Wow…I Didn’t Know Performance Navigator Did That

May 2015
Today’s Agenda:

1. Welcome / Quick Poll Question
2. Customer View / Perspective – Gaining a Competitive Advantage
3. Power of Historical Data
4. Problem Determination Made Easy
5. Power Analytics – Peace of Mind For Customers
6. Capacity Planning
Quick Poll
Welcome / Overview / Update:

Performance Monitoring Best Practice / Guidelines

1. Continuous monitoring 24x7 365 days per year
2. Virtualization Aware – PowerVM, PowerKVM, VMWare – all DIFFERENT
3. Multiple level analysis – Enterprise, Data Center, Frame, LPAR
4. Multiple OS support – AIX, IBM i, Linux, VIOS, PowerKVM, VMWare
5. Single interface
6. High Level management reporting
7. Deep level analysis – problem determination

Access to experts for support
Creating graphs is easy, analyzing them is not
Welcome / Overview / Update:

MPG’s Navigator Family®

1. Performance Navigator® – IBM i
2. Power Navigator® – AIX, VIOS, PowerKVM, Linux (all platforms)
3. Navigator MAX™ – IBM i + VIOS
Navigator Max - Newest Member of The Navigator Family

1. Designed for IBM i customers hosted with VIOS partitions
2. Includes All LPAR license
3. Includes Executive Performance Overview (EXPO)
4. Single keycode
5. Includes monitoring any AIX or Linux on same frame
Peace of Mind For All of You:

- Ex Tech Support Manager  - Used the product in the trenches for years
- Customer Advocate – MPG Best IT Support I’ve Ever Seen
- Teaching our 2.5 day sys admin class all over the world
- Good barometer of sys admin needs as well as the CIO
- Show you why this product made me look like a star – You too will shine
System Admin Question:

What did you guys do to the system?!?
What Are The Qualities of A Good Systems Admin?

- Problem Determination
- Performance Management
- Proving What's Really Going On
- Understand The Impact Of A Change
Simple Architecture

Product Components

**PC Application “Performance Navigator”** - Powerful application (written in Pascal) that displays the IBMi performance data in either a graphical format or a report/tabular format. *Upgrades available throughout the year – Check via “Help About”*

**PN/400** - 5 IBMi jobs that reside on the AS/400. – A series of jobs that manage the historical performance data. *Upgrades available throughout the year – Check [www.mpginc.com](http://www.mpginc.com)*

➢ **Templates** - These are the .Gpt objects that define the characteristics for each graph. That is, these objects interface with the application and the end result is the graph output. These objects reside in the Performance Navigator folder **(C:\Program Files\Midrange Performance Group\Performance Navigator 17)**
Simple Architecture

Product Components

**PC Application** "Performance Navigator" - Powerful application (written in Pascal) that displays the IBMi performance data in either a graphical format or a report/tabular format. *Upgrades available throughout the year – Check via "Help About"*

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**Templates** - These are the .Gpt objects that define the characteristics for each graph. That is, these objects interface with the application and the end result is the graph output. These objects reside in the Performance Navigator folder *(C:\Program Files\Midrange Performance Group\Performance Navigator 17)*
The Brilliance of PN/400

Customer install – Less Than 10 minutes

Movie Camera Is Started – Power of Historical Data
Simple Architecture

1 year of historical data – Only about 75 MB
Simple Interface
Power of Historical Data…

Real Life Example

CPU Utilization 1st Shift
Augusta

Monthly View of CPU

CPU%

0 20 40 60 80 100

System
Interactive
Batch

System
Interactive
Batch

December 2007

January 2008

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

MPG's Navigator Family™
Performance Navigator
Business Navigator

Power of Historical Data...

Real Life Example

CPU Utilization 1st Shift Augusta

This doesn’t look quite right

C PU %

January 2008

February

System Interactive Batch
Power of Historical Data…

System Problem: 11.5% of CPU%

After PTF Installed: 2% of CPU
Problem Determination...One Mouse Click...
Quick Efficient Problem Determination…

Problem Determination Demo
CIOs / Management never want to hear: “I have a feeling…”

In fact, the system admins that make a difference, are the ones that show management exactly what's going on.
Power Analytics – No More Guessing

Output is HTML / PDF
Power Analytics – Why Its Critical For Customers
(Some Real Life Examples)

We don’t need your product…

We never have issues

We are just a small shop
Power Analytics – Why Its Critical For Customers
(Some Real Life Examples)

Application team made a single program change !??
Power Analytics – Why It’s Critical For Customers
(Some Real Life Examples)

Who Needs Insurance?

When Major System Issues Occur…
Performance Navigator Is Simply The Best Performance Management Insurance In The Industry
Power Analytics – Why It’s Critical for Customers
(Some Real Life Examples)

Customer system was “sluggish”

PMR opened up with IBM – Sev 1

Customer who had our product – simply wasn’t aware of the functionality in the product
Power Analytics – Why Its Critical For Customers
(Some Real Life Examples)
Power Analytics – Why It’s Critical For Customers
(Some Real Life Examples)

By knowing the system at a deeper level, I was able to find a huge increase in jobs.
Power Analytics – Why Its Critical For Customers
(Some Real Life Examples)

• Called / emailed the third party vendor with their findings (supporting documentation)

• Two days later the customer was ecstatic…In an email, they said,

  “The vendor found a default setting for the software that didn’t need to be turned on for our environment…once we turned it off, the problem went away”

• Did I get lucky?

  (The more I practice, the luckier I get)
Power Analytics Reporting

Power Analytics Output

Understanding Your System Is The Key To Impeccable Performance Management Service Levels

Use The Navigation Panel On The Left To See How The Enterprise Has Been Performing Historically

Available Output

Management Reporting Output - Comprehensive Weekly & Monthly Performance Reporting (Includes Hardware Reports)

Disk / Library / IFS Output - Comprehensive Disk / Library / IFS Analysis Reports (These comprehensive reports answer the questions, "Why is my disk % growing? / Why is my IFS growing?")

Memory Analysis Output - Comprehensive Memory / Pool Reports

Before vs. After Analysis / What’s Different Analysis Output - Comprehensive Reporting to Measure Core Performance Metrics & Jobs For Any Desired Period

Job / Resource Consumption Analysis / ODEC Output - Comprehensive Job Analysis Reporting

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Quick Poll
Power Analytics Reporting – Performance Health Check

Simple / Fast - One Page Performance Report

IBM i, AIX, Linux

Measured Against User Defined Best Practice Guidelines
Power Analytics Reporting – Management Reporting

Management Reporting:
- Monthly Interactive (last month)
- Monthly Noninteractive (last month)
- Weekly Interactive (last week)
- Weekly Noninteractive (last week)
- Performance Summary (previous day)
- Response Time Analysis (previous day)
- Response Time Analysis (last month)
- Enterprise Performance Overview (last month)
- Enterprise Hardware Summary
- Enterprise Network Overview
- Frame Resource Summary
- Monthly Frame Capacity
- User Licensing / System Specs
- Service Level Analysis
- Executive Performance Overview
- EXPO Reset
- Health Check

Monthly Report Demo
**Power Analytics Reporting – Management Reporting**  
(EXPO – Executive Performance Overview)

**EXecutive Performance Overview Output**

*Understanding Your System Is The Key To Impeccable Performance Management Service Levels*

| **Use The Navigation Panel On The Left To See How The Enterprise Has Been Performing Historically** |
| **Available Output** |
| **Today** - Comprehensive Enterprise Performance Reporting For The Current Day |
| **Yesterday** - Comprehensive Enterprise Performance Reporting For The Previous Day |
| **Last Week** - Comprehensive Enterprise Performance Reporting For The Previous Week |
| **Last Month** - Comprehensive Enterprise Performance Reporting For The Previous Month |
| **Last 12 Months** - Comprehensive Enterprise Performance Reporting For The Previous 12 Months |

**Note:** Trend Analysis Included For All Measured Periods Except Current Day,  
**Note 2:** All metrics are generated via a default EXPO report set or from Power Analytics / Management Reporting menu.

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## Power Analytics Reporting – Management Reporting
(EXPO – Executive Performance Overview)

### Enterprise Performance Overview - For The Month of: April-2015

<table>
<thead>
<tr>
<th>Serial # / System</th>
<th>CPU Utilization</th>
<th>Disk Utilization</th>
<th>Memory (% of Time Faulting)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Peak</td>
<td>Trend</td>
</tr>
<tr>
<td>MPG520D</td>
<td>5.4%</td>
<td>5.6%</td>
<td>Grew 9%</td>
</tr>
<tr>
<td>MPG520P</td>
<td>11.3%</td>
<td>9.4%</td>
<td>Declined 22.6%</td>
</tr>
<tr>
<td>10A757R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S02</td>
<td>10.7%</td>
<td>18.7%</td>
<td>Grew 14.7%</td>
</tr>
</tbody>
</table>

**Performance Data Analyzed:**

Average, Peak Metrics & Trends: 1st Shift

*Note: For Multiple ASP Systems - ASP1 & Other ASPs - Averages Are Calculated With 1 Month Average (Or Data That Was Available)
Other ASPs Calculation Is An Average of All ASPs Utilization*
Power Analytics Reporting – Management Reporting
(EXPO – Executive Performance Overview)


For the period measured, the CPW grew 14.7%.

Note: Extrapolated CPW is also shown below.
Power Analytics Reporting – Management Reporting
(Why Structured Management Reporting Matters)
Power Analytics Reporting –
Why Is My Disk / IFS Growing At an Alarming Rate?!?
Power Analytics Reporting –
Why Is My Disk / IFS Growing At An Alarming Rate?!?
Power Analytics Reporting –
Why Is My Disk / IFS Growing At An Alarming Rate?!!

Why is the QPL growing demo
Power Analytics Reporting –
Why Is My Disk / IFS Growing At An Alarming Rate?!?

Why is the IFS growing? demo
Power Analytics Reporting – Why Is My Disk / IFS Growing At An Alarming Rate?!?

Why is the IFS growing? demo
Why is disk growing at an alarming rate?

File Reorg Analysis demo
Power Analytics Reporting –
Why Is My Disk / IFS Growing At An Alarming Rate?!!?
Power Analytics Reporting –
Why Is My Disk / IFS Growing At An Alarming Rate?!?

Temporary Storage Used
MPG520P – 27May15 – 12:10:05

<table>
<thead>
<tr>
<th>Job Name</th>
<th>User</th>
<th>Number</th>
<th>Temp Storage Used (MB)</th>
<th>Pool ID</th>
<th>Subsystem</th>
<th>Memory Pool</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZSJAVA_BRG</td>
<td>QTMHHTTP</td>
<td>028857</td>
<td>1433</td>
<td>2</td>
<td>ZENDSVR</td>
<td>*BASE</td>
</tr>
<tr>
<td>HTTP</td>
<td>QNOTES</td>
<td>027102</td>
<td>1065</td>
<td>2</td>
<td>NTSSRVST</td>
<td>*BASE</td>
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<tr>
<td>STMSACTPRV</td>
<td>QNOTES</td>
<td>027196</td>
<td>603</td>
<td>2</td>
<td>NTSSRVST</td>
<td>*BASE</td>
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<tr>
<td>HTTP</td>
<td>QNOTES</td>
<td>026959</td>
<td>478</td>
<td>2</td>
<td>NTSSRV02</td>
<td>*BASE</td>
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<tr>
<td>ADMIN2</td>
<td>QLWSVR</td>
<td>026896</td>
<td>300</td>
<td>2</td>
<td>QHTTPSVR</td>
<td>*BASE</td>
</tr>
<tr>
<td>ADMIN4</td>
<td>QWEBADMIN</td>
<td>026897</td>
<td>296</td>
<td>2</td>
<td>QHTTPSVR</td>
<td>*BASE</td>
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<tr>
<td>QYPSJSVR</td>
<td>QYPSJSVR</td>
<td>026552</td>
<td>254</td>
<td>2</td>
<td>QSYSWRK</td>
<td>*BASE</td>
</tr>
<tr>
<td>RUNJAVA</td>
<td>QNOTES</td>
<td>027106</td>
<td>248</td>
<td>2</td>
<td>NTSSRVST</td>
<td>*BASE</td>
</tr>
<tr>
<td>ADMIN</td>
<td>QLWSVR</td>
<td>026896</td>
<td>239</td>
<td>2</td>
<td>QHTTPSVR</td>
<td>*BASE</td>
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<tr>
<td>SERVER</td>
<td>QNOTES</td>
<td>039406</td>
<td>173</td>
<td>2</td>
<td>NTSSRV05</td>
<td>*BASE</td>
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<tr>
<td>QYVRRPS</td>
<td>RWATSON</td>
<td>033861</td>
<td>153</td>
<td>2</td>
<td>QSYSWRK</td>
<td>*BASE</td>
</tr>
</tbody>
</table>
## Enterprise Hardware Summary - Resource Totals

### Analysis Specifications

Total Frames Analyzed: 2
(102C2CP:1033ACE: )

Total Systems Analyzed: 8 + 1
VIOS = 9

### Enterprise Resource Totals

<table>
<thead>
<tr>
<th></th>
<th>CPW</th>
<th>rPerf</th>
<th>Cores</th>
<th>Total Memory (GB)</th>
<th>Disk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Allocated</td>
<td>Total</td>
<td>Allocated</td>
<td># of Luns / Arms</td>
<td>Total (GB)</td>
</tr>
<tr>
<td></td>
<td>27,600</td>
<td>8,900</td>
<td>51.2</td>
<td>17.5</td>
<td>9</td>
<td>36.4</td>
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<tr>
<td>Allocated %</td>
<td>32.6</td>
<td>Allocated %</td>
<td>34.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating System Inventory</td>
<td>6.1.4.0</td>
<td>VIOS 2.2.3.1</td>
<td>7.1.3.0</td>
<td>SUSE 11 SP2</td>
<td>Red Hat 6.6</td>
<td>Red Hat 7.0 Beta</td>
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<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Model Inventory</td>
<td>520 7357-8327</td>
<td>520 8327-7557</td>
<td>E4B 8202-8350</td>
<td>E4B 8350-8350</td>
<td>E4B 8350-8350</td>
<td></td>
</tr>
</tbody>
</table>
### Enterprise Hardware Summary - System Inventory

<table>
<thead>
<tr>
<th>Serial # / System</th>
<th>CPW</th>
<th>rPerf</th>
<th>Cores</th>
<th>Virtuals</th>
<th>Virtual Share Pool ID (# of cores)</th>
<th>Configuration</th>
<th>Memory (GB)</th>
<th>Disk GB</th>
<th># of Luns / Arms</th>
<th>Allbo% / Used Alloc% / Used Total%</th>
<th>OS Rel</th>
</tr>
</thead>
<tbody>
<tr>
<td>102C1CP-E46 5202-8350 Active Cores: 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.00</td>
<td>2.279</td>
<td>18</td>
<td>4 / 26 / 1</td>
<td>VIOS 2.2.3.1</td>
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<tr>
<td>VIOS1 - LPAR 1</td>
<td>0</td>
<td>5.64</td>
<td>0.50</td>
<td>1</td>
<td>Pool 1 (1)</td>
<td>Shared / Uncapped</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADX720 - LPAR 2</td>
<td>0</td>
<td>4.51</td>
<td>0.40</td>
<td>1</td>
<td>Pool 3 (1)</td>
<td>Shared / Uncapped</td>
<td>4.00</td>
<td>143</td>
<td>4</td>
<td>52 / 78 / 41</td>
<td>7.1.3.0</td>
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<tr>
<td>MPG720 - LPAR 3</td>
<td>2.380</td>
<td>0</td>
<td>0.40</td>
<td>1</td>
<td>n/a</td>
<td>Shared / Uncapped</td>
<td>4.00</td>
<td>515</td>
<td>10</td>
<td>0.0%</td>
<td>V7R2</td>
</tr>
<tr>
<td>MPG6020G - LPAR 4</td>
<td>1.190</td>
<td>2.26</td>
<td>0.20</td>
<td>1</td>
<td>Pool 4 (1)</td>
<td>Shared / Uncapped</td>
<td>3.72</td>
<td>71.7</td>
<td>2</td>
<td>48 / 13 / 9</td>
<td>SUSE 11 SP2</td>
</tr>
<tr>
<td>MPG6020G - LPAR 5</td>
<td>1.190</td>
<td>2.26</td>
<td>0.20</td>
<td>1</td>
<td>Pool 4 (1)</td>
<td>Shared / Uncapped</td>
<td>1.98</td>
<td>71.7</td>
<td>2</td>
<td>97 / 18 / 17</td>
<td>Red Hat 6.6</td>
</tr>
<tr>
<td>MPG6020G - LPAR 6</td>
<td>1.190</td>
<td>2.26</td>
<td>0.20</td>
<td>1</td>
<td>Pool 4 (1)</td>
<td>Shared / Uncapped</td>
<td>3.95</td>
<td>75.2</td>
<td>2</td>
<td>94 / 5 / 5</td>
<td>Red Hat 7.0 R5s</td>
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<tr>
<td>Totals</td>
<td>5,950</td>
<td>16.92</td>
<td>1.90</td>
<td>6.00</td>
<td></td>
<td></td>
<td>21.63</td>
<td>3,156</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1033ACE-520 7357-8327 Active Cores: 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPG520P - LPAR 1</td>
<td>2.280</td>
<td>0</td>
<td>0.60</td>
<td>1</td>
<td>n/a</td>
<td>Shared / Uncapped</td>
<td>12.00</td>
<td>917</td>
<td>18</td>
<td>59.6%</td>
<td>V6R1</td>
</tr>
<tr>
<td>MPG520QD - LPAR 2</td>
<td>700</td>
<td>0</td>
<td>0.20</td>
<td>1</td>
<td>n/a</td>
<td>Shared / Uncapped</td>
<td>1.75</td>
<td>212</td>
<td>4</td>
<td>19.4%</td>
<td>V7R1</td>
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<tr>
<td>MPG6020G - LPAR 3</td>
<td>0</td>
<td>0.02</td>
<td>0.10</td>
<td>1</td>
<td>n/a</td>
<td>Shared / Uncapped</td>
<td>1.00</td>
<td>30.0</td>
<td>1</td>
<td>73 / 74 / 54</td>
<td>6.1.4.0</td>
</tr>
<tr>
<td>Totals</td>
<td>3,040</td>
<td>0.60</td>
<td>0.90</td>
<td>3.00</td>
<td></td>
<td></td>
<td>14.75</td>
<td>1,159</td>
<td>21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OS Key:**
- IBMi (A/S400)
- AIX
- Linux
- Solaris
- HP-UX
- VIOS Server
So What Have We Done So Far?

Easy Problem Determination

Power Analytics
  Monthly / Weekly Reporting
  Comprehensive Disk / IFS Analysis
  Enterprise Reporting
Understanding The Impact of Changes

Has This Happened To You?

New Application / Process Went Live That Your Team Didn’t Know Was Going Live
Understanding The Impact of Changes

Has This Happened To You – My Real Life Example

Your Company’s Worst Nightmare:

Purchasing $800,000 worth of “warehouse automation” software that did not run efficiently (“Brought the system to its knees”)

Imagine the impact of that mistake

What went wrong in the process?
The Systems Team Has To Be Part Of The Development Project Life Cycle…

Use Collection Services Interval Data During The Project Testing Phase
Comprehensive Job Analysis...

<table>
<thead>
<tr>
<th>Number Of Users</th>
<th>BCWEST Peak</th>
<th>New Process</th>
<th>Percentage Of Change</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>8.65%</td>
<td>7.30%</td>
<td>15.61%</td>
<td>7.3% CPU% would be added to BCWEST</td>
</tr>
<tr>
<td>CPU ms</td>
<td>78.070</td>
<td>66.137</td>
<td>15.29%</td>
<td>66.137 ms would be added to BCWEST</td>
</tr>
<tr>
<td>Sync I/O</td>
<td>56.031</td>
<td>29.303</td>
<td>49.76%</td>
<td>Sync I/O will increase by 50%</td>
</tr>
<tr>
<td>Async I/O</td>
<td>29.270</td>
<td>20.415</td>
<td>30.25%</td>
<td>Async I/O will increase by 30%</td>
</tr>
<tr>
<td>Logical I/O</td>
<td>5.128</td>
<td>4.528</td>
<td>9.75%</td>
<td>Logical I/O will increase by almost 10%</td>
</tr>
</tbody>
</table>

Note that all core metrics show increases...

**Final Summary / Conclusions**

The Midrange Systems Group has the following observations / concerns:

- From a CPU percentage standpoint, the stress test showed that we would take a minor hit in regards to CPU. Our concern is the fact that the stress test consisted of 80 concurrent users. Is this truly reflective of what we expect in regards to concurrent users? That is, do we really believe that our busiest / peak times will only have 80 concurrent CM users? That number seems low in our estimation, but we will rely on the application group’s knowledge of the business side of the house. As a result, we need to simply remember that the above CPU estimates are based on the 80 concurrent users.

With that said...

- I/O is a big concern. By simply increasing our workload by 80 concurrent users, synchronous I/O has a 50% increase. Since sync I/O is a deterrent to good performance, it is possible that response time SLA’s could suffer. We will have to monitor this as we roll out the new process.

This supporting doc puts everyone involved in the project on the same page!
Did My Tuning Change Work?

In this example, the customer was experiencing a nightly batch issue...

Nightly batch issue where jobs run long...
Did My Tuning Change Work?

Splitting the trend line allows us to do powerful BEFORE vs After analysis

The job ran 17% faster…
Did My Tuning Change Work?

Notice the difference in the nightly batch performance – The senior management team was actually “giddy” when they saw the impact of the tuning change.
Understanding The Impact of Changes

Before vs After Analysis – Taking It To Another Level

Day vs Day Comparisons
As System Admins, we will do many types of comparisons...

• Comparing a good day vs a bad day
• This “month end” processing vs last month processing
• Baseline Data Metric Comparisons (CPU, Disk, Memory) Before / After Analysis after any known change
• Size of Library Today vs 6 Months Ago
• Black Friday This Year vs Black Friday Last Year
• And so on…
What's Different Analysis – Measuring A Good Day vs. A Bad Day


What's Different Demo
Capacity Planning - What-If ® Analysis

- CPaaS - Capacity Planning as a Service
  - MPG, IBM, BP, Customers
  - Enterprise, Data Center, Frames, LPARs
  - VIOS, AIX, IBM i, Linux
  - IBM or BP prices configuration
Why Use Performance Navigator’s State of The Art What If Modeling Tool?

Pegged system 6 months after a 1.3 million dollar upgrade
Capacity Planning - What-If® Analysis
(Current System: 720 / E4B: 8202)

What If -> 720/E4B:8202-8358/4 CPW:23800 P05[UsrExp], 3000Mhz
GERMANY
Partition 1, Cores:0.54/1, CPW:3213

GERMANY 20Oct14
Capacity Planning - What-If® Analysis
(Current System: Upgrading To Power 8)
Capacity Planning - What-If ® Analysis
(Current System: Upgrading To Power 8)
Capacity Planning - What-If ® Analysis
(Current System: Upgrading To Power 8)

What If->814/41A:8286-EPXK/4 CPW:39500 P05[UsrExp],3020Mhz
GERMANY
Partition 1, Cores:1.00/1, CPW:9875

New Power 8
Day 1
Great room for growth…

GERMANY 20ct14
Room for Growth = 53% (allows 15% growth per year for 3 years.)
Capacity Planning - What-If® Analysis
(Current System: Upgrading To Power 8)

What If->814/41A:8286-EPXK/4 CPW:39500 P05[UsrExp],3020Mhz

GERMANY
Partition 1, Cores:1.00/1, CPW:9875
Projected - May/2016

New Power 8
12 Month Projection
Based On Current Trends

GERMANY 2Oct14
Projection effect: 126.6% System, 153.2% Interactive, 126.6% Batch
Room for Growth = 14% (allows 5% growth per year for 3 years.)
Capacity Planning - What-If ® Analysis
(Current System: Upgrading To Power 8)

What If->814/41A:8286-EPXK/4 CPW:39500 P05[UsrExp],3020Mhz
GERMANY
Partition 1, Cores:1.00/1, CPW:9875
Projected - May/2017

New Power 8
24 Month Projection Based On Current Trends

Projection effect: 153.3% System, 206.4% Interactive, 153.3% Batch
Capacity Planning - What-If ® Analysis
(Current System: Upgrading To Power 8)

New Power 8
36 Month Projection
Based On Current Trends
Capacity Planning - What-If Analysis
(Current System: Upgrading To Power 8)
Capacity Planning - What-If ® Analysis
(Current System: Upgrading To Power 8)

What If->814/41A:8286-EPXK/4 CPW:39500 P05[UsrExp],3020Mhz
GERMANY (20ct14)

New Power 8 Disk Metrics

RAID5 52xEMCVMax, 4966GB, 20% Full, 2 IOAs: 2 Virt
As an ex tech support manager responsible for many production systems…

The bottom line is the product does everything in the performance management arena…

Management Reporting Against Best Practice Guidelines
Before vs After Analysis
Problem Determination
Job Analysis
Disk / IFS Analysis
Capacity Planning
Kind Words From Management…

Senior VP sat our 2.5 day class: “Best IT product / class I could have invested in”

CIO told me yesterday as I was leaving… “Best ROI I’ve ever had in IT”

The Product Just Works…
The Product Just Works…

Product is ridiculously inexpensive…. $4895 - $6895 (All LPAR license) per serial number

Every hardware deal, this product should be included in you proposal…

Don’t’ forget the education too

Customers want bang for their buck… Something to make their day to day operations easier… You offer this and you will be a hero

Don’t Believe Me?
A Happy Customer Quote:
"Wow... I didn't know Performance Navigator® did that..."

Keith Livingood of Polaris® Industries, a leader in providing fun and innovative vehicles, talks about Performance Navigator:

"We knew the product was the best capacity planning tool in the industry, but after investing in MPG’s Systems Administration class, we learned that the product was so much more. One week after class, we had two major issues:

1. A 90 minute job was now spiking to 7 hours.
2. Disk usage was growing at an alarming rate.

The MPG tool identified both issues in less than 5 minutes. Management loved that! We just didn’t realize the product did so much more than capacity planning. As a Senior IT administrator, I am so glad it does.”

It’s time to get educated.

MPG’s Performance Navigator will help you learn your systems at a deeper level with powerful functionality that you’ll use every day.
Download an evaluation copy today: www.mpginc.com/perfnav1.htm

Polaris Industries reduces job runtimes, saves CPU usage and specs out new systems

The company wanted to clearly identify and rectify the problem.

It rooted around its stable of administrative tools and found one that it had on hand but was not using to its fullest potential: MPG’s Performance Navigator.

And as Livingood explains, the payback can be enormous. “We got our nightly processes back in order with the Performance Navigator and journal caching, reclaimed disk space with File Reorg Analysis and spec’d out our POWER8 with What If,” he says. “Without those tools, we’d still be scratching our heads and wondering how to best deal with these issues.”
Welcome / Overview / Update:

NEW Navigator Family Demos

1. Main Page – www.mpginc.com
2. Performance Navigator Demos (YouTube Playlist) - bit.ly/perfnavdemos

**DEMOS - PERFORMANCE NAVIGATOR**
Why Performance Navigator is So Vital to your IT Organization

**Performance Navigator - Product Basics** (9 videos, 35:22)
- System Health Check (1:41)
- The Basics of Problem Determination (Isolate and fix problems more efficiently, 3:36)
- Understanding the Impact of Change to the System (3:24)
- Power Analytics/Performance Reporting (Comprehensive Management Reporting, 2:58)
- What is Consuming My Disk Resources? (Comprehensive Library/IFS Analysis, 4:33)
- Comprehensive Job Analysis (Learn How Efficiently Your Jobs Run, 4:18)
- Enterprise Data Center Management (Understand System Performance/Configurations on All Platforms, 4:29)
- Basics of Capacity Planning (Predict future needs with confidence, 4:48)
- What's Different Analysis (Advanced Troubleshooting Technique to Answer the Question: What's Different When Comparing Two Performance Days, 5:35)
Welcome / Overview / Update:

NEW Navigator Family Demos


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**DEMOS - POWER NAVIGATOR**

Why Power Navigator is So Vital to your IT Organization

- **Power Navigator - Product Basics** (5 videos, 16:08)
  - System Health Check (Unix, 1:41)
  - Enterprise Data Center Management (Unix, 4:02)
  - Understanding the Impact of Change to the System (Unix, 2:49)
  - File System Analysis (Unix, 3:24)
  - Basics of Capacity Planning (Unix, 3:47)
Q & A

See for yourself
Download / Update Windows Client
Install the host code
Schedule a walk through

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