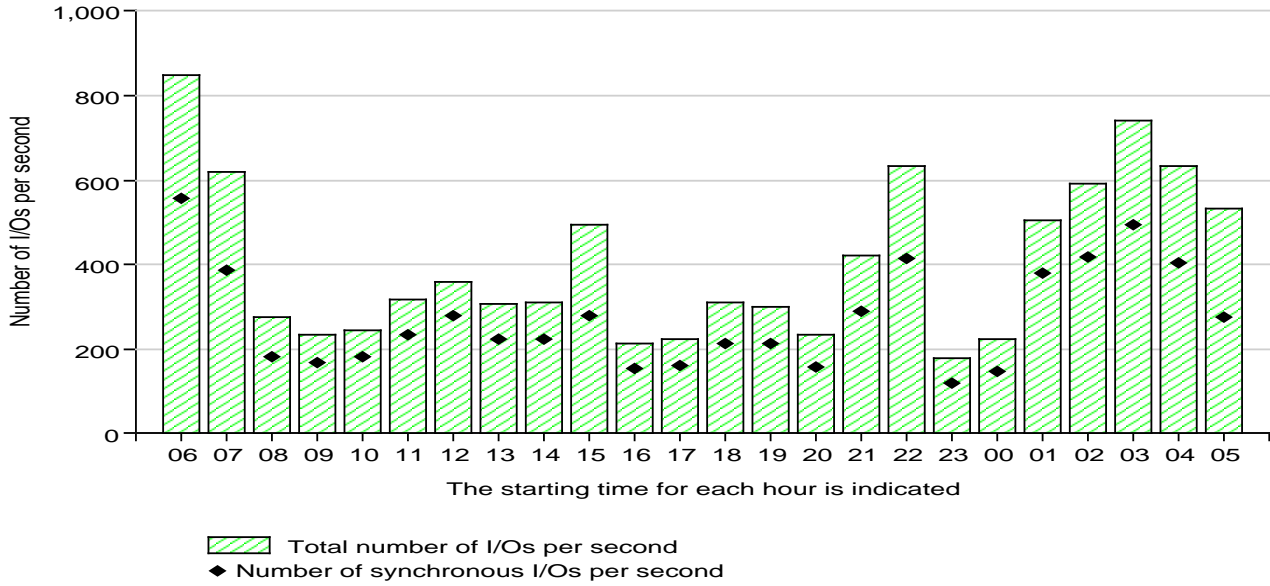
**Batch Jobs - Most Frequent**  
The most frequent jobs



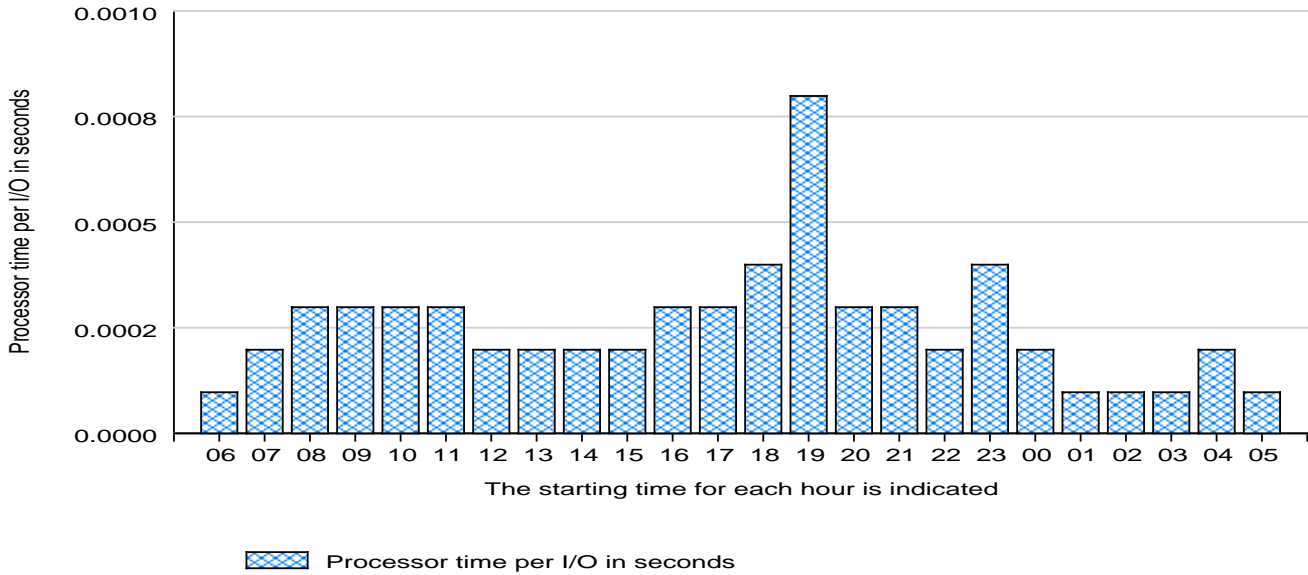
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

Number of I/Os for Batch Jobs



Processor Time, per I/O for Batch Jobs



Facts

Month	Batch jobs during the period containing		
	Processor time per I/O	Number of I/Os per sec	Number of synchron. I/Os per sec
November 11	.0002	302	211

See Fact Sheet 452

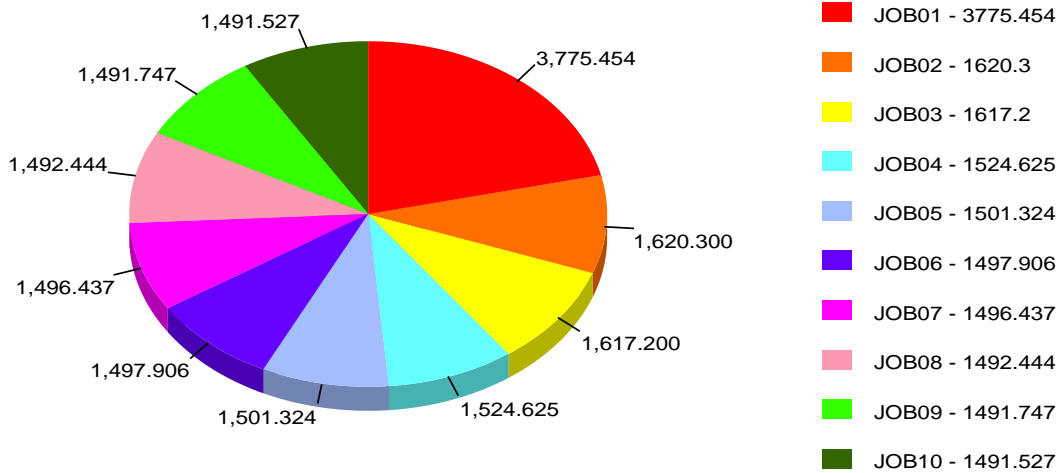
# Low Priority Jobs - Top 10

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

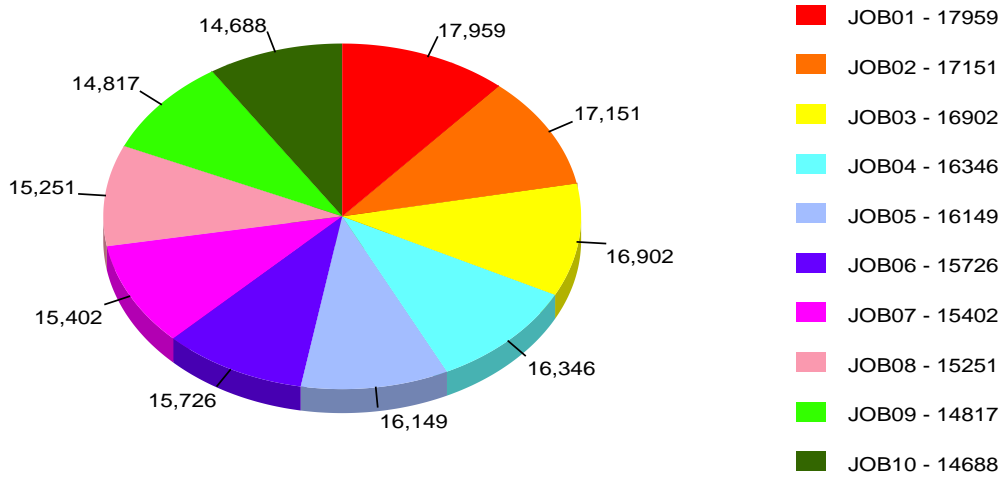
## Batch Jobs - I/O

Jobs with the most I/Os per second



## Batch Jobs - Processor Time

Jobs with the most Processor time

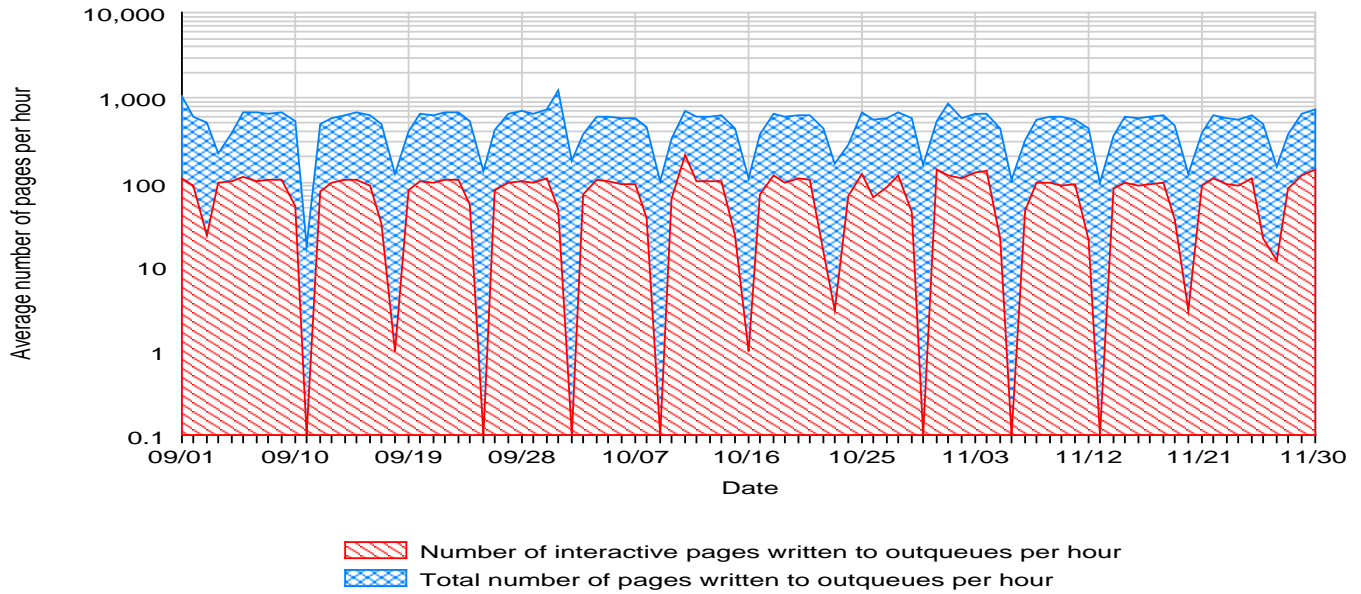


# Print Outs

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

## Print Outs - Daily Average, per Hour



See Fact Sheet 550

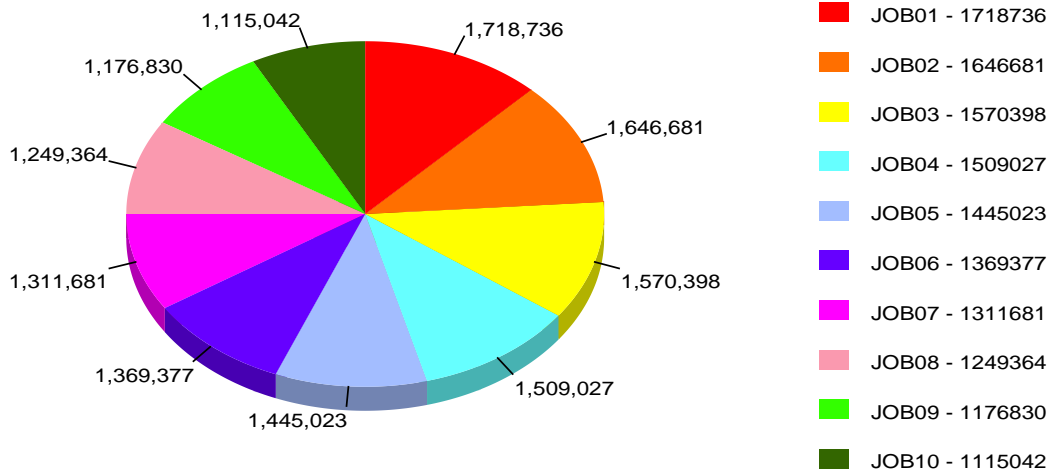
# Print Outs - Top 10

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

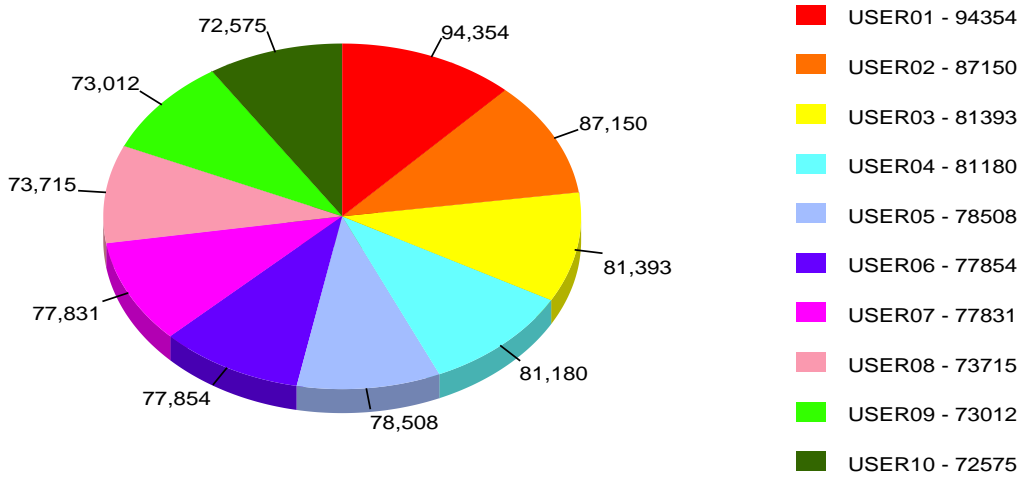
## Print Queue Jobs

Most pages sent to outqueue during the period



## Printed Documents, per User

Most documents to outqueue per person, this period

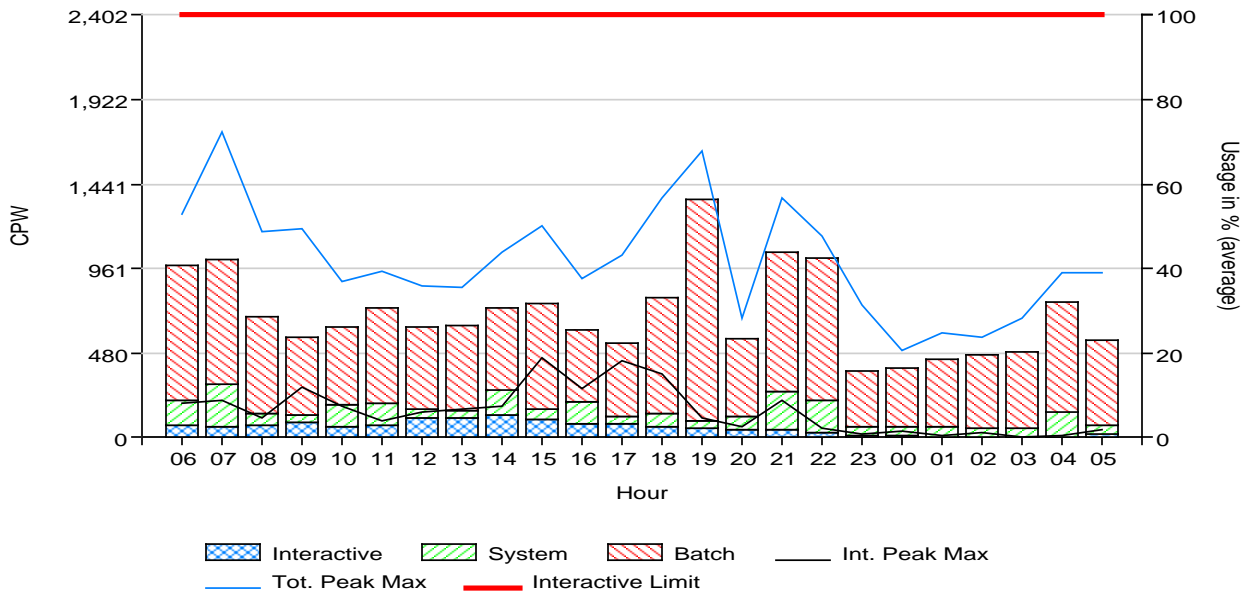


# Processor Utilization

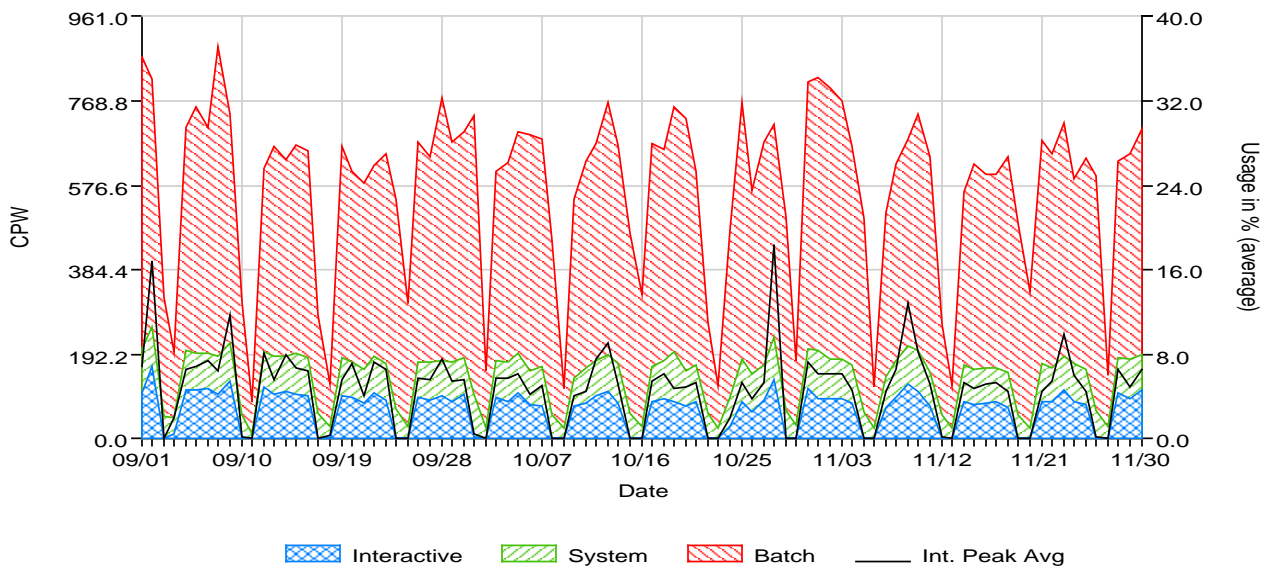
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

## Processor Utilization, by the Hour



## Average Processor Utilization in %, per Day



## Facts

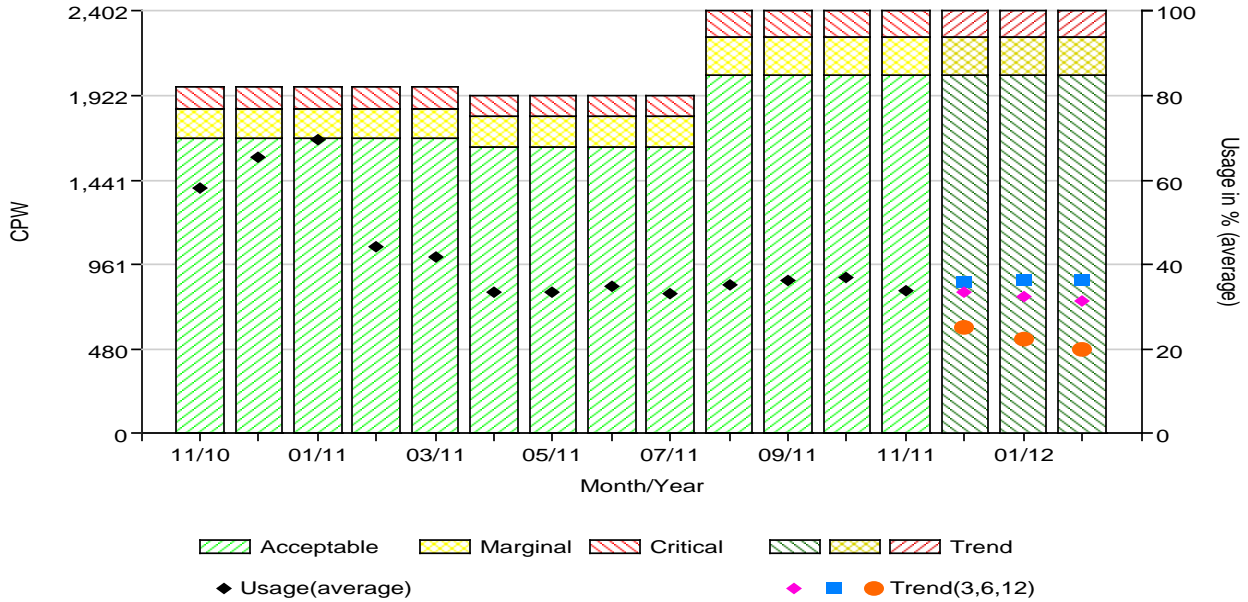
	Avg %	
	Marginal	Critical
Recommended guideline in %, interactive priority	40	55
Recommended guideline in %, system + interactive priority	45	60
Recommended guideline in %, all priorities	80	90

# Total Peak Processor Utilization - with Trend Projections

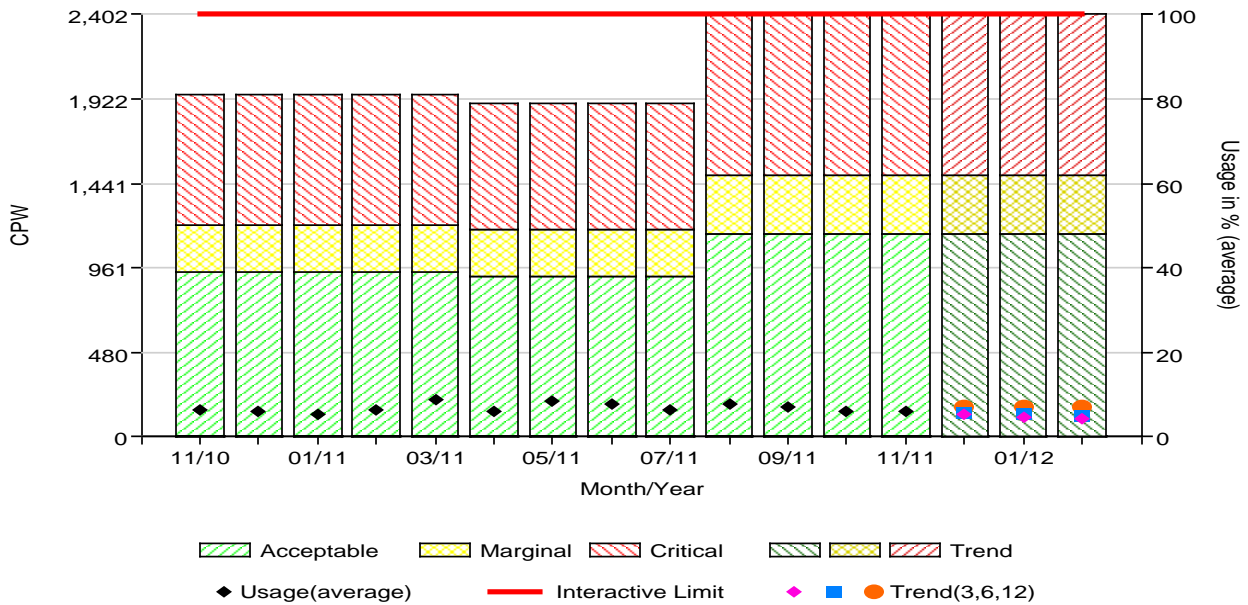
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

**Peak Processor Utilization, Total - with Trend Projections**  
 Monthly average of peak 2 hour utilization for the measured days



**Peak Interactive Processor - with Trend Projections**  
 Monthly average of peak 2 hour utilization for the measured days



## Facts

	Marginal	Peak	Critical
Recommended guideline in %, interactive priority	48		62
Recommended guideline in %, system+int. priority	56		70
Number of months until the guideline is reached, interactive priority	12		12
Number of months until the guideline is reached, system + int. priority	12		12

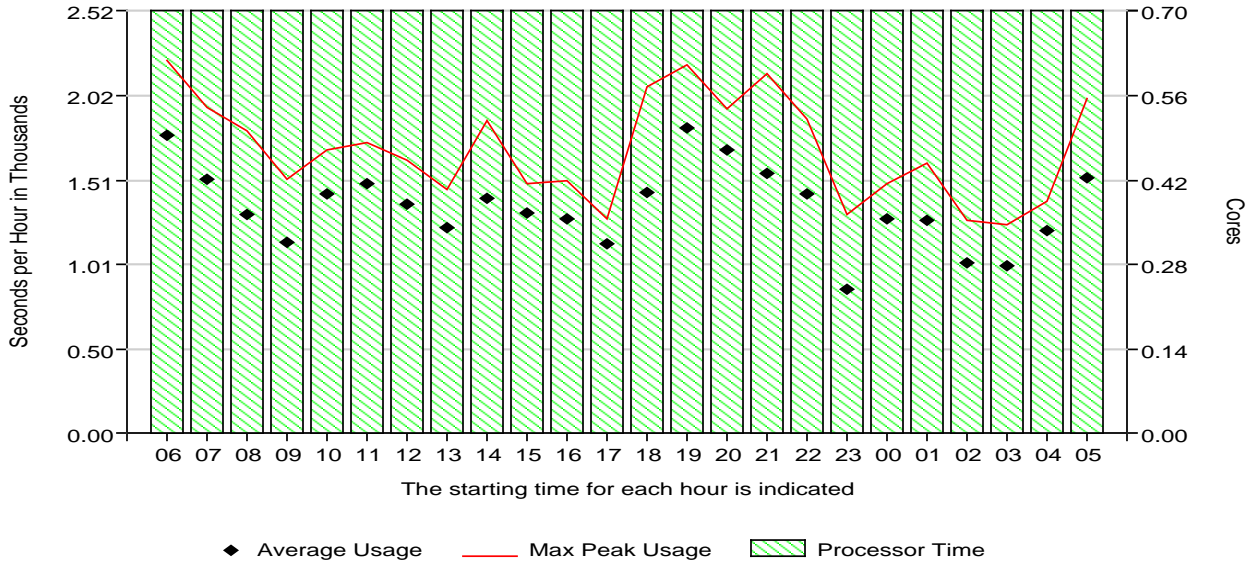
# Shared Processor Pool

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

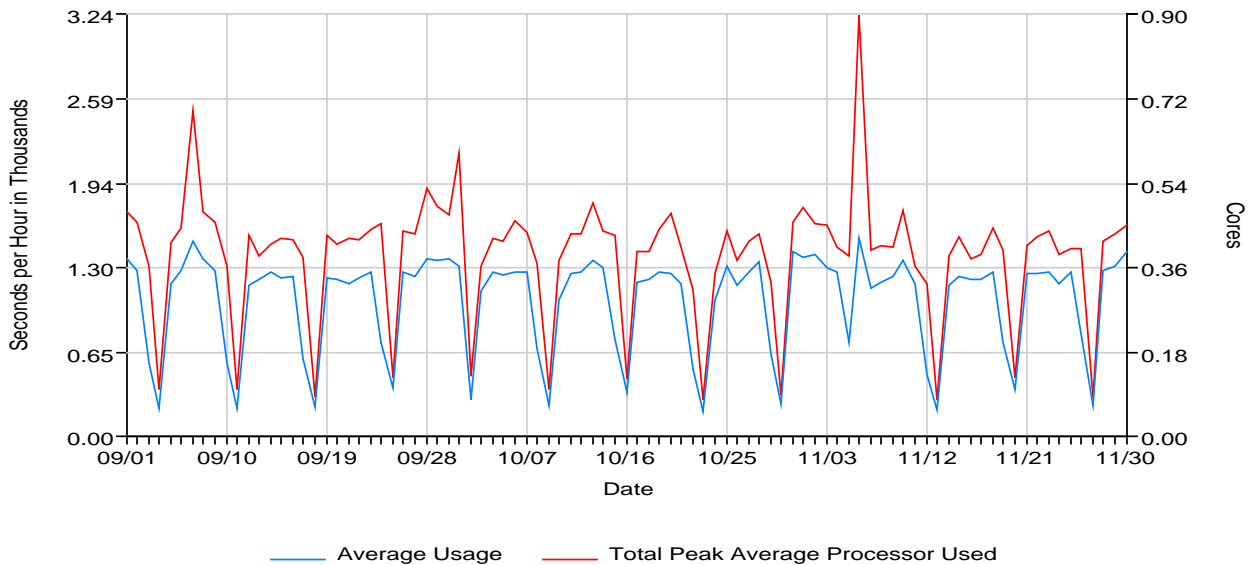
### Shared Physical Processor Pool Average Usage, by Hour - During the Period

Cores Active: 6.00 ; In Shared Pool: 1.00



### Shared Physical Processor Pool Usage, per Day

Cores Active: 6.00 ; In Shared Pool: 1.00



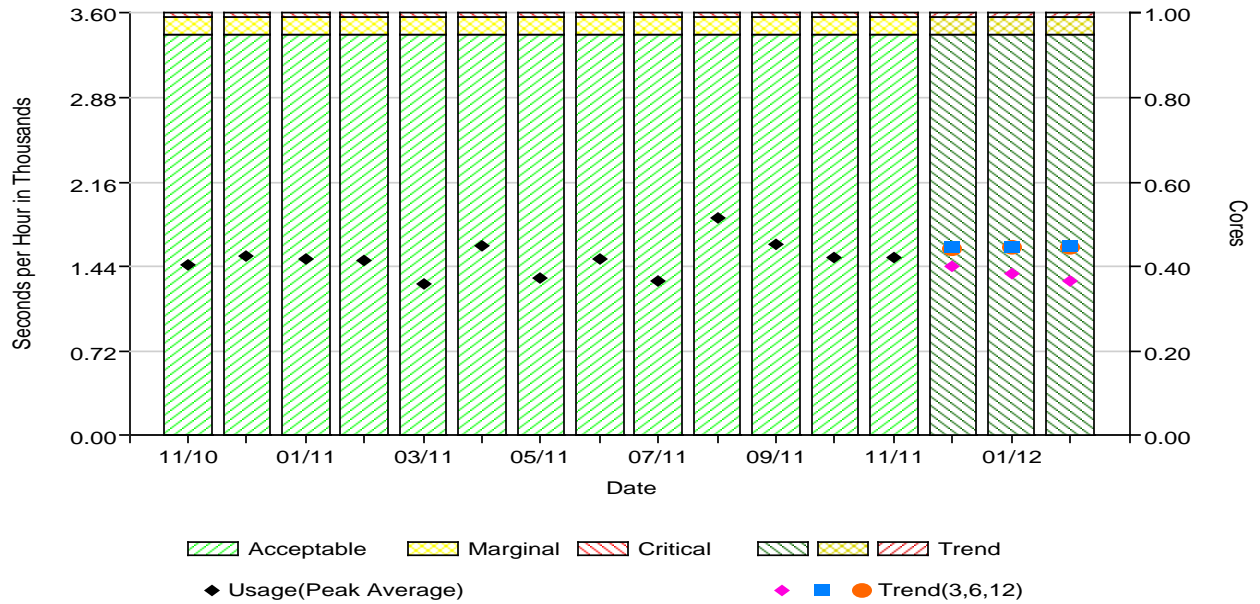
# Shared Processor Pool - Trend

Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

## Shared Physical Processor Pool Peak Utilization - with Trend Projections

Cores Active: 6.00 ; In Shared Pool: 1.00



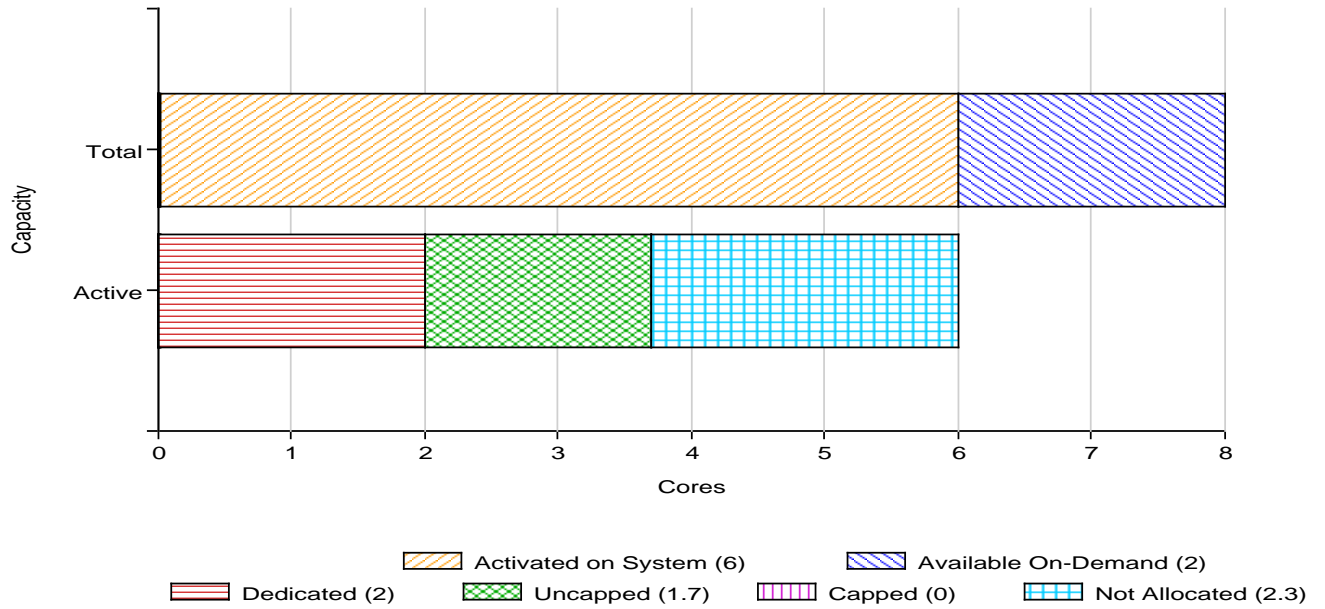
# System View

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

## System Configuration 8204-E8A-4967

Total Cores: 8; Activated Cores: 6; Dedicated Cores: 2; Shared Cores: 4



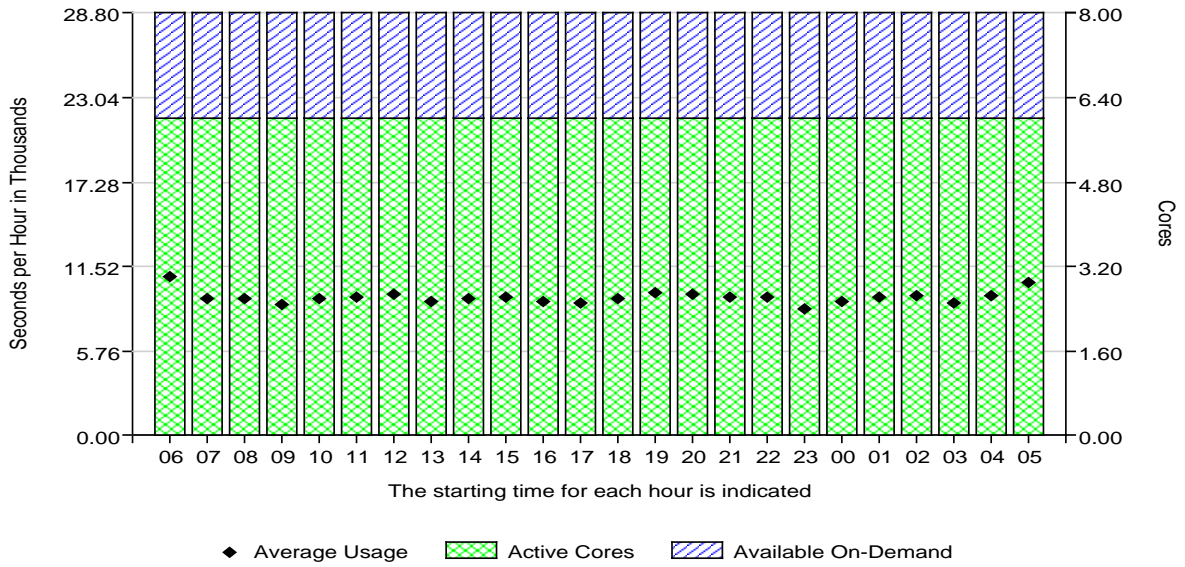
# System View

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

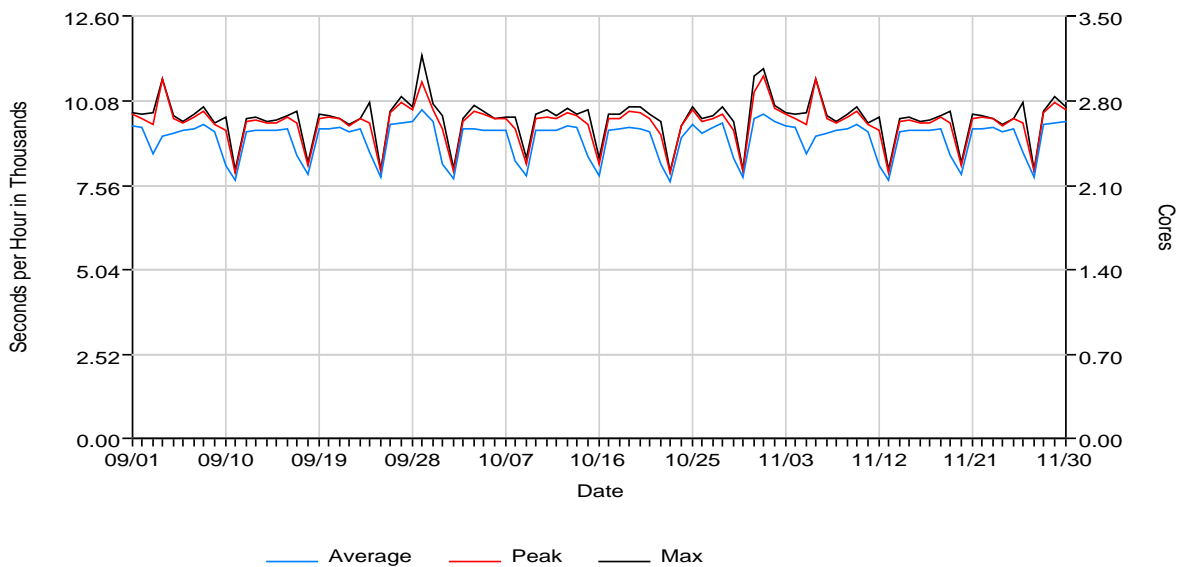
### System View - Hourly Average During the Period

Logical Partition Count: 5; Reporting Partitions: 5



### System View - Processor Utilization Per Day During the Period

Logical Partition Count: 5; Reporting Partitions: 5

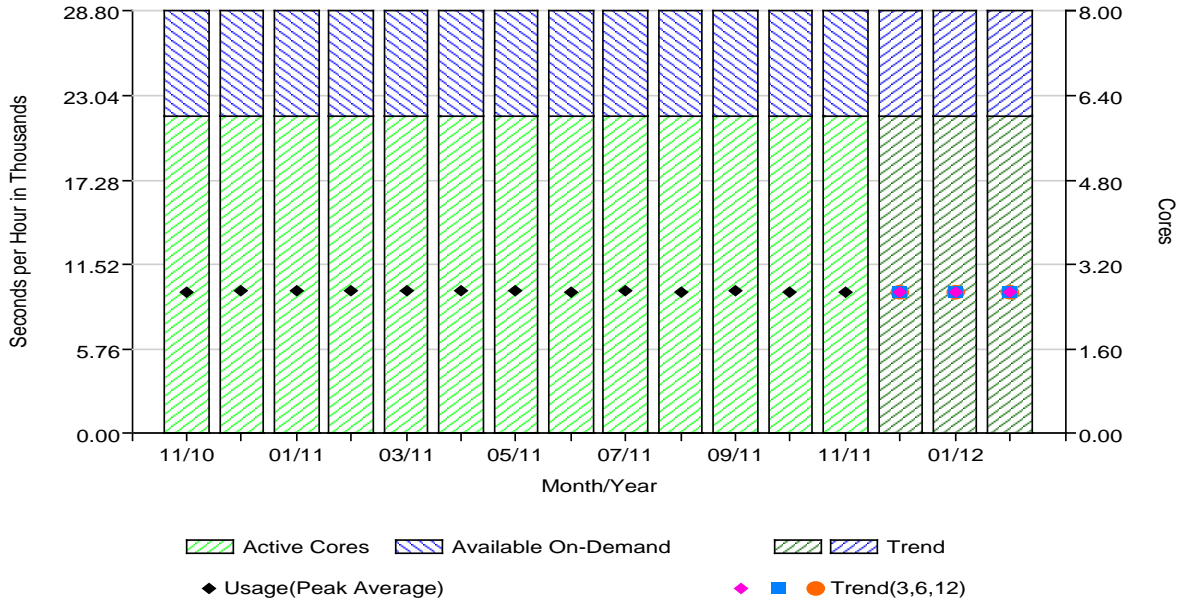


# System View

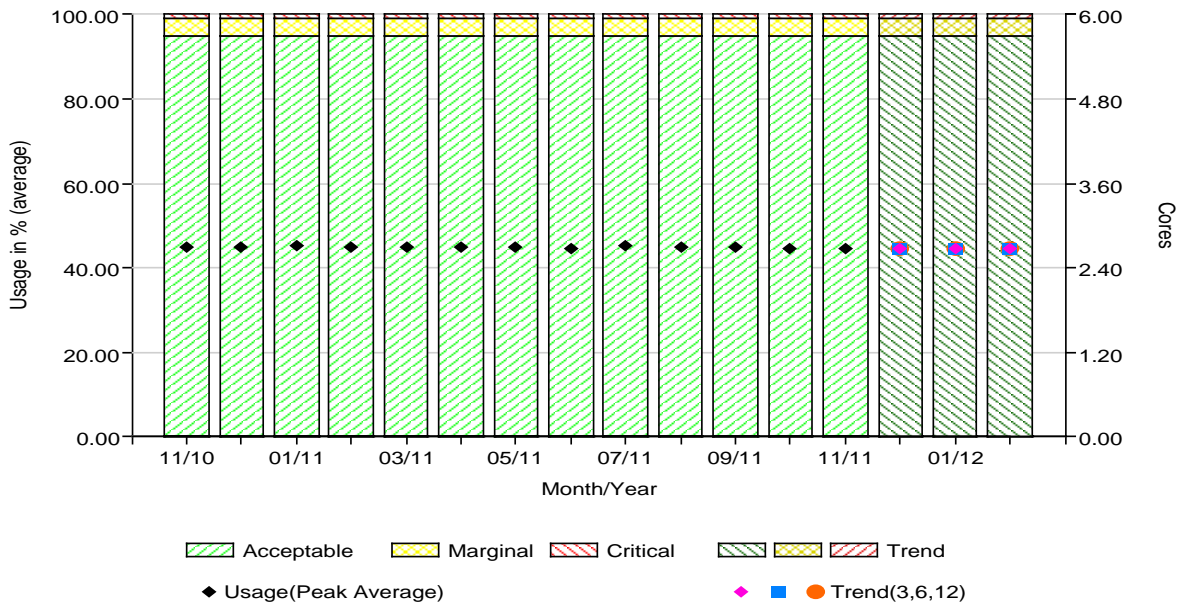
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

**System View - Peak Total Processor Utilization - with Trend Projections**  
 Logical Partition Count: 5; Reporting Partitions: 5



**System View - Peak Active Processor Utilization - with Trend Projections**  
 Logical Partition Count: 5; Reporting Partitions: 5



## Facts

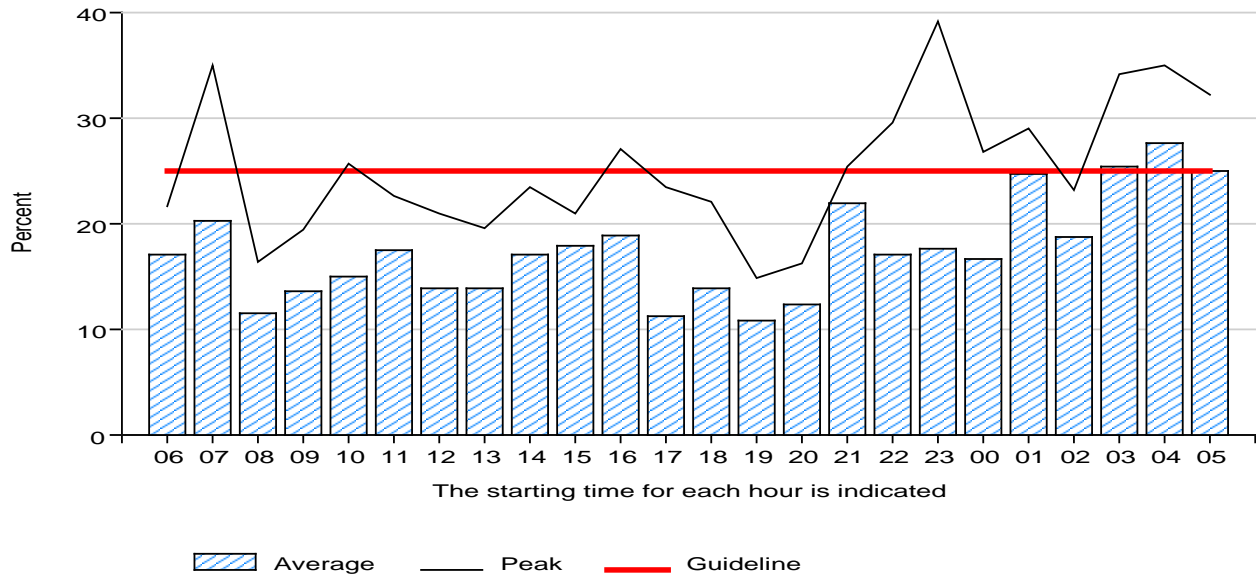
	Peak	Marginal	Critical
Recommended guideline in %, all priorities		93	97
Number of months until the guideline is reached, all priorities		12	12

# Memory

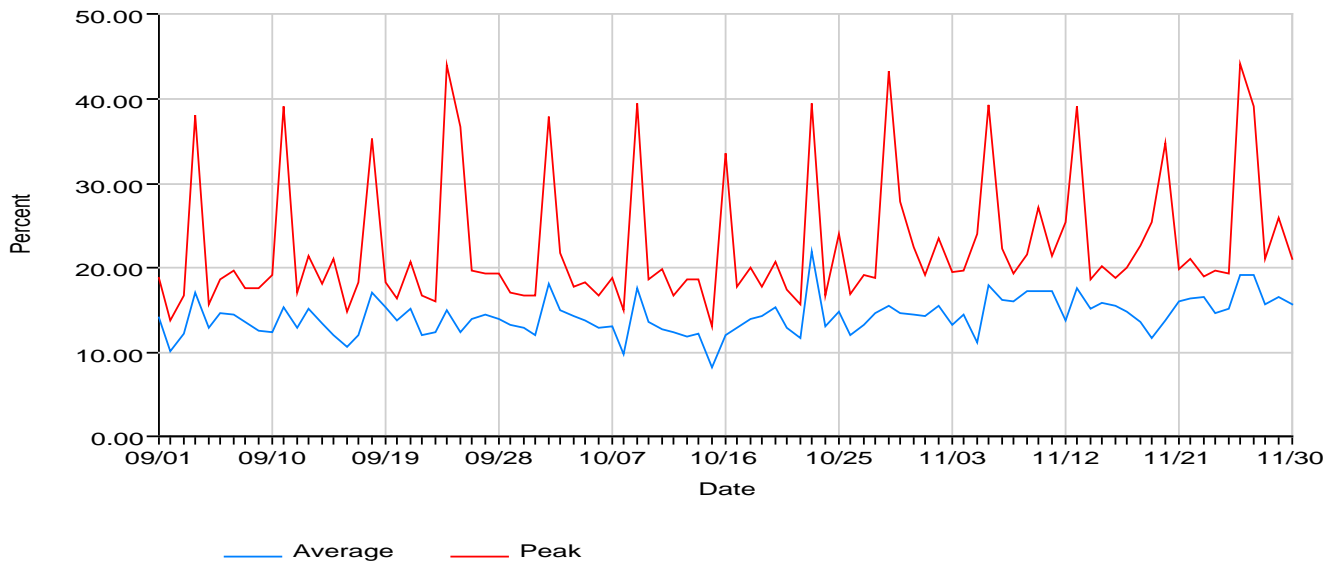
Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

### Percent of Time Faulting, per Hour



### Percent of Time Faulting, per Day



## Facts

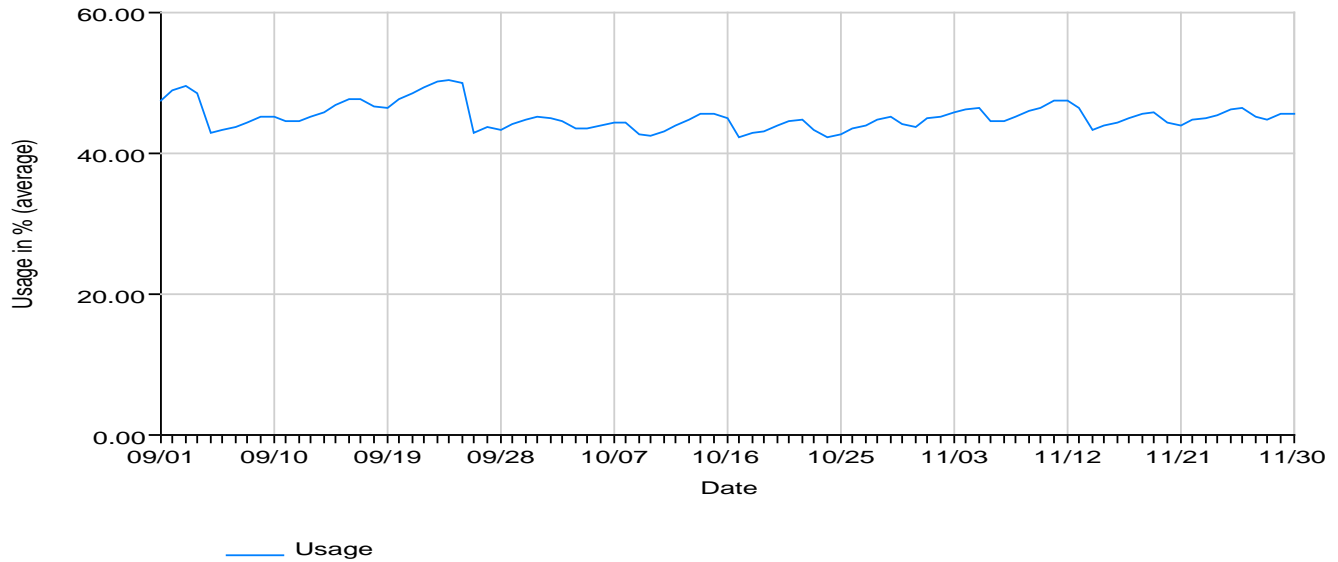
	Marginal	Critical
Recommended Guideline in %	20	25

# Disk Space Usage

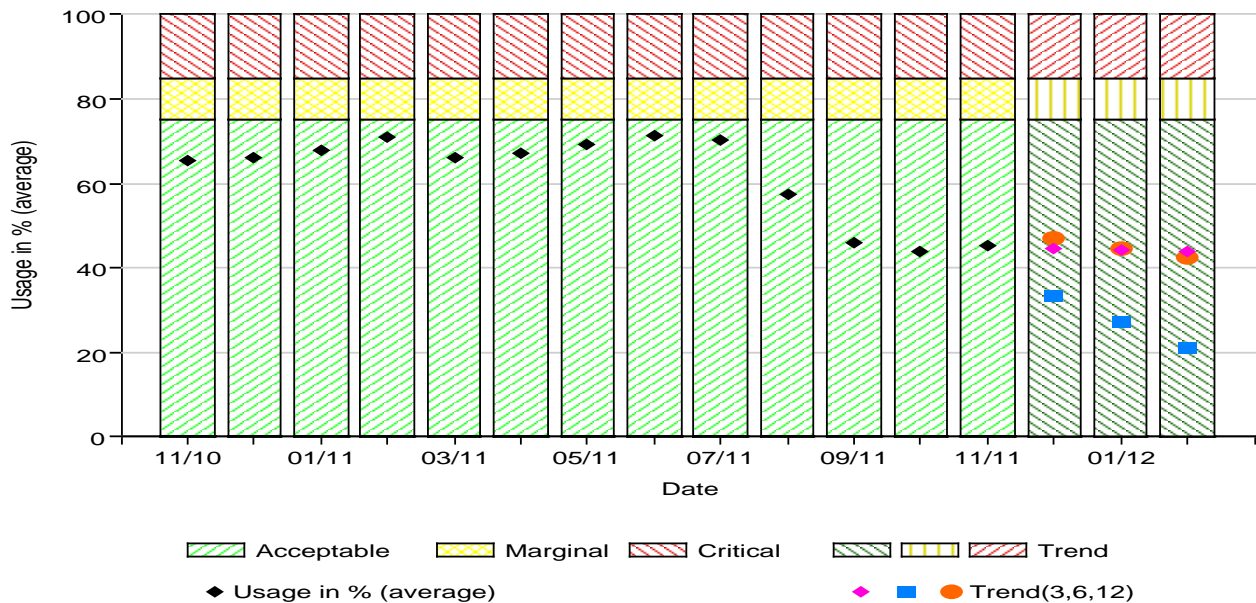
Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

Disk Space Usage in %, per Day



Disk Space Usage in % - with Trend Projections



## Facts

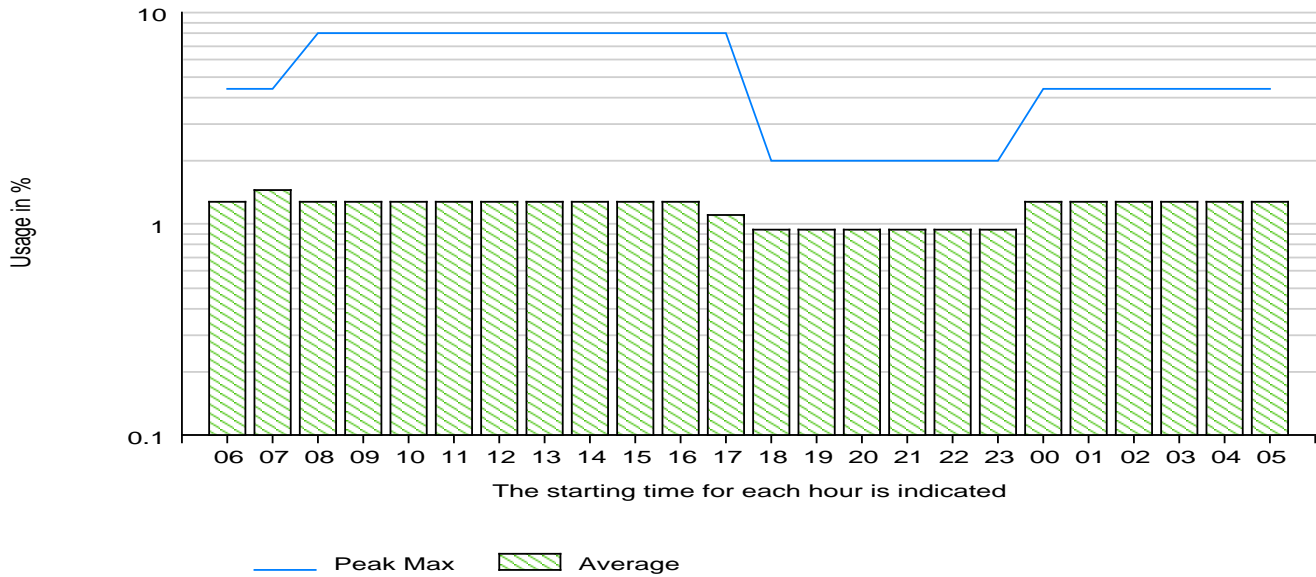
	Marginal	Critical	
Recommended guideline in %	75	85	
Number of months until the guideline is reached	12	12	
Change of stored data in % during the period			-21.07
Maximum usage of disk space in % during the period			75.37

# Disk Arm Utilization

Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

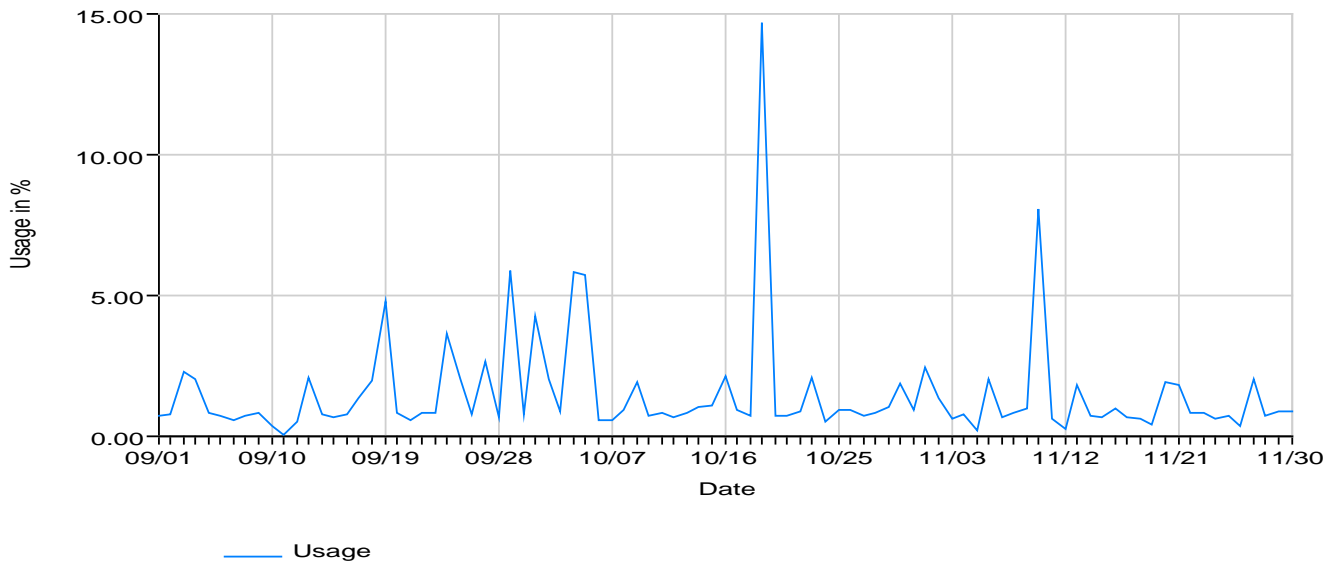
SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

## Disk Arm Utilization, by Hour



## Peak Disk Arm Utilization in %, per Day

The two heaviest hours per measured day



### Facts

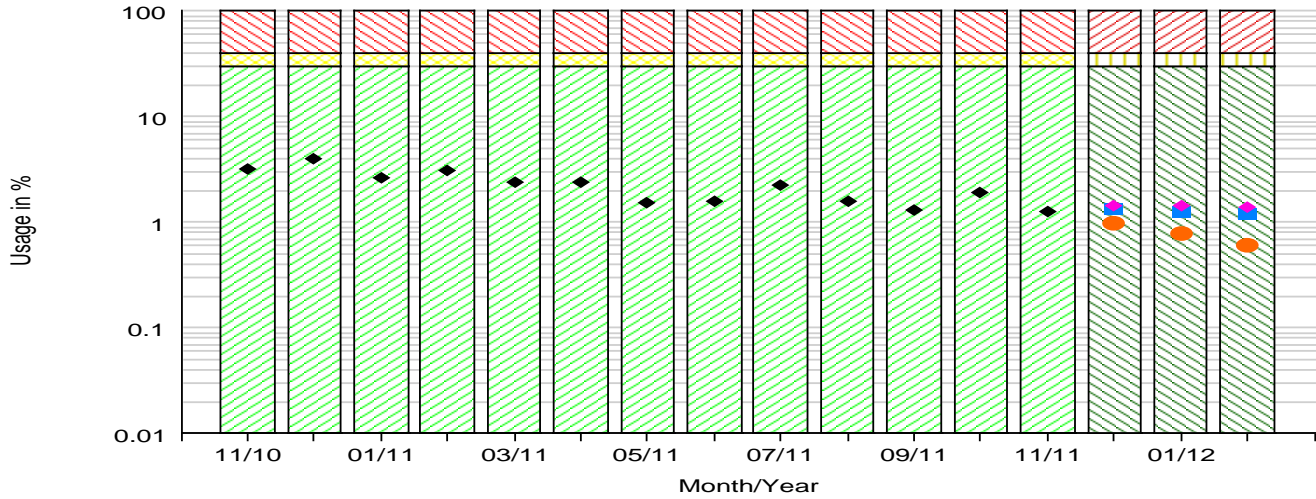
	Marginal	Peak	Critical
Recommended guideline in %	30		40
Number of months until the guideline is reached			12

# Disk Arm Utilization - Trend

Sample Corporation  
 Month Ending November 2011  
 Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
 Model 8204 E8A Cores (CPU) 0.50  
 Disk Capacity 1301 GB  
 Internal Memory 13312 MB

## Peak Disk Arm Utilization in % - with Trend Projections



Acceptable   
  Marginal   
  Critical   
  Trend  
 Usage in % (average)   
 Trend(3,6,12)

**Note for systems with SAN-based storage:** Each server/LPAR's graph for disk arms will reflect utilization of the portion of the SAN which is accessed by that server/LPAR. In rare cases, multiple servers using storage on the same SAN unit may result in a slight increase in displayed disk arm utilization

## Facts

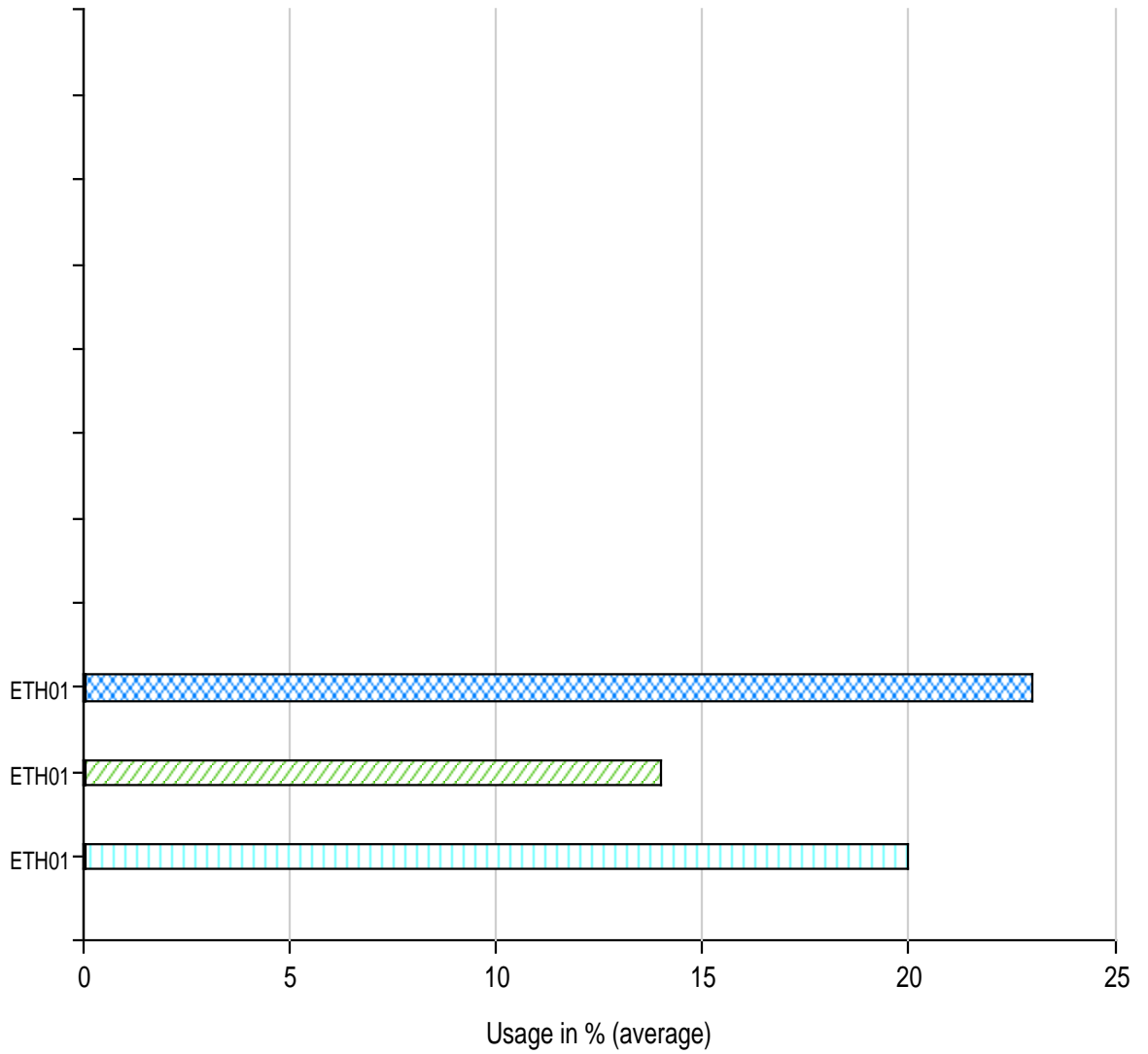
	Marginal	Peak	Critical
Recommended guideline in %	30		40
Number of months until the guideline is reached			12





# Communication Lines

Sample Corporation  
Month Ending November 2011  
Shift 1 (08:00 - 17:30)

SAMPLE01 V6R1M0 (10ABCDE-0013)  
Model 8204 E8A Cores (CPU) 0.50  
Disk Capacity 1301 GB  
Internal Memory 13312 MB

## Line Utilization



Legend:  September 11  October 11  November 11  Error

# Sample Corporation

## Technical Specifications for SAMPLE01

Serial Number - LPAR	10ABCDE-0013
Operating System Version	V6R1M0
Model	8204 E8A
Disk Capacity	1301 GB
Internal Memory	13312 MB
Total Number of Cores(CPUs) Active in the system	6.00
Number of Cores(CPUs) assigned to this Partition/Server	0.50

### Period

Month Ending	November 2011
Business Days	M Tu W Th F
Shift	1 (08:00 - 17:30)

### Configuration change during the period

Model/Processor Feature	No
Internal Memory	No
Disk Capacity	No

### Data not received for

No missing days

### Trending based on

13 Months

### System Resources Summary

		Utilization in %	Months to Guideline
Processor Int Capacity	Avg	3.76	12
	Peak	6.10	12
	Max	12.89	-
Processor Sys+Int	Avg	7.26	12
	Peak	10.98	12
	Max	18.85	-
Processor Total	Avg	27.54	12
	Peak	33.96	12
	Max	49.11	-
Disk Space	Avg	45.52	12
	Max	47.67	-
DB Processor	Avg	2.45	-
	Peak	3.83	-
	Max	5.99	-
		% of Time Faulting	Months to Guideline
Memory	Avg	15.60	0
	Peak	24.43	0
	Max	44.15	-

### System Values

QACTJOB	512
QADLACTJ	32
QTOTJOB	2048
QADLTOTJ	32
QPFRADJ	3
Avg.Active Jobs	2445
Max.Active Jobs	3153