

What PM/400e and the IBM Workload Estimator for iSeries can do for you

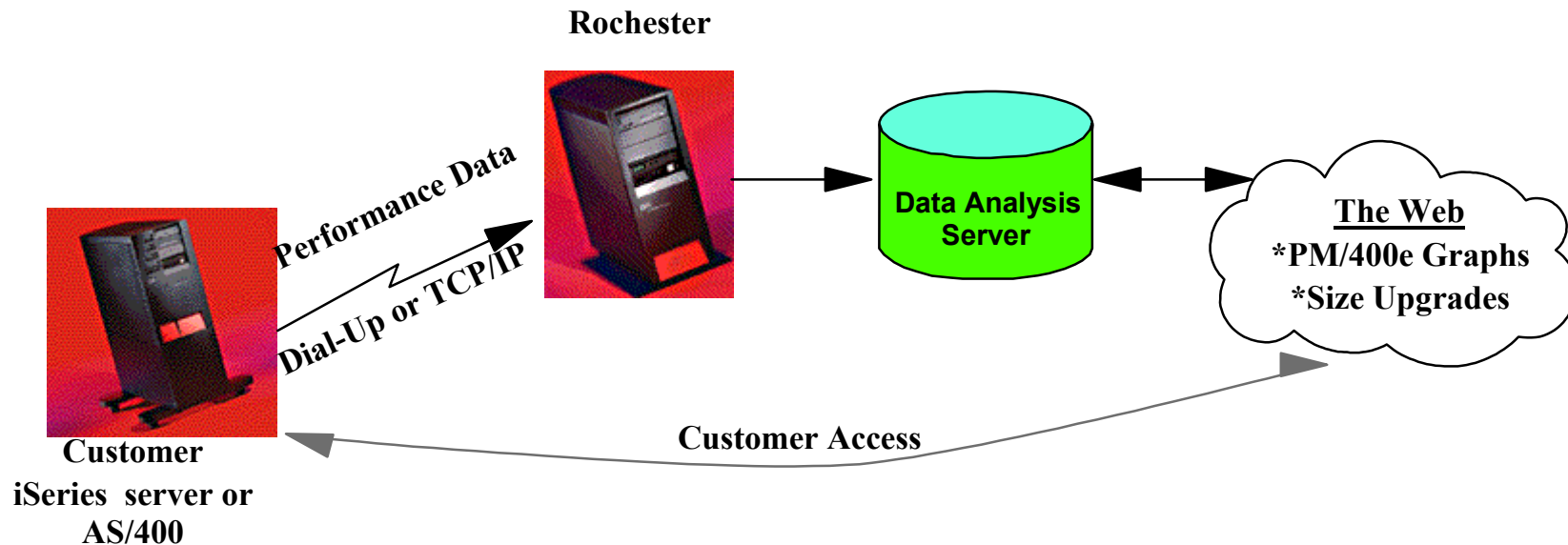
*"Get more out of your system performance
information"*

Van Sammons and Kurt Thompson vdsammo@us.ibm.com
and kct990@us.ibm.com iSeries Nation August 2002

Agenda

- **Overview of PM/400e offering**
 - ▶ How it works
 - ▶ Potential Benefits
 - ▶ Terms and conditions
 - ▶ Examples
 - ▶ Activation instructions
- **PM/400e - IBM Workload Estimator for iSeries integration**
- **Detailed Report Review....what are the PM/400e reports telling you?**
- **Q & A**

What is it?



- Automates Capacity Planning
 - Performance Analysis
- Integrated OS/400 Function
- Transfers Collected Performance Data (Collection Services data) to IBM
 - (customer retains the option to collect and transmit)
- Reports & graphs posted to web site or returned via hardcopy
- Option to size your next upgrade or replacement system
- Customer password protected Web access to view/print/save graphs

PM/400e - iSeries server Advantage

PM/400e Provides the Information Needed to Help

- Forecast data processing growth that is based on trends
- Plan for and manage consistent service levels
- Maximize your return on current and future hardware investments
- Identify performance bottlenecks
- Reduce the time that is needed to collect and manage system performance data
- Identify resource-intensive applications
- Easily size your next iSeries server upgrade or replacement system

And the information is available when you need it via the Internet!

PM/400e Worldwide Terms and Conditions

- No Extra Charge if hardware warranty or IBM Maintenance
 - Customer activates for no additional charge
 - Customer receives:
 - ▶ Management Summary Graph on Internet
 - ▶ Postal notification when exceeding guideline
 - Free access to the Workload Estimator
 - ▶ A web tool for sizing your next upgrade

- PM/400e Fee Offering
 - 27 reports and graphs
 - Monthly Option on the Internet
 - Monthly or Quarterly hardcopy option
 - ▶ IBM Prints & Mails
 - Savings on Internet vs. hardcopy

The Management Summary Graph

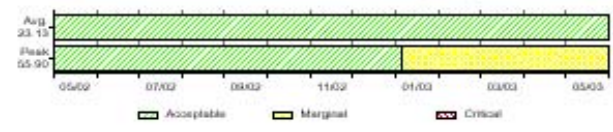
- Updated Monthly
- Internet Access Only
 - Password Protected
- Provides:
 - Average & Peak Utilization Analysis For:
 - ▶ Interactive CPU (both % utilization and % capacity)
 - ▶ Total CPU
 - ▶ Disk Space
 - Current Utilization
 - Projection of Remaining Growth Capacity in months
 - ▶ Green - Acceptable
 - ▶ Yellow - Marginal
 - ▶ Red - Critical
 - 1st & 2nd Shift Analysis

Management Summary

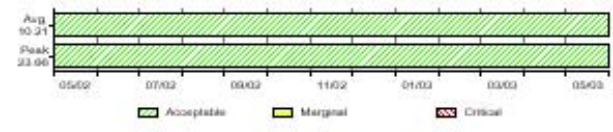
IBM
March 2002 - May 2002
Time frame 8.00 - 17.00

ISMQ4005 (10-2447M)
9406 720-206B V4R5M0 CPU(s) 1
Internal memory in MB 1792
Disk Capacity in GB 151

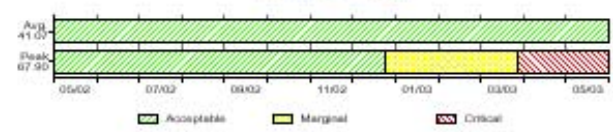
Processor - Interactive Capacity



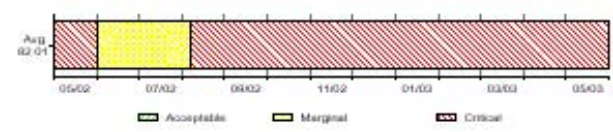
Processor - System+Interactive



Processor - Total



Disk Space



Printed 06/2002

Report 175

PM/400e Fee Detailed Graphs

- Internet Option
 - Updated Monthly
 - Aggressively Priced vs Hardcopy Option
 - Great Accessibility
 - Print/View/Save Options
- Hardcopy Option
 - Monthly or Quarterly
 - IBM Prints & Mails to customer
- Twenty-Seven Detailed Graphs Providing:
 - Management Summary Information Plus
 - Detailed Graph:
 - ▶ CPU Utilization by Workload type
 - ▶ Response time
 - ▶ Transaction volumes
 - ▶ I/O & CPU usage analysis
 - ▶ Jobs & Print analysis
 - ▶ Disk Space & Disk Arm
 - ▶ Memory analysis
 - ▶ Comm Line
 - ▶ User Statistics
 - Peak & Average Analysis
 - Hourly & Daily Analysis
 - 12 month history with 3 month projection

Activation Instructions

- See written instructions for any release at:
<http://www.ibm.com/eserver/series/pm400/activation/steps.html>
 - For additional activation assistance if needed: US contact 1-800-237-5511; option 2, access routing code 1400; Non-US: visit the above web site and look for country PM/400e contacts
- Activation Options
 - At IPL ... Take option 'G' for Go to "Do you want to activate PM/400?" message
 - Activation at anytime run OS/400 command CFGPM400
 - As part of EZ-Setup
 - As part of Management Central (V5.1 and after)
 - After activation always update contact information. At Command Line: Type 'GO QMPGLIB/PM400' or 'GO PM400' (5.1) -- Take Work with Contact Info Option
- New news: V5R2 PM/400e 60 day history file auto data collection (not transmission)
 - History file transmits (at customer option) with:
 - 1st activation of PM/400e or
 - as part of Service Agent / Universal Connection transmission
- Two options for PM/400 data transmission
 - Traditional SNA dial up.....all releases
 - TCP/IP via Service Agent / Universal Connection (V5R1 and after)

PM/400e Integration with the IBM Workload Estimator for iSeries

- **Helps size your next iSeries server upgrade or replacement system - no charge to use**
 - The IBM Workload Estimator is a "sizer" not a capacity planner.
 - Always consult your IBM Representative or Business Partner on output

- **Web access for customer via PM/400e website**
 - www.ibm.com/eserver/series/pm400
 - When viewing graphs, take size next upgrade option
 - Automatically invokes the IBM Workload Estimator and loads PM/400e data

- **Recommendation**
 - Model, processor fea., inter fea., DASD, memory, arms
 - User adjustable growth rate and time horizons
 - Optional sizing of Domino, Websphere, Java TM, traditional server consolidation, etc
 - Assists with sizing LPAR's

- **Recommendations can be saved, emailed**

 Search

Home | Products & services | Support & downloads | My account

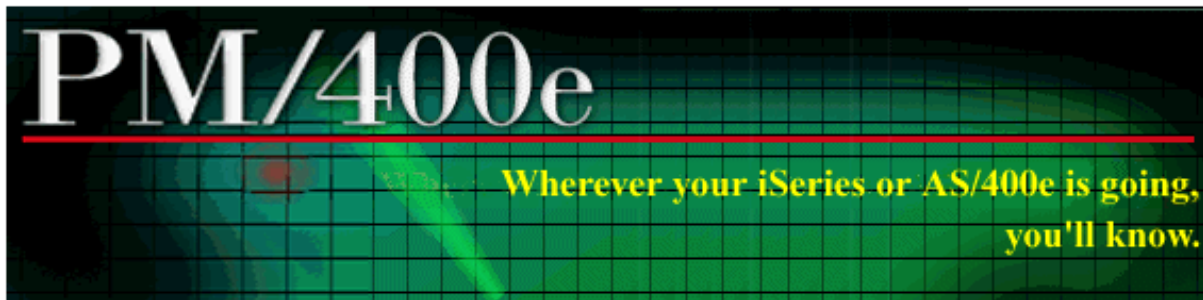
Select a country

Products > Servers > Integrated application servers > Performance Management/400e

Integrated application servers

- PM/400 Home
- Guided Tour
- Existing Customers FAQs
- Upcoming Events
- PM/400 News
- Activate PM/400 Now

Related links:
How to Buy



As a systems management tool, Performance Management/400 (PM/400) helps ensure that you get the most from your IBM **@server** iSeries or AS/400e by measuring performance. PM/400 helps you identify potential resource constraints, plan more easily for future growth and make decisions that affect your budget. All this and more - and you may qualify to receive this service for free. Take a tour and find out how PM/400 works and how the benefits add up... and how they can affect your IT resources.

Existing PM/400e Customers:
Click here to view your Management Summary Graph

PM/400e News

- [Version 5 Release 2: PM/400e Enhancements](#)
- [PM/400e and Server Consolidation](#)
- [New Memory Faulting Report](#)
- [Automatic PM/400e data collection](#)
- [New method of transmitting data using the Integrated asynchronous modem](#)
- [More news and announcements](#)

Take our Guided Tour

- [What is PM/400?](#)
- [Benefits of PM/400](#)
- [What's Different about PM/400?](#)
- [Customer System Requirements and Availability](#)
- [Guided Tour FAQs](#)
- [PM/400e Report Descriptions with Examples](#)
- [PM/400e Report Examples](#)



- Select a country
- ← PM/400 home
- PM/400e
- Resend Password

View Your PM/400e Graphs

Your session has timed out, please sign in again.

PM400e Userid/Serial Number:

Password:

- Related links:**
- PM/400 FAQ
 - Contact PM/400
 - Country Contact Information
 - PM/400e User Guide
-

If you have trouble logging in or you can no longer remember your password please click the "Resend Password" link in the left hand navigation bar for assistance.



- Select a country
- ← PM/400 home
- PM/400e
 - View PM/400e Fee and Free graphs
 - Size your next upgrade
 - Business Partner Authorization
 - Edit PM/400e Profile
 - Sign out

Size next upgrade

This application allows you to automatically integrate your PM/400e data with IBM Workload Estimator. Once you are in the Workload Estimator, please read the "PM/400e Integration with IBM Workload Estimator" tutorial to understand the flexibility available to you for sizing traditional upgrades, or for sizing to replace your current system with a whole new system, or for sizing server consolidation or for sizing a specific application like Domino or WebSphere as part of your upgrade, etc.

You have the flexibility to size your needed upgrade based on of your workload characteristics as of the months and workload shifts depicted below. Select your desired month. **Caution:** selecting a month other than the most recent will cause you to size the upgrade based on workload characteristics different from your most recent month's workload characteristics.

Date for:	Shift
2002-05-01	1
2002-04-01	1
2002-03-01	1
2002-02-01	1
2002-01-01	1
2001-12-01	1
2001-11-01	1
2001-10-01	1
2001-09-01	1
2001-08-01	1
2001-07-01	1
2001-06-01	1

- Related links:
- PM/400 FAQ
 - Contact PM/400
 - Country Contact Information
 - PM/400e User Guide





IBM Workload Estimator for iSeries

an IBM @server

Version: 2002.2 fix.2
11-Jun-02
www-912
← →

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- Tutorials
- Help

sn: S102447m

PM400 Workload Definition

1. [System Information:](#)

12 months of PM/400 data available.

Company Name:	IBM
Serial:	S102447m
Model:	720-2061
Feature:	1501
System CPU:	67.9 % of 240 CPW
Interactive CPU:	63.9 % of 70 CPW
# of Processors:	<input type="text" value="1"/>
Memory:	1792 MB
Disk Arms:	2.6 % utilization of 20 Arms installed
Disk Arms Distribution:	7,200 RPM Arms: <input type="text" value="20.0"/> 10,000 RPM Arms: <input type="text" value="0.0"/>
Disk Storage:	126.8 GB (82.0 %) of 155 GB installed
Data Protection:	<input type="text" value="No Protection"/>

2. [Growth Information:](#)

Months to Grow:	<input type="text" value="12"/>	Memory Growth Matches:
---------------------------------	---------------------------------	--



2. [Growth Information:](#)

[Months to Grow:](#)

[Memory Growth Matches:](#)

[Interactive CPU:](#) CPW/Month

[NonInteractive CPU:](#) CPW/Month

[Total System CPU:](#) CPW/Month

[Disk Arms:](#) Arms/Month

[Disk Storage:](#) GB/Month

[Memory:](#) MB/Month

(Grow Independently)

[Back](#) [Advanced Growth Options](#) [Next](#)

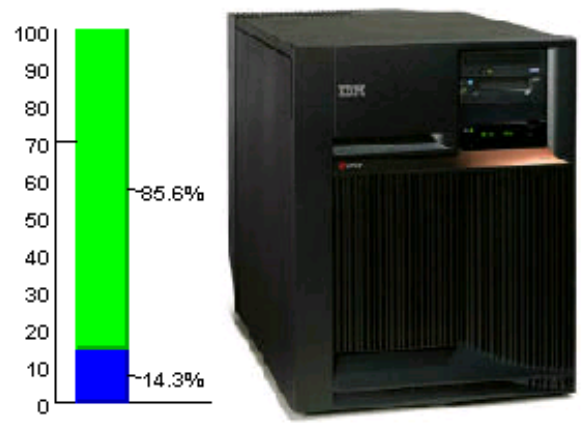
- File
- Add Workload
- Remove Workload
- Save All Workloads
- Print
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- Navigation
- Workload Selection
- sn: S102447m
- Selected System
- Contact IBM
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- Help

Selected System

Consider Growth

Available
 sn: S102447m

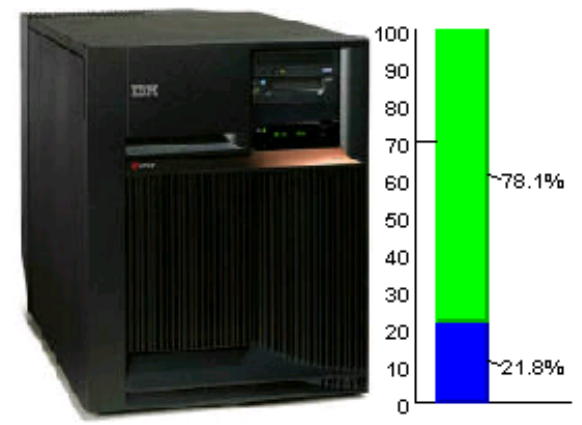
Immediate Solution



The 820-2436/1522 can handle the defined workloads **NOW**.

Growth Solution

[Growth Trends](#) can be changed [here](#).



It can also handle the specified growth.

Model/Feature:	820-2436/1522 1100/70	820-2436/1522 1100/70
Processor CPW:	1100	1100
Interactive CPW:	70 (55% utilized)	70 (98% utilized)
CIW Rating:	385	385
Database Capacity:	N/A	N/A
N-Way:	Uni	Uni
CPU Utilization:	14.3%	21.8%
Software Pricing Tier:	P30	P30
Memory (MR):	1 793 of 16 384	2 411 of 16 384

Applet com.ibm.workloadestimator.applets.GenChart running



IBM Workload Estimator for iSeries

an IBM @server

Version: 2002.2 fix.2
11-Jun-02
www-912



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Workload Selection

Type of Workload	Name of Workload
PM400	sn: S102447m
Domino	Domino #1
Workload Type	Workload #3

Use the pull downs to select your workloads. Then press **Next**

Allow Another Workload

LPAR Status:

- No LPAR
- LPAR Dedicated Proc
- LPAR Shared Proc

Options: OS/400 Version = V5R2, BCS Support = No
 Developed by the Rochester iSeries System Performance Team

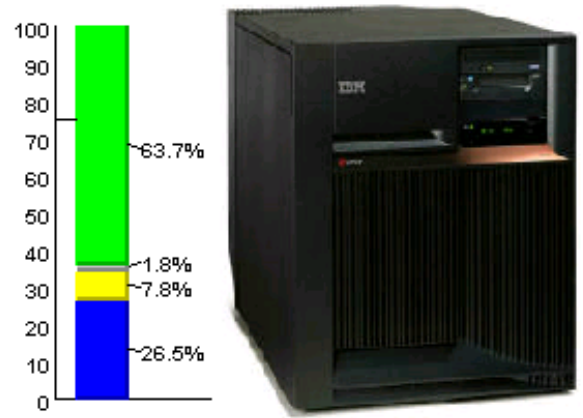
- ▶ File
- ▶ Edit
- ▶ Navigation
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- ▶ Help

Selected System

Consider Growth

- Available
- Partition Controller
- sn: S102447m
- Domino #1

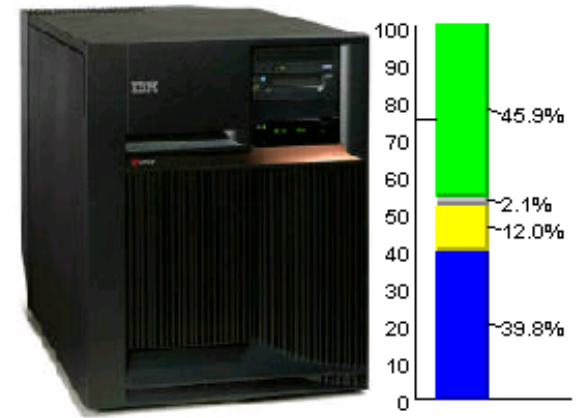
Immediate Solution



The 820-2397/1522 can handle the defined workloads **NOW**.

Growth Solution

[Growth Trends](#) can be changed [here](#).



It can also handle the specified growth.

Model/Feature:	820-2397/1522	2000/70
Processor CPW:	2000	2000
Interactive CPW:	70 (55% utilized)	70 (98% utilized)
CIW Rating:	N/A	N/A
Database Capacity:	N/A	N/A
N-Way:	2-way	2-way
CPU Utilization:	37.9 %	56.4 %
Software Pricing Tier:	P30	P30
Memory (MB):	4,251 of 16,384	6,032 of 16,384

Shared Processor LPAR Configuration

Partition	Number of Processors	Utilization	Workloads
Name: Domino OS: OS/400 vers: V5R2	Processor(s): 0.90 Target Util: 60.0% Interactive CPW: 0.0 Memory(MB): 2,392 Anns: 8.4 Storage(GB): 192.0	<p>41.0% 58.9%</p>	<ul style="list-style-type: none"> Available Domino #1
Name: PM400 OS: OS/400 vers: V5R2	Processor(s): 0.30 Target Util: 60.0% Interactive CPW: 38.1 Memory(MB): 1,792 Anns: 15.5 Storage(GB): 122.3	<p>47.5% 52.4%</p>	<ul style="list-style-type: none"> Available sn: S102447m

Important Tips on use of these tools

- Read the Tutorials in the lefthand Nav Bar
- PM/400e integration with the IBM Workload Estimator does not support:
 - Dedicated Server for Domino
 - Data from multiple PM/400 LPARs but it will consolidate multiple system workloads or applications workloads and size a new LPAR system
- LPAR consideration: PM/400e reports data at a partition level on LPAR systems beginning at V4R5
 - Each partition has to separately report PM/400e data
- For additional information, see the FAQs on the PM/400e website
<http://www.ibm.com/eserver/iserries/pm400>

PM/400e Resources

- PM/400e Website: <http://www.ibm.com/eserver/series/pm400>
- Workload Estimator website for standalone sizings:
 - <http://www.ibm.com/eserver/series/support/estimator>
- PM/400e activation assistance
 - US: Call PM/400 SupportLine at: 1-800-237-5511
option 2, routing code 1400
 - Non-US. Look at the above PM/400e web site for country contact information
- Detailed fee report sign up:
 - US: 1-888-426-4343 option 3
 - Non US: Look at the above PM/400e web site for country contact information

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eServer	OS/400
IBM	

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Photographs shown are of engineering prototypes. Changes may be incorporated in production models.

What you are agreeing to with the transmission of PM/400e data

PM/400e is an optional function for your use within OS/400. PM/400e uses performance and capacity information from your system. This data is system utilization information, performance information, and hardware configuration information. For detailed information on what is collected, see the Performance topic in the iSeries Information Center which is available from the following web site: www.ibm.com/eserver/series/infocenter

Once the data is collected, PM/400e processes the data and prepares it for transmission to IBM for future analysis and report generation. Within IBM, the PM/400e data will be used to prepare the reports and graphs that are delivered as part of the PM/400e offering.

You agree that IBM may use and share the data collected by PM/400e ("Your Data") within the IBM enterprise without limitation, including for purposes of problem analysis, of assisting you with performance and capacity planning, of maintaining your existing and new business relationships with IBM, of notifying you of existing or projected resource constraints, and to assist us to enhance IBM products. You also agree that Your Data may be transferred to such entities in any location whether or not a member of the European Union.

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