V93

Performance Toolkit for VM – Product Update

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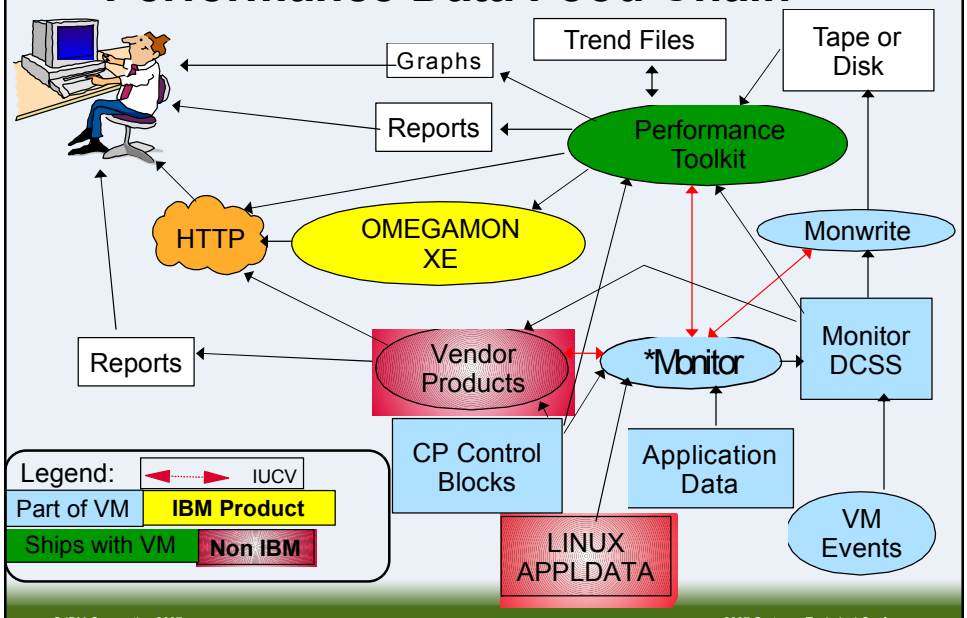
Performance Data Food Chain



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VM Performance Product Strategy

- **Performance Toolkit is bread and butter monitoring product**
  - **Introduced in z/VM 4.4.0**
  - **Enhanced in z/VM 5.1.0**
  - **Enhanced in z/VM 5.2.0**
  - **Enhanced in z/VM 5.3.0**
  - **Supports most monitor data of all supported VM releases**
- **Last release for VMPRF and RTM was z/VM 4.4.0**
  - **No support for z/VM 5.1.0**
- **Synergy with Tivoli Omegamon products**
- **Vendor Activity continues to enrich the offerings and capabilities**

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Performance Toolkit Naming Conventions

- FCON = Full Screen Operator Console
  - FCON/XA, FCON/ESA are previous names for Toolkit
- FCX = 3 letter module prefix
  - Used in messages, displays, etc.
- Performance Toolkit for VM = full name
- PERFKIT = module that invokes it
- PERFSVM = default userid where Performance Toolkit runs
- FCXRES00 = default APPC resource name
- 5VMPTK20 = installation userid for FL520
- 5VMPTK30 = installation userid for FL530

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Usages

- Real time Monitor
  - Allows viewing of current status of the system
  - Scheduled report generation
  - Recording for historical records
- MONSCAN
  - View Monwrite Data as if you were looking at live system
- BATCH or VMPRF
  - Post processing of Monwrite data
- Re-display of historical records
- Systems Operations

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New for z/VM 5.2.0

- Support for new z/VM Monitor Data and Features
  - System Execution Space Reports
  - New/Changed Paging Reports
  - QEBSM Reports
- New Central Data Collection Processing
  - “Pull” from other FL520 PERFKIT’s
  - “Push” from other FL510 PERFKIT’s

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New Reports for FL520 – STORMENU (FCX260)

```
1FCX260  Run 2005/08/08 13:34:15        STORMENU                                          Page    1
                                        Storage and Paging Logs Selection Menu
 From (Not applicable)                                                          GDLVM7
 To   (Not applicable)                                                          CPU 2084-332   SN 2069A
 For  (Not applicable)                  This is a performance report for system XYZ     z/VM   V.5.2.0 SLU 0000
 ------------------------------------------------------------------------------------------------------------


   General Storage/Paging
 S Log Name    Description
 _ AVAILLOG    Available list management log
 _ DEMNDLOG    Demand scan details log
 _ PAGELOG     Paging activity log
 _ STORLOG     Storage utilization log

   System Execution Space
 S Log Name    Description
 _ SXSAVAIL    SXS page queues management log
 _ SXSDEFER    SXS deferred tasks management log
 _ SXSPAGE     SXS page management log
 _ SXSUTIL     SXS storage utilization log
```

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Changed Reports for FL520 – PAGELOG (FCX143)

```
1FCX143  Run 2005/08/08 14:04:32          PAGELOG                                                    Page    1
                                          Total Paging Activity, by Time
 From 2005/08/08 00:04:00                                                                          GDLVM7
 To   2005/08/08 13:59:02                                                                          CPU 2084-332   SN 2069A
 For  50102 Secs 13:55:02                 This is a performance report for system XYZ               z/VM   V.5.2.0 SLU 0000
_____________________________________________________________________________________________________________________

          <---------- Expanded Storage ----------> <-Real Stor-> <---------- Paging to DASD ----------> <Page Table>
                      Fast-                Est.  Page     DPA  Est.                    <-Single Reads--> <Management>
 Interval  Paging  PGIN  Path PGOUT Total  Life  Migr Pagable  Page Reads Write Total  Shrd Guest Systm Total Reads Writes
 End Time  Blocks    /s     %    /s    /s   sec    /s  Frames  Life    /s    /s    /s    /s    /s    /s    /s    /s    /s
 >>Mean>>  478182   3.3  86.6  10.0  13.3 47689   3.7 1523298  114k   5.1   3.3   8.4   7.7    .5   6.0   6.5    .0 572.3
 02:24:00  521303    .1 100.0    .0    .1  ....    .0 1526275 2336k    .0    .7    .7   4.5    .0   2.4   2.4   4.9    .1
 02:29:00  521303    .1 100.0    .0    .1  ....    .0 1526307 2775k    .2    .6    .7   6.3    .0   4.7   4.7   4.9    .1
 02:34:00  521303    .1 100.0    .0    .1  ....    .0 1526286 5324k    .0    .3    .3   6.7    .0   5.2   5.2   4.9    .1
 02:39:00  521303    .1 100.0    .0    .1  ....    .0 1526295 8978k    .0    .2    .2   2.6    .0   1.2   1.3   4.9    .1
 02:44:00  521303    .2 100.0    .0    .2  ....    .0 1526281 5145k    .0    .3    .3   4.2    .0   2.8   2.8   4.9    .1
 02:49:00  521303    .3 100.0    .0    .3  ....    .0 1526273   11M    .0    .1    .1   2.6    .0   1.3   1.3   4.9    .1
 02:54:00  521303    .1 100.0    .0    .1  ....    .0 1526300 5517k    .0    .3    .3   2.2    .0    .7    .7   4.9    .1
 02:59:00  521303    .1 100.0    .0    .1  ....    .0 1526300   11M    .0    .1    .1   2.4    .0   1.1   1.1   4.9    .1
 03:04:00  521303    .2  96.4    .0    .2  ....    .0 1526241 1536k    .3   1.0   1.3   8.0    .1   4.3   4.5   4.9    .1
 03:09:00  521303    .1 100.0    .0    .1  ....    .0 1526256   12M    .0    .1    .2   2.6    .0   1.3   1.3   4.9    .1
 03:14:00  521303    .1 100.0    .0    .1  ....    .0 1526190 1379k    .0   1.1   1.1   7.9    .0   5.6   5.6   4.9    .1
 03:19:00  521303    .1 100.0    .0    .1  ....    .0 1526263 6188k    .0    .2    .3   3.3    .0   1.8   1.8   4.9    .1
 03:24:00  521303    .1 100.0    .0    .1  ....    .0 1526268 5946k    .1    .3    .4   2.1    .0    .6    .6   4.9    .1
 03:29:00  521303    .1 100.0    .0    .1  ....    .0 1526223   13M    .0    .1    .1   2.3    .0   1.0   1.0   4.9    .1
 03:34:00  521303    .1 100.0    .0    .1  ....    .0 1526267 5203k    .0    .3    .3   2.9    .0   1.4   1.4   4.9    .1
 03:39:00  521303    .1 100.0    .0    .1  ....    .0 1526244   13M    .0    .1    .1   2.3    .0   1.0   1.0   4.9    .1
 03:44:00  521303    .2 100.0    .0    .2  ....    .0 1526248 5517k    .0    .3    .3   2.1    .0    .6    .6   4.9    .1
 03:49:00  521303    .1 100.0    .0    .1  ....    .0 1526206   12M    .0    .1    .1   3.4    .0   2.1   2.1   4.9    .1
 03:54:00  521303    .1 100.0    .0    .1  ....    .0 1526217 1199k    .0   1.3   1.3   8.3    .0   5.8   5.8   4.9    .1
 03:59:00  521303    .1 100.0    .0    .1  ....    .0 1526224   12M    .0    .1    .1   2.3    .0   1.0   1.0   4.9    .1
```

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New Reports for FL520 – AVAILLOG (FCX254)

```
1FCX254  Run 2005/08/08 13:58:48          AVAILLOG                                                   Page    1
                                          Available List Management, by Time
 From 2005/08/08 00:04:00                                                                          GDLVM7
 To   2005/08/08 13:54:02                                                                          CPU 2084-332   SN 2069A
 For  49802 Secs 13:50:02                 This is a performance report for system XYZ               z/VM   V.5.2.0 SLU 0000
_____________________________________________________________________________________________________________________

          <---------------------------------------------- Available List Management ---------------------------------------------->
          <---- Thresholds -----> <---------- Page Frames ----------> <-Times-> <---------- Replenishment ----------> Perct
 Interval <---Low---> <--High---> <Available> <Obtains/s> <Returns/s> <-Empty-> <--Scan1--> <--Scan2--> <-Em-Scan-> Scan Emerg
 End Time  <2GB  >2GB  <2GB  >2GB   <2GB  >2GB  <2GB  >2GB  <2GB  >2GB <2GB >2GB  Compl Pages Compl Pages Compl Pages Fail  Scan
 >>Mean>>     0   186   240   426   418k 21492  10.2 193.7   4.4  40.3    0   96   1923  518k     5     6     0     0     0    0
 02:19:00     0   169   240   409   434k 73304    .3  65.4    .1  10.1    0    0      0     0     0     0     0     0     0    ..
 02:24:00     0   169   240   409   434k 73024    .2  76.8    .1  31.9    0    0      0     0     0     0     0     0     0    ..
 02:29:00     0   169   240   409   434k 72190    .2  64.5    .1  11.8    0    0      0     0     0     0     0     0     0    ..
 02:34:00     0   169   240   409   434k 74133    .4  97.2    .3  34.6    0    0      0     0     0     0     0     0     0    ..
 02:39:00     0   169   240   409   434k 74187    .2  46.2    .1  12.1    0    0      0     0     0     0     0     0     0    ..
 02:44:00     0   169   240   409   434k 74134    .2  52.5    .1  12.6    0    0      0     0     0     0     0     0     0    ..
 02:49:00     0   169   240   409   434k 74037    .2  53.4    .1   9.8    0    0      0     0     0     0     0     0     0    ..
 02:54:00     0   169   240   409   434k 73570    .3  93.7    .2  19.1    0    0      0     0     0     0     0     0     0    ..
 02:59:00     0   169   240   409   434k 73106    .2  76.5    .1   9.5    0    0      0     0     0     0     0     0     0    ..
 03:04:00     0   169   240   409   434k 76499  16.8 179.7  11.2  53.6    0    0      0     0     0     0     0     0     0    ..
 03:09:00     0   169   240   409   434k 76305    .5  83.8    .3  26.5    0    0      0     0     0     0     0     0     0    ..
 03:14:00     0   169   240   409   434k 73894    .1  64.0    .0  13.1    0    0      0     0     0     0     0     0     0    ..
 03:19:00     0   169   240   409   434k 71776    .4  71.3    .1   9.5    0    0      0     0     0     0     0     0     0    ..
 03:24:00     0   169   240   409   434k 72707    .1  62.6    .1   9.6    0    0      0     0     0     0     0     0     0    ..
 03:29:00     0   169   240   409   434k 73188    .1  61.6    .1  10.5    0    0      0     0     0     0     0     0     0    ..
 03:34:00     0   169   240   409   434k 73631    .1  51.0    .0   8.1    0    0      0     0     0     0     0     0     0    ..
 03:39:00     0   169   240   409   434k 72823    .2  46.4    .1   9.1    0    0      0     0     0     0     0     0     0    ..
 03:44:00     0   169   240   409   434k 73852    .3  91.0    .2  30.7    0    0      0     0     0     0     0     0     0    ..
 03:49:00     0   169   240   409   434k 73323    .2  41.1    .1   9.2    0    0      0     0     0     0     0     0     0    ..
 03:54:00     0   169   240   409   434k 72243    .5  91.8    .3  41.4    0    0      0     0     0     0     0     0     0    ..
```

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New Reports for FL520 – STORLOG (FCX253)

```
1FCX253  Run 2005/08/08 13:59:01          STORLOG                                                    Page    1
                                          Storage Utilization Log, by Time
 From 2005/08/08 00:04:00                                                                          GDLVM7
 To   2005/08/08 13:54:02                                                                          CPU 2084-332   SN 2069A
 For  49802 Secs 13:50:02                 This is a performance report for system XYZ               z/VM   V.5.2.0 SLU 0000
 ____________________________________________________________________________________________________________________

          <------------------------------ Storage Utilization (Page Frames) ------------------------------>
          <------- DPA ------->  Stor                  <---------- Locked ---------->
 Interval <--Pageable--> Nonpgb  Util    Save    Track  <-LOCK REAL-> <-SXS Alias->  Diag      Re-    Resid
 End Time    <2GB     >2GB   <2GB     %   Areas    Cache    <2GB   >2GB  Total   LOCK X'98'  served  Shared
 >>Mean>>  505699 1017618  18588    26     135    16553       0      0      9    126   919   18224  726443
 02:19:00  508608 1017624  15679    14     129    75061       0      0      9    117   919   18202  377119
 02:24:00  508600 1017675  15687    16     129    75061       0      0      9    115   919   18202  377470
 02:29:00  508596 1017711  15691    13     129    75097       0      0      9    113   919   18202  377824
 02:34:00  508594 1017692  15693    15     129    75097       0      0      9    117   919   18202  378175
 02:39:00  508588 1017707  15699    15     129    75097       0      0      9    118   919   18202  378526
 02:44:00  508580 1017701  15707    15     129    75097       0      0      9    115   919   18202  378877
 02:49:00  508572 1017701  15715    14     129    75097       0      0      9    116   919   18207  379228
 02:54:00  508567 1017733  15720    14     129    75097       0      0      9    111   919   18207  379579
 02:59:00  508563 1017737  15724    14     129    75109       0      0      9    111   919   18207  379930
 03:04:00  508560 1017681  15727    16     129    75109       0      0      9    114   919   18207  380710
 03:09:00  508553 1017703  15734    16     129    75109       0      0      9    117   919   18207  381061
 03:14:00  508551 1017639  15736    15     129    75109       0      0      9    114   919   18207  381412
 03:19:00  508541 1017722  15746    15     129    75109       0      0      9    112   919   18203  381763
 03:24:00  508540 1017728  15747    14     129    75109       0      0      9    112   919   18203  382114
 03:29:00  508538 1017685  15749    14     129    75109       0      0      9    117   919   18203  382465
 03:34:00  508537 1017730  15750    15     129    75109       0      0      9    114   919   18203  382819
 03:39:00  508532 1017712  15755    15     129    75109       0      0      9    114   919   18203  383170
 03:44:00  508528 1017720  15759    20     129    75109       0      0      9    117   919   18203  383521
```

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New Reports for FL520 – DEMNDLOG (FCX259)

```
1FCX259  Run 2005/08/08 13:34:40          DEMNDLOG                                                   Page    1
                                          Demand Scan Details, by Time
 From 2005/08/08 00:04:00                                                                          GDLVM7
 To   2005/08/08 13:34:02                                                                          CPU 2084-332   SN 2069A
 For  48602 Secs 13:30:02                 This is a performance report for system XYZ               z/VM   V.5.2.0 SLU 0000
 ____________________________________________________________________________________________________________________

          <--------- Demand Scan Pass 1 ----------> <------- Demand Scan Pass 2 --------> <------- Emergency Scan ------->
          <-- Ended After --> <--- Page Frames ---> <-Ended After-> <--- Page Frames ---> <-Ended After-> <-Page Frames-->
 Interval  Lng Drm NSS Eli Dsp Long Dor- NSS Eli Dsp Lng Drm Eli Dsp Long Dor- NSS Eli Dsp Drm NSS Eli Dsp Dor- NSS Eli Dsp   Scan
 End Time  Drm ant Shr Lst Lst Dorm mant Shr Lst Lst Drm ant Lst Lst Dorm mant Shr Lst Lst ant Shr Lst Lst mant Shr Lst Lst Failed
 >>Mean>>  480   0 484   0 841  56k    0  0M   0  0M   5   0   0   0    6   0   0   0   0   0   0   0   0   0   0   0      0
 01:59:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:04:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:09:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:14:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:19:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:24:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:29:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:34:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:39:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:44:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:49:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:54:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 02:59:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 03:04:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 03:09:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
 03:14:00    0   0   0   0   0    0    0   0   0   0   0   0   0   0    0   0   0   0   0   0   0   0   0   0   0   0      0
```

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New Reports for FL520 – SXSAVAIL (FCX261)

```
1FCX261  Run 2005/08/08 11:58:19          SXSAVAIL                                                          Page    1
                                          System Execution Space Page Queues Management
From 2005/08/08 00:04:00                                                                                    GDLVM7
 To   2005/08/08 11:54:02                                                                                    CPU 2084-332   SN 2069A
 For  42602 Secs 11:50:02                 This is a performance report for system XYZ                       z/VM   V.5.2.0 SLU 0000
```

	<-- Backed <2GB Page Queue -->					<-- Backed >2GB Page Queue -->					<---------- Unbacked Page Queue ---------->							
Interval	Avail	<-Pages/s-->		<Preferred>		Avail	<-Pages/s-->		<Preferred>		Avail	<-Pages/s-->		<Preferred>		<---- Replenishment ---->		
End Time	Pages	Taken	Return	Used	Empty	Pages	Taken	Return	Used	Empty	Pages	Taken	Return	Used	Empty	Thres	Att/s	Stolen	MinPgs
>>Mean>>	19	1.817	1.817	1.811	.001	15	54.12	54.12	54.12	.015	480531	49.79	49.52	49.75	.000	128	.000	128	...
00:19:02	21	2.580	2.590	2.577	.010	29	10.77	10.78	10.77	.000	484143	47.48	50.59	47.45	.000	128	.000	128	...
00:24:02	21	.543	.543	.540	.000	26	1.320	1.307	1.320	.000	484321	16.81	17.40	16.79	.000	128	.000	128	...
00:29:02	24	.600	.600	.587	.000	27	2.133	2.140	2.133	.000	484298	22.95	22.88	22.94	.000	128	.000	128	...
00:34:02	22	.457	.460	.450	.000	27	1.257	1.253	1.257	.000	484530	20.28	21.04	20.26	.000	128	.000	128	...
00:39:02	20	.393	.383	.387	.000	27	1.033	1.033	1.033	.000	484467	14.08	13.87	14.06	.000	128	.000	128	...
00:44:00	27	.634	.654	.631	.000	24	1.453	1.446	1.453	.000	484022	30.31	28.82	30.29	.000	128	.000	128	...
00:49:00	26	.290	.283	.277	.000	26	.793	.797	.793	.000	484404	30.71	31.99	30.70	.000	128	.000	128	...
00:54:00	18	.467	.450	.463	.000	30	.583	.600	.583	.000	484454	20.45	20.60	20.42	.000	128	.000	128	...
00:59:00	15	.290	.280	.287	.000	29	.737	.730	.737	.000	484429	12.60	12.51	12.57	.000	128	.000	128	...
01:04:00	29	.403	.437	.400	.000	32	1.877	1.887	1.877	.000	484592	80.82	81.38	80.80	.000	128	.000	128	...
01:09:00	23	1.623	1.613	1.617	.043	29	39.20	39.19	39.20	.000	484527	38.64	38.42	38.58	.000	128	.000	128	...
01:14:00	22	.293	.293	.290	.000	31	.507	.510	.507	.000	484584	11.86	12.05	11.84	.000	128	.000	128	...
01:19:00	18	.497	.483	.493	.000	30	1.257	1.253	1.257	.000	484547	16.74	16.62	16.72	.000	128	.000	128	...
01:24:00	23	.250	.267	.247	.000	30	.460	.460	.460	.000	484570	17.90	17.98	17.88	.000	128	.000	128	...
01:29:00	12	.310	.273	.307	.000	32	.917	.923	.917	.000	484580	20.24	20.28	20.22	.000	128	.000	128	...
01:34:00	0	.740	.707	.740	.007	27	1.477	1.460	1.477	.000	484558	30.83	30.74	30.79	.000	128	.000	128	...
01:39:00	20	.373	.433	.370	.000	22	2.143	2.127	2.143	.000	484401	18.63	18.11	18.60	.000	128	.000	128	...
01:44:00	26	.310	.327	.307	.000	22	.487	.487	.487	.000	484505	17.08	17.43	17.06	.000	128	.000	128	...
01:49:00	24	.417	.413	.413	.000	21	1.070	1.067	1.070	.000	484333	15.40	14.83	15.38	.000	128	.000	128	...
01:54:00	29	.263	.267	.253	.000	21	.493	.493	.493	.000	484262	15.39	15.17	15.37	.000	128	.000	128	...

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New Reports for FL520 – SXSPAGE (FCX262)

```
1FCX262  Run 2005/08/08 11:58:00          SXSPAGE                                                           Page    1
                                          System Execution Space Page Management
 From 2005/08/08 00:04:00                                                                                   GDLVM7
 To   2005/08/08 11:54:02                                                                                   CPU 2084-332   SN 2069A
 For  42602 Secs 11:50:02                 This is a performance report for system XYZ                       z/VM   V.5.2.0 SLU 0000
```

	<---- Page Requests/s ---->				<------------ Page Returns/s ------------>						<---- Aliases ----->			<PTE Invalidation>		
Interval	Free	Non-FS	<-Contiguous->		Free	Non-FS	<Contiguous->		<Queues of Pgs>		<-- Requests/sec -->			<-- Rates/sec --->		
End Time	Stor	Single	Requests	Pages	Stor	Single	Returns	Pages	Returns	Pages	Create	Remove	Queue	Steal	CSP	IPTE
>>Mean>>	.203	55.94	.003	.025	.193	55.93	.003	.025	.110	.148	49.75	49.50	.000	.001	.000	49.52
00:19:02	.183	13.36	.003	.027	.177	13.34	.003	.027	.103	.170	47.45	50.59	.000	.003	.000	50.59
00:24:02	.153	1.857	.003	.027	.150	1.847	.003	.027	.113	.150	16.79	17.38	.000	.003	.000	17.40
00:29:02	.113	2.723	.003	.027	.123	2.737	.003	.027	.093	.123	22.94	22.86	.000	.000	.000	22.88
00:34:02	.093	1.707	.003	.027	.077	1.687	.003	.027	.077	.077	20.26	21.04	.000	.000	.000	21.04
00:39:02	.137	1.420	.003	.027	.137	1.417	.003	.027	.103	.137	14.06	13.84	.000	.000	.000	13.87
00:44:00	.114	2.087	.003	.027	.111	2.081	.003	.027	.087	.111	30.29	28.81	.000	.003	.000	28.82
00:49:00	.130	1.067	.003	.027	.123	1.060	.003	.027	.110	.123	30.70	31.98	.000	.000	.000	31.99
00:54:00	.173	1.050	.003	.027	.153	1.040	.003	.027	.107	.147	20.42	20.59	.000	.000	.000	20.60
00:59:00	.147	1.020	.003	.027	.143	1.010	.003	.027	.120	.143	12.57	12.49	.000	.000	.000	12.51
01:04:00	.130	2.277	.003	.027	.160	2.317	.003	.027	.110	.160	80.80	81.36	.000	.000	.000	81.38
01:09:00	.247	40.86	.003	.027	.210	40.82	.003	.027	.097	.210	38.58	38.37	.000	.000	.000	38.42
01:14:00	.123	.793	.003	.027	.127	.807	.003	.027	.097	.127	11.84	12.02	.000	.000	.000	12.05
01:19:00	.160	1.750	.003	.027	.150	1.733	.003	.027	.120	.150	16.72	16.59	.000	.000	.000	16.62
01:24:00	.107	.707	.003	.027	.107	.707	.003	.027	.090	.107	17.88	17.97	.000	.000	.000	17.98
01:29:00	.117	1.223	.003	.027	.063	1.187	.003	.027	.057	.063	20.22	20.26	.000	.003	.000	20.28
01:34:00	.200	2.223	.003	.027	.130	2.177	.003	.027	.093	.127	30.79	30.71	.000	.000	.000	30.74
01:39:00	.120	2.513	.003	.027	.167	2.533	.003	.027	.087	.167	18.60	18.11	.000	.000	.000	18.11
01:44:00	.103	.793	.003	.027	.120	.810	.003	.027	.103	.120	17.06	17.41	.000	.000	.000	17.43
01:49:00	.160	1.483	.003	.027	.133	1.453	.003	.027	.097	.133	15.38	14.83	.000	.000	.000	14.83

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New Reports for FL520 – SXSDEFER (FCX263)

```
1FCX263  Run 2005/08/08 11:57:20          SXSDEFER                                                    Page    1
                                          System Execution Space Deferred Tasks Management
 From 2005/08/08 00:04:00                                                                           GDLVM7
 To   2005/08/08 11:54:02                                                                           CPU 2084-332   SN 2069A
 For  42602 Secs 11:50:02                 This is a performance report for system XYZ               z/VM   V.5.2.0 SLU 0000
```

Interval End Time	<Req. On a Page	Deferred/s-> <On a Frame> Any	<2GB	<--Non-Deferrable---> <-Requests Failed/s-> Alias	NoPage	NoFrame	<--Deferred--> <Create Alias> Average	Rate/s	<---- Deferred Page Requests -----> <With Backing> Total	Any	<2GB	<-For Frame-> Any	<2GB	<-Redrives/s-> Att- empts	Ind.Task Redrives
>>Mean>>	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:19:02	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:24:02	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:29:02	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:34:02	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:39:02	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:44:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:49:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:54:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
00:59:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:04:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:09:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:14:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:19:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:24:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:29:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:34:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:39:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:44:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
01:49:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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New Reports for FL520 – SXSUTIL (FCX264)

```
1FCX264  Run 2005/08/08 11:43:00          SXSUTIL                                                     Page    1
                                          System Execution Space Utilization
 From 2005/08/08 00:04:00                                                                           GDLVM7
 To   2005/08/08 11:39:02                                                                           CPU 2084-332   SN 2069A
 For  41702 Secs 11:35:02                 This is a performance report for system XYZ               z/VM   V.5.2.0 SLU 0000
```

Interval End Time	Total Pages	Avail- able Queues	<------- System Execution Space Utilization (Pages) -------> <------- Used -------> <------- CP -------> ID Total	Mapped	Free	<------- Aliases --------> Other	Total	<--Locked--> Total	CPLock	No- Owned	<Pages Backed> <2GB	>2GB	Poten- tial Steal	Conti- guous Queue	Pages
>>Mean>>	524287	480753	43534	3067	12441	5165	22862	125	0	0	9335	34234	22864	1669
00:04:00	524287	484591	39696	3067	10509	5167	20953	118	0	0	7385	32361	20955	1657
00:09:00	524287	484099	40188	3067	10502	5168	21451	117	0	0	7389	32858	21453	1657
00:14:02	524287	483257	41030	3067	10513	5170	22280	121	0	0	7407	33668	22282	1657
00:19:02	524287	484193	40094	3067	10515	5172	21340	113	0	0	7416	32728	21341	1657
00:24:02	524287	484368	39919	3067	10516	5174	21162	113	0	0	7416	32550	21163	1657
00:29:02	524287	484349	39938	3067	10513	5173	21185	115	0	0	7416	32573	21187	1657
00:34:02	524287	484579	39708	3067	10518	5174	20949	119	0	0	7420	32337	20951	1657
00:39:02	524287	484514	39773	3067	10518	5175	21013	116	0	0	7419	32401	21015	1657
00:44:00	524287	484073	40214	3067	10519	5176	21452	116	0	0	7425	32840	21453	1657
00:49:00	524287	484456	39831	3067	10521	5176	21067	110	0	0	7428	32455	21069	1657
00:54:00	524287	484502	39785	3067	10527	5173	21018	115	0	0	7427	32406	21020	1657

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New Reports for FL520 – QEBSM (FCX255)

```
1FCX255  Run 2005/08/08 14:48:26         QEBSM                                                                    Page    1
                                         QEBSM Device Activity
 From 2005/05/04 14:43:32                                                                                  GDLTPRF1
 To   2005/05/04 14:44:32                                                                                  CPU 2084-324   SN 96F5A
 For     60 Secs 00:01:00                This is a performance report for system XYZ                       z/VM   V.5.2.0 SLU 0000
 ____________________________________________________________________________________________________________________________

 ______       .      .      .      .      .      .      .      .      .      .      .      .
         <-------------- Executed/s by z/VM --------------->  <-QIOBK/QSD-->  <Pin Probl>  FOBLK
 Device  <-- SQBS ---> <-- EQBS ---> <---- SIGA Instr ----->  <Lock Fails/s>  <-Rate/s--> Resrce
 Number  SCompl SPartl ECompl EPartl SIGA-wt SIGA-rt SIGA-lt  General Output    Pin UnPin  Exh/s
 >>All<<   .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
 800A      .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
 CE02      .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
```


New Reports for FL520 – QEBSMLOG (FCX256)

```
1FCX256  Run 2005/08/08 14:54:12         QEBSMLOG CE02                                                            Page    1
                                         QEBSM Device Activity Log
 From 2005/05/04 14:37:32                                                                                  GDLTPRF1
 To   2005/05/04 14:44:32                                                                                  CPU 2084-324   SN 96F5A
 For  (Not applicable)                   This is a performance report for system XYZ                       z/VM   V.5.2.0 SLU 0000
 ____________________________________________________________________________________________________________________________

  QEBSM Activity Log for Device CE02

           <-------------- Executed/s by z/VM --------------->  <-QIOBK/QSD-->  <Pin Probl>  FOBLK
  Interval  <-- SQBS ---> <-- EQBS ---> <---- SIGA Instr ----->  <Lock Fails/s>  <-Rate/s--> Resrce
  End Time  SCompl SPartl ECompl EPartl SIGA-wt SIGA-rt SIGA-lt  General Output    Pin UnPin  Exh/s
  >>Mean>>    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
  14:38:32    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
  14:39:32    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
  14:40:32    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
  14:41:32    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
  14:42:32    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
  14:43:32    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
  14:44:32    .000   .000   .000   .000    .000    .000    .000     .000   .000   .000  .000   .000
```

New Reports for FL520 – UQDIO (FCX257)

```
1FCX257  Run 2005/08/08 13:35:09         UQDIO                                                                  Page    1
                                         User QDIO Activity Information
 From 2005/08/08 13:29:02                                                                                GDLVM7
 To   2005/08/08 13:34:02                                                                                CPU 2084-332   SN 2069A
 For    300 Secs 00:05:00                 This is a performance report for system XYZ                    z/VM   V.5.2.0 SLU 0000
 ____________________________________________________________________________________________________________________________

  _____        .          .          .       .            .        .
            <Guest Instruct>       Alert  <- Adapter Interruptions/s ->
            <-Intercepts/s->  Interrupts  <Delivered to Guest>  Stacked  Nr of
  Userid      TVS        SVS        /sec  ViaTPI         InSIE     ByCP  Users
  >System<     .0         .0         2.8      .0           2.8       .0      4
  LNXREGR      .0         .0          .0      .0            .0       .0
  SEL01        .0         .0          .0      .0            .0       .0
  TCPIP        .0         .0        11.0      .0          11.1       .0
  TCPIP310     .0         .0          .0      .0            .0       .0
```

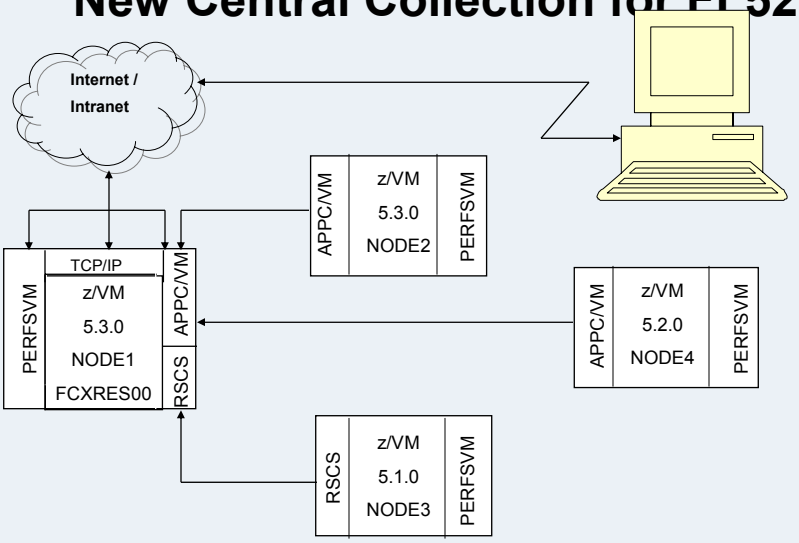

New Reports for FL520 – UQDIOLOG (FCX258)

```
1FCX258  Run 2005/08/08 13:55:52         UQDIOLOG LNXREGR                                                       Page    1
                                         User QDIO Activity Log
 From 2005/08/08 00:04:00                                                                                GDLVM7
 To   2005/08/08 13:54:02                                                                                CPU 2084-332   SN 2069A
 For  (Not applicable)                   This is a performance report for system XYZ                    z/VM   V.5.2.0 SLU 0000
 ____________________________________________________________________________________________________________________________

  QDIO Activity Log for User LNXREGR

            <Guest Instruct>       Alert  <- Adapter Interruptions/s ->
  Interval  <-Intercepts/s->  Interrupts  <Delivered to Guest>  Stacked
  End Time    TVS        SVS        /sec  ViaTPI         InSIE     ByCP
  >>Mean>>     .0         .0          .0      .0            .0       .0
  13:39:02     .0         .0          .0      .0            .0       .0
  13:44:02     .0         .0          .0      .0            .0       .0
  13:49:02     .0         .0          .0      .0            .0       .0
  13:54:02     .0         .0          .0      .0            .0       .0
```

New Central Collection for FL520



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New Central Collection for FL520

NODE1 Setup Files

File FCONRMT SYSTEMS

```
*System Definition file for remote monitoring
*Node-ID PERFKIT-ID VM Type Append Nickname
*|        |          |        |        |
NODE2    PERFSVM   z/VM5.3   N      FCXRES02
NODE3    PERFSVM   z/VM5.2   N      FCXRES03
NODE4    PERFSVM   z/VM5.1   N
```

File FCONRMT AUTHORIZ

```
*Authorization file for local and remote data retrieval and
*command execution
*Node-ID     User-ID      Authorized for ..
* NO ENTRIES NEEDED FOR COLLECTION
```

NOTE: To enable the Web Server, you will need entries for node 1

```
NODE1    PERFSVM   z/VM5.3   N      FCXRES00
```

```
NODE1      PERFSVM      S&FSERV  DATA
```

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New Central Collection for FL520

NODE2 Setup Files

File FCONRMT SYSTEMS

```
*System Definition file for remote monitoring
*Node-ID PERFKIT-ID VM Type Append Nickname
*|          |              |          |          |
*NO ENTRIES NEEDED
```

File FCONRMT AUTHORIZ

```
*Authorization file for local and remote data retrieval and
*command execution
*Node-ID    User-ID    Authorized for ..
NODE2       PERFSVM    S&FSERV  DATA
```

Directory Entry for PERFSVM at NODE2

```
IUCV *IDENT FCXRES02 GLOBAL
IUCV ALLOW
```

UCOMDIR NAMES A

```
:nick.FCXRES00          :luname.*IDENT
                        :tpn.FCXRES02
                        :security.SAME
```

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New Central Collection for FL520

NODE3 Setup Files

File FCONRMT SYSTEMS

```
*System Definition file for remote monitoring
*Node-ID PERFKIT-ID VM Type Append Nickname
*|          |              |          |          |
*NO ENTRIES NEEDED
```

File FCONRMT AUTHORIZ

```
*Authorization file for local and remote data retrieval and
*command execution
*Node-ID    User-ID    Authorized for ..
NODE3       PERFSVM    S&FSERV  DATA
```

Directory Entry for PERFSVM at NODE2

```
IUCV *IDENT FCXRES03 GLOBAL
IUCV ALLOW
```

UCOMDIR NAMES A

```
:nick.FCXRES00          :luname.*IDENT
                        :tpn.FCXRES03
                        :security.SAME
```

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New Central Collection for FL520

NODE4 (FL510) Setup Files

File FCONRMT SYSTEMS

File FCONRMT AUTHORIZ

No entries needed in either of these files, just need:

FC MONCOLL REMSEND ON RSCS nodeid userid

In FCONX $PROFILE or entered manually

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New for z/VM 5.3.0

- **Support for new z/VM Monitor Data and Features**
- **Changes for Mixed Engine support**
- **z/VM related changes**
- **Support for other products**

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New for z/VM 5.3.0

- **Support for new z/VM Monitor Data and Features**
  - **LOCKLOG Report FCX265**
  - **GVSWITCH Report FCX266**
  - **EVSWITCH Report FCX267**
  - **GVNIC Report FCX268**
  - **VNIC Report FCX269**
  - **EVNIC Report FCX270**

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FL530 New Reports – LOCKLOG (FCX265)

Access thru Option 3B

Session A - [24 x 80]

File Edit View Communication Actions Window Help

```
FCX265       CPU 2084  SER 56F5A  Interval 13:58:17 - 14:52:17     Perf. Monitor

                      <-------------------- Spin Lock Activity --------------------
                      <----- Total ------>  <--- Exclusive --->  <----- Shared --
Interval              Locks Average   Pct   Locks Average   Pct   Locks Average
End Time LockName      /sec    usec  Spin    /sec    usec  Spin    /sec    usec  S
14:52:17 NSUNLSLK        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 HCPPGDML        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 NSUIMGLK        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 FSDVMLK         .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 DCTLLOK         .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 SYSDATLK        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 RSACALLK        .3    .485  .000      .3    .485  .000      .0    .000  .
14:52:17 RSAAVLLK        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 HCPPGDAL        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 HCPPGDTL        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 HCPPGDSL        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 HCPPGDPL        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 SRMALOCK        .0    .000  .000      .0    .000  .000      .0    .000  .
14:52:17 HCPTRQLK       4.5    .441  .000     4.5    .441  .000      .0    .000  .
14:52:17 SRMSLOCK      30.4   1.507  .000    30.4   1.501  .000      .1   4.020  .

Command ===>
F1=Help  F4=Top  F5=Bot  F7=Bkwd  F8=Fwd  F10=Left  F11=Right  F12=Return
MA    a                                                          23/015
```

Connected to remote server/host gdlvme.pok.ibm.com using port 23 — usendl3f-250-02-P014-Endicott-N on usendl3f

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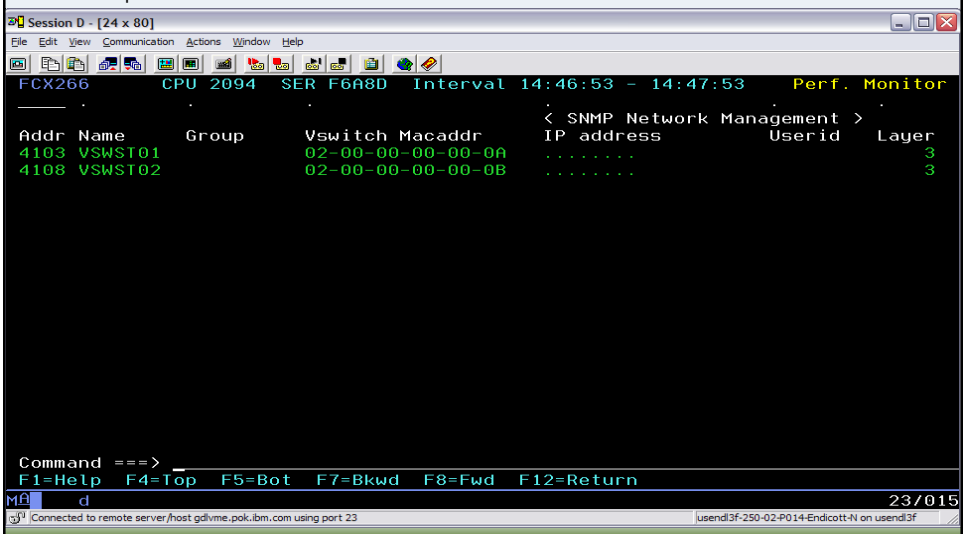
New Reports for FL530 – GVSWITCH (FCX266)

Access thru option 3K TCPIP Menu



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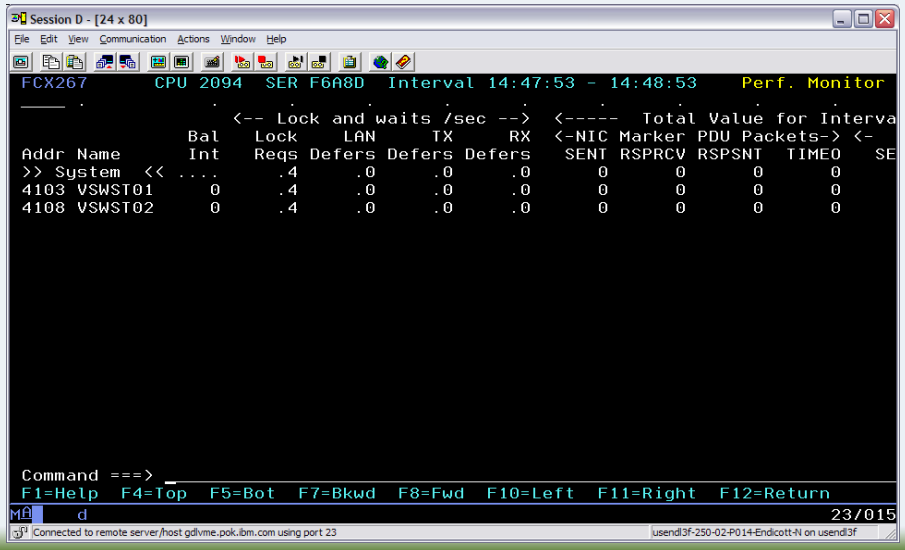
New Reports for FL530 – EVSWITCH (FCX267)

Access thru option 3K TCPIP



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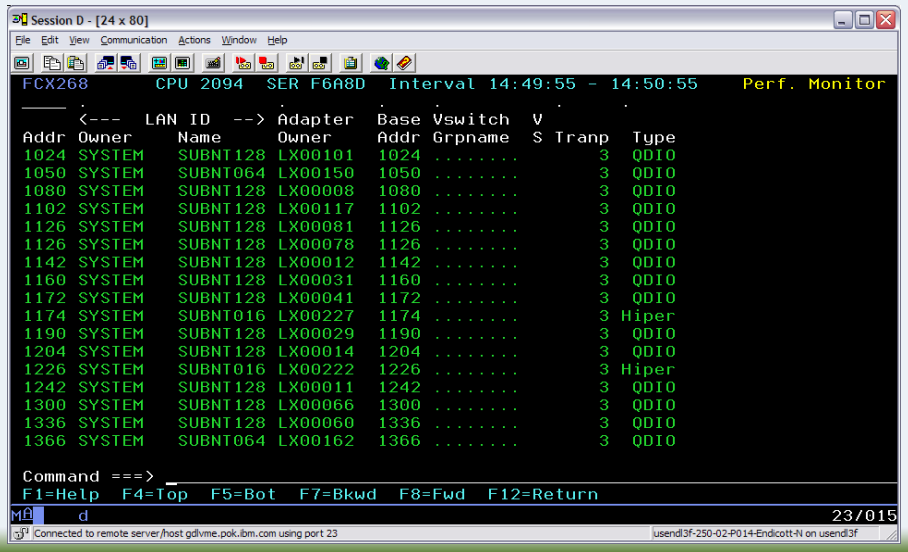
New Reports for FL530 – GVNIC (FCX268)

Access thru option 3K TCPIP

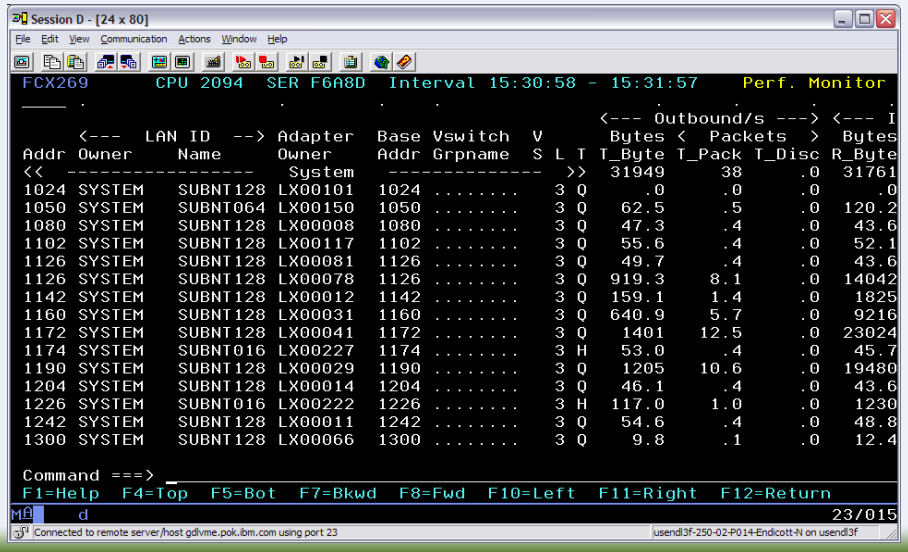


```
Session D - [24 x 80]
File  Edit  View  Communication  Actions  Window  Help
FCX268       CPU 2094  SER F6A8D  Interval 14:49:55 - 14:50:55    Perf. Monitor
     <---  LAN ID  --> Adapter  Base Vswitch  V
Addr Owner    Name     Owner    Addr Grpname  S Tranp  Type
1024 SYSTEM   SUBNT128 LX00101  1024 ........       3  QDIO
1050 SYSTEM   SUBNT064 LX00150  1050 ........       3  QDIO
1080 SYSTEM   SUBNT128 LX00008  1080 ........       3  QDIO
1102 SYSTEM   SUBNT128 LX00117  1102 ........       3  QDIO
1126 SYSTEM   SUBNT128 LX00081  1126 ........       3  QDIO
1126 SYSTEM   SUBNT128 LX00078  1126 ........       3  QDIO
1142 SYSTEM   SUBNT128 LX00012  1142 ........       3  QDIO
1160 SYSTEM   SUBNT128 LX00031  1160 ........       3  QDIO
1172 SYSTEM   SUBNT128 LX00041  1172 ........       3  QDIO
1174 SYSTEM   SUBNT016 LX00227  1174 ........       3 Hiper
1190 SYSTEM   SUBNT128 LX00029  1190 ........       3  QDIO
1204 SYSTEM   SUBNT128 LX00014  1204 ........       3  QDIO
1226 SYSTEM   SUBNT016 LX00222  1226 ........       3 Hiper
1242 SYSTEM   SUBNT128 LX00011  1242 ........       3  QDIO
1300 SYSTEM   SUBNT128 LX00066  1300 ........       3  QDIO
1336 SYSTEM   SUBNT128 LX00060  1336 ........       3  QDIO
1366 SYSTEM   SUBNT064 LX00162  1366 ........       3  QDIO

Command ===>
F1=Help  F4=Top  F5=Bot  F7=Bkwd  F8=Fwd  F12=Return
MA    d                                                    23/015
Connected to remote server/host gdlvme.pok.ibm.com using port 23   usendl3f-250-02-P014-Endicott-N on usendl3f
```


New Reports for FL530 – VNIC (FCX269)

Access thru option 3K TCPIP or from FCX268

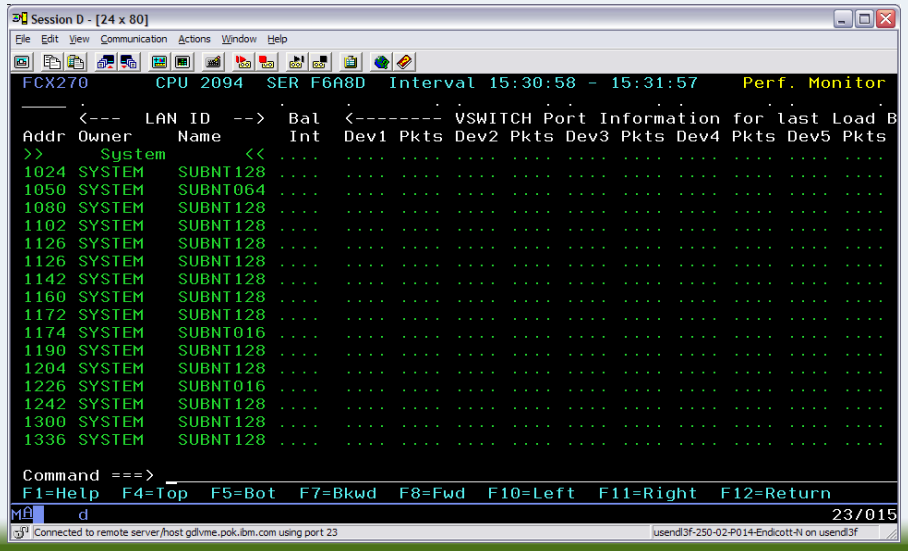


```
Session D - [24 x 80]
File  Edit  View  Communication  Actions  Window  Help
FCX269       CPU 2094  SER F6A8D  Interval 15:30:58 - 15:31:57    Perf. Monitor
                                                  <--- Outbound/s --->  <--- I
     <---  LAN ID  --> Adapter  Base Vswitch  V      Bytes <  Packets  >  Bytes
Addr Owner    Name     Owner    Addr Grpname  S L T T_Byte T_Pack T_Disc R_Byte
<<  ----------------   System   ----------  >> 31949     38      .0   31761
1024 SYSTEM   SUBNT128 LX00101  1024 ........ 3 Q    .0     .0      .0     .0
1050 SYSTEM   SUBNT064 LX00150  1050 ........ 3 Q   62.5     .5      .0   120.2
1080 SYSTEM   SUBNT128 LX00008  1080 ........ 3 Q   47.3     .4      .0    43.6
1102 SYSTEM   SUBNT128 LX00117  1102 ........ 3 Q   55.6     .4      .0    52.1
1126 SYSTEM   SUBNT128 LX00081  1126 ........ 3 Q   49.7     .4      .0    43.6
1126 SYSTEM   SUBNT128 LX00078  1126 ........ 3 Q  919.3     8.1     .0 14042
1142 SYSTEM   SUBNT128 LX00012  1142 ........ 3 Q  159.1     1.4     .0  1825
1160 SYSTEM   SUBNT128 LX00031  1160 ........ 3 Q  640.9     5.7     .0  9216
1172 SYSTEM   SUBNT128 LX00041  1172 ........ 3 Q   1401    12.5     .0 23024
1174 SYSTEM   SUBNT016 LX00227  1174 ........ 3 H   53.0     .4      .0    45.7
1190 SYSTEM   SUBNT128 LX00029  1190 ........ 3 Q   1205   10.6     .0 19480
1204 SYSTEM   SUBNT128 LX00014  1204 ........ 3 Q   46.1     .4      .0    43.6
1226 SYSTEM   SUBNT016 LX00222  1226 ........ 3 H  117.0     1.0     .0  1230
1242 SYSTEM   SUBNT128 LX00011  1242 ........ 3 Q   54.6     .4      .0    48.8
1300 SYSTEM   SUBNT128 LX00066  1300 ........ 3 Q    9.8     .1      .0    12.4

Command ===>
F1=Help  F4=Top  F5=Bot  F7=Bkwd  F8=Fwd  F10=Left  F11=Right  F12=Return
MA    d                                                    23/015
Connected to remote server/host gdlvme.pok.ibm.com using port 23   usendl3f-250-02-P014-Endicott-N on usendl3f
```

New Reports for FL530 – EVNIC (FCX270)

Access thru option 3K TCPIP or from FCX269



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New for z/VM 5.3.0

- **Changes for Mixed Engine support**
  - **CPU FCX100**
  - **LPAR FCX126**
  - **LPARLOG FCX202**
  - **PROCLOG FCX144**
  - **SCHEDLOG FCX145**
  - **SYSCONF FCX180**

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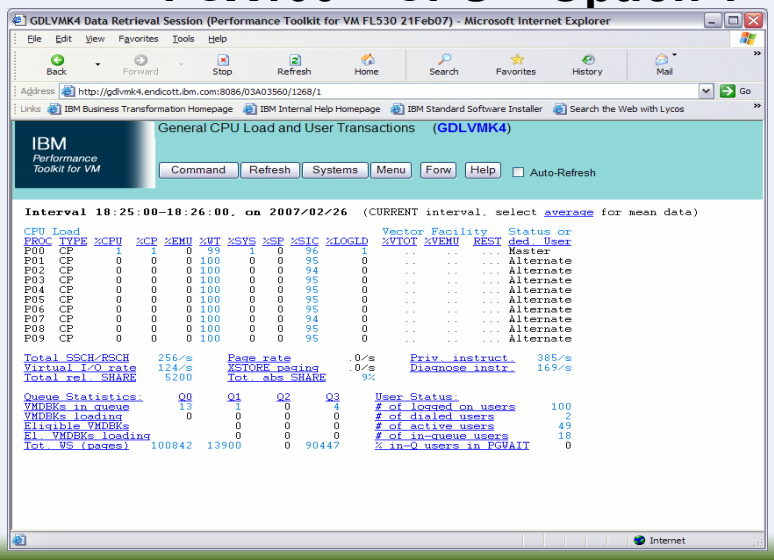
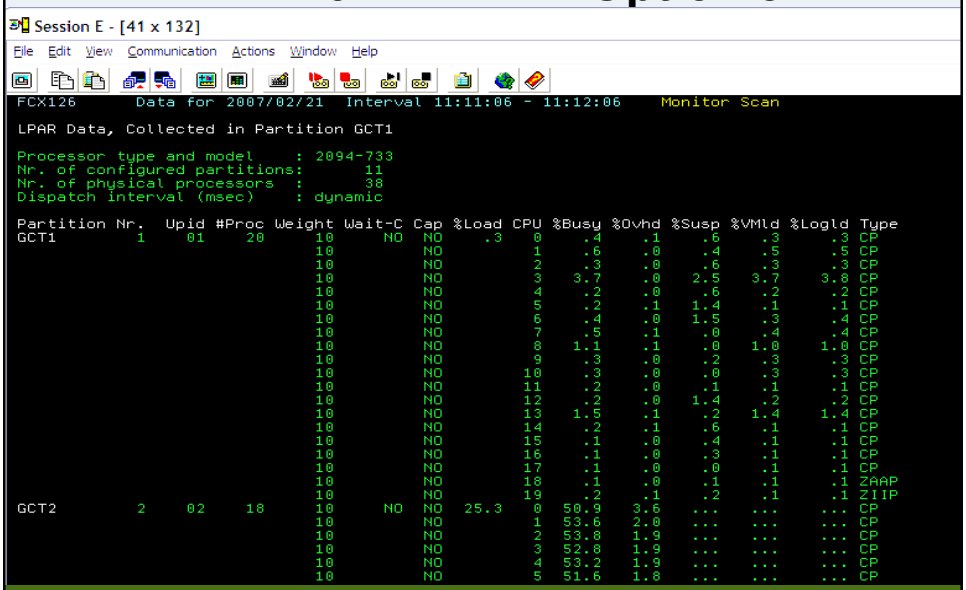
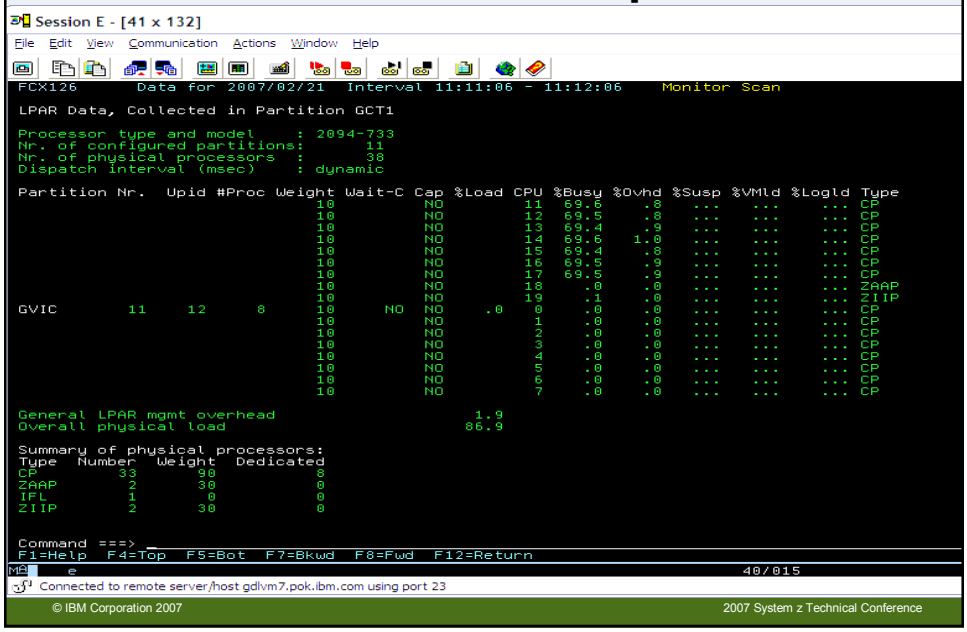
FCX100 – CPU – Option 1



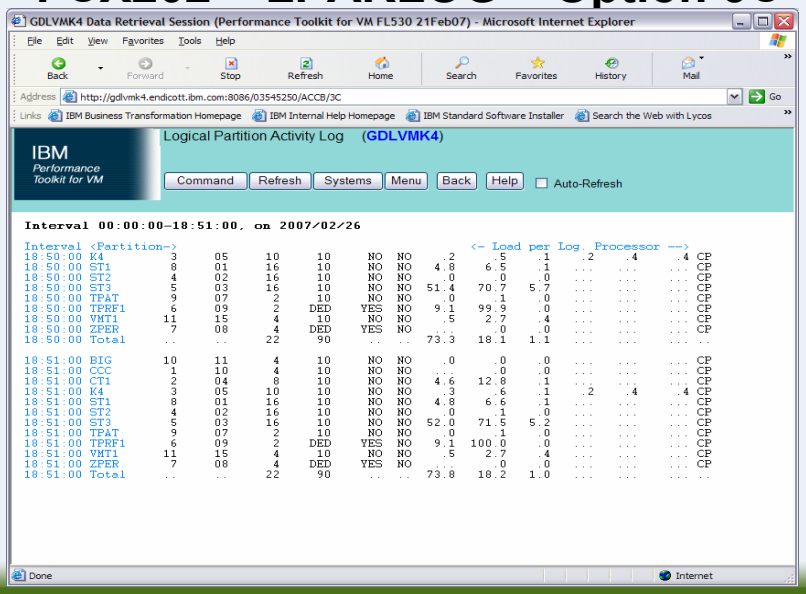
FCX126 – LPAR – Option 8



FCX126 – LPAR – Option 8



FCX202 – LPARLOG – Option 3C



FCX144 – PROCLOG – Option 3B

Session E - [41 x 132]

File Edit View Communication Actions Window Help

FCX144 Data for 2007/02/21 Interval 11:11:06 - 11:12:06 Monitor Scan

Interval End Time	C P U	Type	Total	User	Syst	Emul	Vect	Inst Siml	DIAG	SIGP	SSCH	Pct Em-pty	Mean when Non-0	VMDBK Mastr only	VMDBK Stoln /s	To Below Mastr /s	2GB /s	Fast PGIN /s	Path %	Page Reads /s	Ms
>>Mean>>	13	CP	1.4	.2	1.2	.1	....	7.4	7.5	211.6	146.9	..	....	....	10.2	1.0	.0	.0	....	.0	1
>>Mean>>	8	CP	.3	.2	.1	.1	....	4.9	1.2	104.7	.5	..	....	....	4.2	.0	.0	.0	....	.0	
>>Mean>>	1	CP	.5	.5	.1	.1	....	39.8	1.2	37.2	1.8	..	....	....	4.4	.0	.0	.0	....	.0	
>>Mean>>	2	CP	.3	.2	.1	.1	....	12.3	.6	20.3	.5	..	....	....	4.0	.0	.0	.0	....	.0	
>>Mean>>	3	CP	3.7	.0	3.7	.0	....	.7	.0	21.5	.2	..	....	....	1.4	.0	.0	.0	....	.0	
>>Mean>>	4	CP	.2	.1	.1	.0	....	3.9	.2	12.6	.3	..	....	....	5.7	.0	.0	.0	....	.0	
>>Mean>>	5	CP	.1	.1	.1	.0	....	1.4	.0	32.6	.1	..	....	....	3.5	.0	.0	.0	....	.0	
>>Mean>>	6	CP	.3	.2	.2	.1	....	8.6	.1	29.1	.7	..	....	....	10.8	.0	.0	.0	....	.0	
>>Mean>>	7	CP	.4	.2	.2	.1	....	8.5	.5	71.9	.6	..	....	....	10.9	.0	.0	.0	....	.0	
>>Mean>>	8	CP	1.0	.8	.2	.3	....	64.2	4.1	83.6	6.5	..	....	....	7.1	.0	.0	.0	....	.0	
>>Mean>>	9	CP	.3	.2	.1	.1	....	3.6	1.9	77.1	1.4	..	....	....	4.0	.0	.0	.0	....	.0	
>>Mean>>	10	CP	.3	.2	.1	.1	....	8.9	.6	23.5	1.2	..	....	....	6.2	.0	.0	.0	....	.0	
>>Mean>>	11	CP	.1	.1	.1	.1	....	.4	.5	32.0	.3	..	....	....	2.8	.0	.0	.0	....	.0	
>>Mean>>	12	CP	.2	.1	.0	.1	....	8.4	.1	30.5	.7	..	....	....	.9	.0	.0	.0	....	.0	
>>Mean>>	14	CP	.1	.1	.1	.1	....	.3	.4	13.5	.2	..	....	....	2.9	.0	.0	.0	....	.0	
>>Mean>>	15	CP	.1	.1	.0	.0	....	.0	.0	22.7	.1	..	....	....	.7	.0	.0	.0	....	.0	
>>Mean>>	16	CP	.1	.1	.0	.0	....	.4	.0	6.3	.1	..	....	....	4.0	.0	.0	.0	....	.0	
>>Mean>>	17	CP	.1	.0	.0	.0	....	.1	.2	20.7	.1	..	....	....	1.1	.0	.0	.0	....	.0	
>>Mean>>	18	ZAAP	.1	.0	.1	.0	....	.0	.0	.6	.3	..	....	....	.0	.0	.0	.0	....	.0	
>>Mean>>	19	ZIIP	.1	.0	.1	.0	....	.0	.0	1.7	.2	..	....	....	.0	.0	.0	.0	....	.0	
>>Mean>>	.	CP	.5	.1	.3	.0	....	9.6	1.0	47.7	8.9	..	0	....	4.7	.0	.0	.0	....	.0	
>>Mean>>	.	ZAAP	.1	.0	.1	.0	....	.0	.0	.6	.3	..	0	....	.0	.0	.0	.0	....	.0	
>>Mean>>	.	ZIIP	.1	.0	.1	.0	....	.0	.0	1.7	.2	..	0	....	.0	.0	.0	.0	....	.0	
11:12:06	13	CP	1.4	.2	1.2	.1	....	7.4	7.5	211.6	146.9	..	....	....	10.2	1.0	.0	.0	....	.0	1
11:12:06	8	CP	.3	.2	.1	.1	....	4.9	1.2	104.7	.5	..	....	....	4.2	.0	.0	.0	....	.0	
11:12:06	1	CP	.5	.5	.1	.1	....	39.8	1.2	37.2	1.8	..	....	....	4.4	.0	.0	.0	....	.0	
11:12:06	2	CP	.3	.2	.1	.1	....	12.3	.6	20.3	.5	..	....	....	4.0	.0	.0	.0	....	.0	
11:12:06	3	CP	3.7	.0	3.7	.0	....	.7	.0	21.5	.2	..	....	....	1.4	.0	.0	.0	....	.0	
11:12:06	4	CP	.2	.1	.1	.0	....	3.9	.2	12.6	.3	..	....	....	5.7	.0	.0	.0	....	.0	
11:12:06	5	CP	.1	.1	.1	.0	....	1.4	.0	32.6	.1	..	....	....	3.5	.0	.0	.0	....	.0	

Command ===>

F1=Help F4=Top F5=Bot F7=Bkwd F8=Fwd F12=Return

e 40/015

Connected to remote server/host gdlvm7.pok.ibm.com using port 23 usendl3f-250-02-P014-Endicott-N on usendl3f

FCX145 – SCHEDLOG – Option 3F

GDLVMK4 Data Retrieval Session (Performance Toolkit for VM FL530 21Feb07) - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit

Address http://gdlvmk4.endicott.ibm.com:8086/03545250/6FF9/3F

Links IBM Business Transformation Homepage IBM Internal Help Homepage IBM Standard Software Installer Search the Web with Lycos Windows Marketplace

IBM Performance Toolkit for VM

Scheduler Queue Lengths, by Time (GDLVMK4)

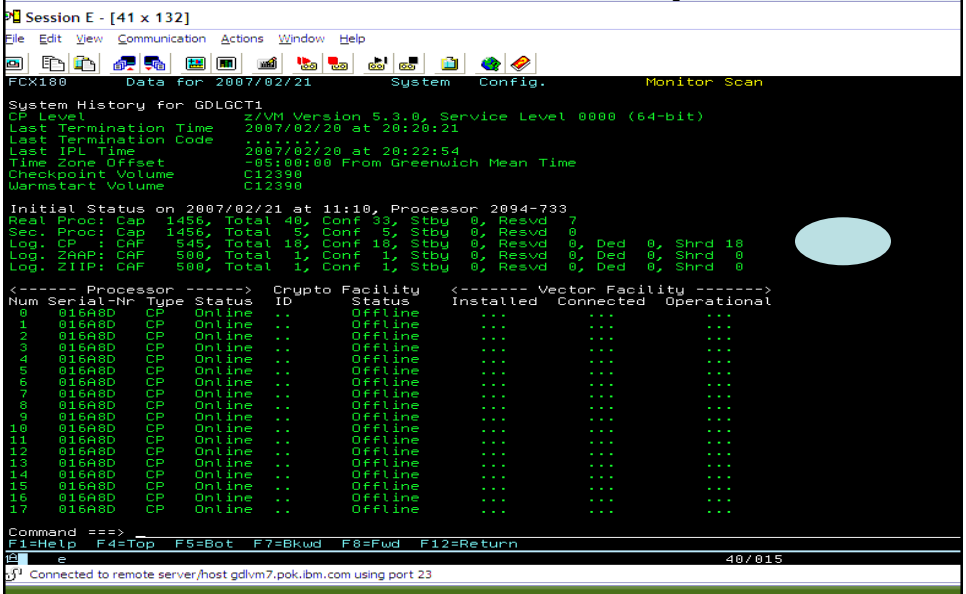
Command Refresh Systems Menu Back Help Auto-Refresh

Interval 00:00:00-18:57:00, on 2007/02/26

Interval End Time	Total VMDBK in Q	Users in Dispatch List Q0	Q1	Q2	Q3	Loading Q0	Q1	Q2	Q3	Lim Lst	In Eligible List E1	E2	E3	Loading E1	E2	E3	Class 1 Elapsed	Sum of Abs Shares	Sum of Rel Shares	Storage (Pages) Total Consid	Total VSS Q0	Q1	Q2	C
>>Mean>>	12	8.4	.1	.1	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	5%	3098	1027k	140k	300	51	9010
18:39:00	15	11	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	5745	1028k	188k	0	0	9050
18:40:00	16	12	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	3600	1028k	98273	0	0	9050
18:41:00	18	14	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	7029	1028k	152k	0	0	9050
18:42:00	8.0	4.0	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	500	1028k	29258	0	0	9051
18:43:00	14	10	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	6%	5745	1028k	169k	0	0	9050
18:44:00	10	6.0	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	6%	1787	1028k	63209	0	0	9051
18:45:00	14	10	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	5316	1028k	141k	0	0	9051
18:46:00	14	10	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	6%	5745	1028k	169k	0	0	9051
18:47:00	14	10	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	5316	1028k	116k	0	0	9051
18:48:00	13	9.0	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	1987	1028k	100k	0	0	9051
18:49:00	18	14	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	6374	1028k	216k	0	0	9051
18:50:00	19	15	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	4229	1028k	138k	0	0	9051
18:51:00	17	12	.0	1.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	5945	1028k	178k	0	179	9051
18:52:00	14	10	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	2416	1028k	136k	0	0	9051
18:53:00	15	11	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	5745	1028k	152k	0	0	9051
18:54:00	15	11	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	2845	1028k	136k	0	0	9051
18:55:00	16	11	1.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	5516	1028k	179k	1467	0	9051
18:56:00	12	8.0	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	6%	2645	1028k	134k	0	0	9051
18:57:00	16	12	.0	.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.050	9%	6174	1028k	211k	0	0	9057

Internet

FCX180 – SYSCONF – Option G



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Changes for FL530

- Shipping text decks
  - Reduce the size of PTFs
  - Consistent with other VMSES/E service
- FCXLEVEL changes
- New dump format
  - DUMPLOAD – increased the PERFSVM 191
  - Send the DUMP and the LOADMAP from 5VMPTK30
  - Consistent with other dumps for service
- Support for pass phrase from Web logon
  - Using DMSPASS interface
  - DIAG88 required in user directory for WEB server
- FC MONCOLL SEGOUT used by OMEGAMON XE

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New dump format

- DUMPLOAD – increased the PERFSVM 191
  - Send the DUMP and the LOADMAP from 5VMPTK30
  - Consistent with other dumps for service
- VMDUMPTL – used to look at dumps (like with CP)
  - PKINIT – New VMDUMPTL macro to show highlights of dump
    - Shows point of DUMP (FCXBAS)
    - Shows point of abend and reason
  - PKTRACE
    - Shows back trace of internal trace macro

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PKINIT – abend point

```
PSWs
  EXT 4000 18 Old 00080000 80B33648 FCXBAS+2398
           58 New 00080000 80F22FD8
  SVC 00C9 20 Old 000C0000 00F12838
           60 New 000C0000 80F116D6
  PRG 0001 28 Old 00E80000 80C89C66 FCXWWO+B76
                  PgmIntCode = Operation exception
           68 New 00080000 81381938
  MCH      30 Old 00000000 00000000
                  MCIC = 00000000 00000000
           70 New 00080000 80F3E9E8
  I/O      38 Old FFFFFFFF FFFFFFFF
           78 New 00080000 80F10DD8
----- Registers stored by CMS at Program Check Time-----
```

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PKINIT - Registers

```
 General registers from 00007944
R0 03966079                R8 03968EDF
R1 00000000                R9 00000000
R2 03968DA4                RA 03E93000
R3 00000000                RB 00C890F0 FCXWWO
R4 0396608B                RC 00C8A0F0 FCXWWO+1000
R5 03964CA8                RD 00C8A598 FCXWWO+14A8
R6 03968CA8                RE 00C8A696 FCXWWO+15A6
R7 00000000                RF 00000000
```

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Pass phrase support

- Keeping up with the rest of VM
- Used for WEB LOGON
- Password/passphrase is case sensitive
- PERFSVM now requires OPTION DIAG88 in the user directory
  - PERFKIT uses DMSPASS for authentication (New CMS lvl)
- SSL recommended if being used outside your own installation
- In keeping up with the rest of VM, This is the only option now available. IDTEST will be ignored with an informational message.

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New for z/VM 5.3.0

- **Support for other IBM products**
  - **FC MONCOLL SEGOUT for use with OMEGAMON XE**

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FC MONCOLL SEGOUT used by OMEGAMON XE

- Provides data in a shared segment
- Used by OMEGAMON XE
- Leaves the calculations in PERFKIT
- Provides data to OMEGAMON XE for viewing with other platforms

```
                    + Query
  FC MONCOLL SEGOUT +
                    |     + PERFOUT
                    + ON  +
                    |     + SEGNAME
                    + OFF
```

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Miscellaneous Hints

- Do not use 370 Accomodation
  - While RTM required this, it will result in problems with Performance Toolkit
- If you are going to have Performance Toolkit store data in SFS, you need to ensure SFS is first in autolog sequence
- User classes in Batch Mode are defined in SETTINGS file via FC UCLASS command, not via UCLASS file.
- PERFKIT uses some common interrupt areas, don ‘t use other programs from within PERFKIT that also do this. For example: PING

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References

- General information
  - http://www.vm.ibm.com/related/perfkit/
- Performance Toolkit Book
  - http://publibz.boulder.ibm.com/bookmgr_OS390/libraryserver/zvmv5r2/
- Comparison to VMPRF
  - http://www.vm.ibm.com/related/perfkit/pkitprf.html
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- Redbook:
  - http://www.redbooks.ibm.com/abstracts/sg246059.html
- Whitepaper: What's new in Performance Toolkit for VM in z/VM V5.1
  - http://www.vm.ibm.com/library/gm130637.pdf

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