

guider: a system-wide performance analyzer

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guider

- A system-wide performance analyzer
 - thread analysis
 - function analysis
 - top analysis
 - file analysis
- Open-source contribution
 - <https://github.com/iipeace/guider>

Requirement

- Linux kernel (≥ 3.0)
- Python (≥ 2.7)

Installation

- git

```
$ git clone https://github.com/iipeace/guider.git
```

```
$ cd guider
```

```
# make && make install
```

- pip

```
# pip install --pre guider
```

Top analysis

- Show real-time system status with processes
\$ guider **top**

```
/ g.u.i.d.e.r ver.3.8.3 /
-----
[Top Info] [Time: 2232770.320] [Interval: 1.0] [Ctxt: 2059] [Fork: 1] [IRQ: 1016] [Core: 12] [Task: 348/898] [RAM: 64374] [Swap: 65477] [Unit: %/MB]
=====
 ID   | CPU (Usr/Ker/Blk/IRQ)| Mem (Free/Anon/File/Slab)| Swap (Used/ InOut )| Reclaim | BlkRW | NrFlt | NrBlk | NrSIRQ | NrMlk | NrDrt | NetIO |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Total | 0 % ( 0 / 0 / 0 / 0 )| 3583 ( 2 / -4 / 0 / 0 )| 1226 ( 0 / 0/0 )| 0/0 | 0/0 | 0 | 0 | 169 | 17 | 17 | 8K/10K |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
 Process      ( ID / Pid / Nr / Pri)| CPU(Usr/Ker/Dly)| Mem(RSS/Txt/Shr/Swp)| Blk( RD / WR /NrFlt)| Yld | Prmt | FD | LifeTime| SignalHandler |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Plex DLNA Serve ( 3007/ 2953/ 54/C 0)| 3( 1/ 2/ -)| 1522(886/ 3/ 4/ 14)| 0( -/ -/ 0)| 0| 0| 256|620:12:38| 1800004e8 |
chromium-browser (16887/ 3734/ 13/C 0)| 2( 2/ 0/ -)| 1828(602/ 40/434/ 6)| 0( -/ -/ 0)| -| -| 512|188:33:34| 1c0014eed |
chromium-browser ( 4084/ 3734/ 10/C 0)| 1( 1/ 0/ -)| 1308(165/ 40/ 31/ 7)| 0( -/ -/ 0)| -| -| 512|620:11:11| 1c0014eed |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
[-]bash (13974/ 3460/ 1/C 0)| 0( 0/ 0/ -)| 25( 5/ 0/ -/ -)| 0( -/ -/ 0)| -| -| -| 0: 0: 4| - |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
```

Top analysis

- Show real-time system status with threads
\$ guider top -e t

```
/ g.u.i.d.e.r ver.3.8.3 /
```

```
[Top Info] [Time: 2232132.360] [Interval: 1.0] [Ctxt: 2060] [Fork: 0] [IRQ: 1034] [Core: 12] [Task: 352/921] [RAM: 64374] [Swap: 65477] [Unit: %/MB]
=====
  ID   | CPU (Usr/Ker/Blk/IRQ)| Mem (Free/Anon/File/Slab)| Swap (Used/ InOut )| Reclaim | BlkRW | NrFlt | NrBlk | NrSIRQ | NrMlk | NrDrt | NetIO |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Total | 0 % ( 0 / 0 / 0 / 0 )| 3825 ( -2 / 1 / 0 / 0 )| 1226 ( 0 / 0/0 )| 0/0 | 0/0 | 0 | 0 | 138 | 17 | 57 | 2K/6K |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
  Thread   ( ID / Pid / Nr / Pri)| CPU(Usr/Ker/Dly)| Mem(RSS/Txt/Shr/Swp)| Blk( RD / WR /NrFlt)| Yld | Prmt | FD | LifeTime| SignalHandler |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
 synergyc ( 3445/ 3443/ 3/C 0)| 13( 13/ 0/ -)| 226( 94/ 0/ 1/ 0)| 0( -/ -/ 0)| -| -| 64|620: 1:40| 180000200 |
  guider (13349/13349/ 1/C 0)| 2( 1/ 1/ -)| 47( 18/ 2/ 2/ 0)| 0( -/ -/ 0)| -| -|1024| 0: 0: 2| 180000006 |
 chromium-browse (16887/16887/ 18/C 0)| 1( 1/ 0/ 0)| 1841(599/ 40/434/ 6)| 0( -/ -/ 0)| 17| 6| 512|188:22:56| 1c0014eed |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
```

Top analysis

- Show only specific processes
\$ guider top -g chrome

```
/ g.u.i.d.e.r ver.3.8.3 /
```

```
[Top Info] [Time: 2232220.360] [Interval: 1.0] [Ctxt: 2004] [Fork: 0] [IRQ: 978] [Core: 12] [Task: 351/919] [RAM: 64374] [Swap: 65477] [Unit: %/MB]
```

```
=====  
ID | CPU (Usr/Ker/Blk/IRQ) | Mem (Free/Anon/File/Slab) | Swap (Used/ InOut ) | Reclaim | BlkRW | NrFlt | NrBlk | NrSIRQ | NrMlk | NrDrt | NetIO |  
=====  
Total | 0 % ( 0 / 0 / 0 / 0 ) | 3827 ( 0 / -1 / 0 / 0 ) | 1226 ( 0 / 0/0 ) | 0/0 | 0/0 | 0 | 0 | 110 | 17 | 3 | 3K/11K |  
=====
```

```
=====  
Process ( ID / Pid / Nr / Pri) | CPU(Usr/Ker/Dly) | Mem(RSS/Txt/Shr/Swp) | Blk( RD / WR /NrFlt) | Yld | Prmt | FD | LifeTime | SignalHandler |  
=====
```

```
chromium-browse (16887/ 3734/ 18/C 0) | 2 ( 2/ 0/ 0) | 1841(600/ 40/434/ 6) | 0 ( -/ -/ 0) | 13 | 5 | 512|188:24:24 | 1c0014eed |  
chromium-browse ( 4015/ 3734/ 13/C 0) | 1 ( 0/ 1/ 0) | 1777(239/ 40/ 39/ 9) | 0 ( -/ -/ 0) | 2 | 0 | 512|620: 2: 5 | 1c0014eed |  
chromium-browse ( 4298/ 3734/ 10/C 0) | 1 ( 1/ 0/ 0) | 1178( 77/ 40/ 16/ 24) | 0 ( -/ -/ 0) | 2 | 0 | 512|620: 1:53 | 1c0014eed |  
chromium-browse ( 3921/ 3810/ 1/C 0) | 0 ( 0/ 0/ -) | 694( 1/ 40/ 0/ 12) | 0 ( -/ -/ 0) | 0 | 0 | 256|620: 2:14 | 1c00004e8 |  
chromium-browse ( 4323/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1185( 85/ 40/ 26/ 8) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 1:52 | 1c0014eed |  
chromium-browse ( 4359/ 3734/ 17/C 0) | 0 ( 0/ 0/ 0) | 1308(148/ 40/ 30/ 8) | 0 ( -/ -/ 0) | 1 | 0 | 512|620: 1:51 | 1c0014eed |  
chromium-browse ( 3709/ 1814/ 39/C 0) | 0 ( 0/ 0/ 0) | 1985(160/ 40/ 47/ 18) | 0 ( -/ -/ 0) | 7 | 0 | 512|620: 2:15 | 180014003 |  
chromium-browse ( 4380/ 3734/ 9/C 0) | 0 ( 0/ 0/ -) | 1029( 33/ 40/ 16/ 9) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 1:51 | 1c0014eed |  
chromium-browse ( 4260/ 3734/ 10/C 0) | 0 ( 0/ 0/ 0) | 1139( 78/ 40/ 15/ 17) | 0 ( -/ -/ 0) | 1 | 0 | 512|620: 1:55 | 1c0014eed |  
chromium-browse ( 4269/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1087( 30/ 40/ 16/ 22) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 1:55 | 1c0014eed |  
chromium-browse ( 4005/ 3734/ 10/C 0) | 0 ( 0/ 0/ 0) | 1335(177/ 40/ 34/ 17) | 0 ( -/ -/ 0) | 1 | 0 | 512|620: 2: 5 | 1c0014eed |  
chromium-browse ( 4168/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1082( 24/ 40/ 14/ 17) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 1:59 | 1c0014eed |  
chromium-browse ( 3971/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1096( 30/ 40/ 15/ 22) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 2: 8 | 1c0014eed |  
chromium-browse ( 4306/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1085( 25/ 40/ 15/ 17) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 1:52 | 1c0014eed |  
chromium-browse ( 4238/ 3734/ 18/C 0) | 0 ( 0/ 0/ -) | 1359(179/ 40/ 85/ 7) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 1:57 | 1c0014eed |  
chromium-browse ( 3942/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1268( 66/ 40/ 18/148) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 2:10 | 1c0014eed |  
chromium-browse ( 4126/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1152( 48/ 40/ 17/ 37) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 2: 0 | 1c0014eed |  
chromium-browse ( 4389/ 3734/ 10/C 0) | 0 ( 0/ 0/ -) | 1106( 33/ 40/ 16/ 23) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 1:51 | 1c0014eed |  
chromium-browse ( 3728/ 3709/ 1/C 0) | 0 ( 0/ 0/ -) | 654( 6/ 40/ 4/ 8) | 0 ( -/ -/ 0) | 0 | 0 | 256|620: 2:14 | 1800104e8 |  
chromium-browse ( 4051/ 3734/ 10/C 0) | 0 ( 0/ 0/ 0) | 1299(136/ 40/ 21/ 14) | 0 ( -/ -/ 0) | 1 | 0 | 512|620: 2: 3 | 1c0014eed |  
chromium-browse ( 4084/ 3734/ 10/C 0) | 0 ( 0/ 0/ 0) | 1307(163/ 40/ 31/ 7) | 0 ( -/ -/ 0) | 1 | 0 | 512|620: 2: 1 | 1c0014eed |  
chromium-browse ( 3810/ 3709/ 3/C 0) | 0 ( 0/ 0/ -) | 800( 36/ 40/ 13/ 11) | 0 ( -/ -/ 0) | 0 | 0 | 512|620: 2:14 | 1c00004e8 |  
chromium-browse ( 3734/ 3728/ 1/C 0) | 0 ( 0/ 0/ -) | 654( 3/ 40/ 0/ 7) | 0 ( -/ -/ 0) | 0 | 0 | 256|620: 2:14 | 1800104e8 |  
=====
```

Top analysis

- Show memory details of processes
\$ guider top -e m

```
/ g.u.i.d.e.r ver.3.8.3 /
```

```
[Top Info] [Time: 2232341.560] [Interval: 1.0] [Ctxt: 2073] [Fork: 2] [IRQ: 1009] [Core: 12] [Task: 352/914] [RAM: 64374] [Swap: 65477] [Unit: %/MB]
```

ID	CPU (Usr/Ker/Blk/IRQ)	Mem (Free/Anon/File/Slab)	Swap (Used/ InOut)	Reclaim	BlkRW	NrFlt	NrBlk	NrSIRQ	NrMlk	NrDrt	NetIO
Total	0 % (0 / 0 / 0 / 0)	3824 (-1 / -1 / 0 / 0)	1226 (0 / 0/0)	0/0	0/0	0	0	134	17	29	3K/8K
Process	(ID / Pid / Nr / Pri)	CPU(Usr/Ker/Dly)	Mem(RSS/Txt/Shr/Swp)	Blk(RD / WR /NrFlt)	Yld	Prmt	FD	LifeTime	SignalHandler		
guider	(13461/11562/ 1/C 0)	2(2/ 0/ 0)	41(15/ 2/ 2/ 0)	0(-/ -/ 0)	1	65	512	0: 0: 3	180000006		
	(1) [STACK]	SIZE: 0M / RSS: 0M / PSS: 0M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 44K									
	(20) [HEAP]	SIZE: 14M / RSS: 12M / PSS: 12M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 12M									
	(11) [FILE]	SIZE: 27M / RSS: 2M / PSS: 2M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 328K									
	(2) [ETC]	SIZE: 0M / RSS: 0M / PSS: 0M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 0K									
chromium-browser	(16887/ 3734/ 18/C 0)	1(1/ 0/ 0)	1842(600/ 40/434/ 6)	0(-/ -/ 0)	13	5	512	188:26:25	1c0014eed		
	(18) [STACK]	SIZE: 136M / RSS: 0M / PSS: 0M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 596K									
	(112) [SHM]	SIZE: 449M / RSS: 402M / PSS: 400M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 596K / PDIRTY: 398M									
	(740) [HEAP]	SIZE: 639M / RSS: 162M / PSS: 162M / SWAP: 0M / HUGE: 38M / LOCKED: 0K / SDIRTY: 72K / PDIRTY: 161M									
	(204) [FILE]	SIZE: 617M / RSS: 36M / PSS: 6M / SWAP: 5M / HUGE: 0M / LOCKED: 0K / SDIRTY: 2732K / PDIRTY: 184K									
	(2) [ETC]	SIZE: 0M / RSS: 0M / PSS: 0M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 0K									
Plex DLNA Serve	(3007/ 2953/ 54/C 0)	1(1/ 0/ -)	1522(885/ 3/ 4/ 14)	0(-/ -/ 0)	-	-	256	620: 5:29	1800004e8		
	(54) [STACK]	SIZE: 424M / RSS: 50M / PSS: 50M / SWAP: 0M / HUGE: 50M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 50M									
	(2) [SHM]	SIZE: 0M / RSS: 0M / PSS: 0M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 4K / PDIRTY: 0K									
	(190) [HEAP]	SIZE: 928M / RSS: 831M / PSS: 831M / SWAP: 10M / HUGE: 818M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 831M									
	(63) [FILE]	SIZE: 169M / RSS: 4M / PSS: 2M / SWAP: 4M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 160K									
	(2) [ETC]	SIZE: 0M / RSS: 0M / PSS: 0M / SWAP: 0M / HUGE: 0M / LOCKED: 0K / SDIRTY: 0K / PDIRTY: 0K									

Top analysis

- Show all information
\$ guider top -a

```
/ g.u.i.d.e.r ver.3.8.3 /
```

```
[Top Info] [Time: 2232518.070] [Interval: 1.0] [Ctxt: 2128] [Fork: 0] [IRQ: 1011] [Core: 12] [Task: 352/906] [RAM: 64374] [Swap: 65477] [Unit: %/MB]
```

ID	CPU (Usr/Ker/Blk/IRQ)	Mem (Free/Anon/File/Slab)	Swap (Used/ InOut)	Reclaim	BlkRW	NrFlt	NrBlk	NrSIRQ	NrMlk	NrDrt	NetIO
Total	0 % (0 / 0 / 0 / 0)	3823 (-1 / -1 / 0 / 0)	1226 (0 / 0/0)	0/0	0/0	0	0	153	17	21	4K/19K
Core/0	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/1	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/2	2 % (2 / 0 / 0 / 0)	###								1171 Mhz	[1171-3418]
Core/3	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/4	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/5	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/6	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/7	0 % (0 / 0 / 0 / 0)									3418 Mhz	[1171-3418]
Core/8	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/9	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/10	0 % (0 / 0 / 0 / 0)									1171 Mhz	[1171-3418]
Core/11	0 % (0 / 0 / 0 / 0)									3418 Mhz	[1171-3418]

Process	(ID / Pid / Nr / Pri)	CPU(Usr/Ker/Dly)	Mem(RSS/Txt/Shr/Swp)	Blk(RD / WR /NrFlt)	Yld	Prmt	FD	LifeTime	SignalHandler
chromium-browse	(16887/ 3734/ 17/C 0)	1(1/ 0/ 0)	1843(601/ 40/434/ 6)	0(-/ -/ 0)	15	5	512	188:29:22	1c0014eed
Plex DLNA Serve	(3007/ 2953/ 53/C 0)	1(0/ 1/ -)	1522(885/ 3/ 4/ 14)	0(-/ -/ 0)	-	-	256	620: 8:26	1800004e8
chromium-browse	(3921/ 3810/ 1/C 0)	0(0/ 0/ -)	694(1/ 40/ 0/ 12)	0(-/ -/ 0)	0	0	256	620: 7:11	1c00004e8
khelper	(90/ 2/ 1/C-20)	0(0/ 0/ -)	0(0/ 0/ 0/ -)	0(-/ -/ 0)	0	0	64	620: 8:37	
kworker/u24:2	(11389/ 2/ 1/C 0)	0(0/ 0/ 0)	0(0/ 0/ 0/ -)	0(-/ -/ 0)	3	0	64	0:38:52	
window-stack-br	(1941/ 1814/ 1/C 0)	0(0/ 0/ -)	74(2/ 0/ 2/ 0)	0(-/ -/ 0)	0	0	64	620: 8:34	180014002
gnome-keyring-d	(1944/ 1814/ 6/C 0)	0(0/ 0/ -)	289(3/ 0/ 2/ 0)	0(-/ -/ 0)	0	0	64	620: 8:34	180000000
kworker/2:1	(19408/ 2/ 1/C 0)	0(0/ 0/ -)	0(0/ 0/ 0/ -)	0(-/ -/ 0)	0	0	64	19: 3:38	

Top analysis

- Show open files of specific processes
\$ guider top -e f -g sshd, upstart

```
/ g.u.i.d.e.r ver.3.8.3 /
```

```
[Top File Info] [Time: 2232642.640] [Proc: 352] [FD: 7652] [File: 1780] [Unit: %/MB]
```

PROC	(ID / Pid / Nr / Pri)	FD	PATH
sshd (12875/12835/ 1/C 0)		13 PIPE: 5 SOCKET: 4 DEVICE: 3 FILE: 1 PROC: 0 EVENT: 0	
		14 pipe:[50833107]	
		12 pipe:[50833106]	
		11 pipe:[50833105]	
		9 pipe:[50843741]	
		8 pipe:[50843741]	
		7 /run/systemd/sessions/222.ref	
		6 socket:[50842802]	
		5 socket:[50842749]	
		4 socket:[50842747]	
		3 socket:[50833095]	
		2 /dev/null	
		1 /dev/null	
0 /dev/null			
sshd (12451/12367/ 1/C 0)		13 DEVICE: 6 SOCKET: 4 PIPE: 2 FILE: 1 PROC: 0 EVENT: 0	
		13 /dev/ptmx	
		12 /dev/ptmx	
		10 /dev/ptmx	
		9 pipe:[50829119]	
		8 pipe:[50829119]	
		7 /run/systemd/sessions/221.ref	
		6 socket:[50829930]	
		5 socket:[50829911]	
		4 socket:[50832296]	
		3 socket:[50832581]	
		2 /dev/null	
		1 /dev/null	
0 /dev/null			
sshd (12367/ 1233/ 1/C 0)		11 SOCKET: 6 DEVICE: 4 FILE: 1 PIPE: 0 PROC: 0 EVENT: 0	
		10 socket:[50829942]	
		9 socket:[50829935]	
		8 socket:[50829931]	
		7 /run/systemd/sessions/221.ref	
		6 /dev/ptmx	

Top analysis

- Show stacks of specific processes
\$ guider top -e s -g init

```
/g.u.i.d.e.r ver.3.8.3/
```

```
[Top Info] [Time: 2232881.720] [Interval: 1.0] [Ctxt: 3731] [Fork: 1] [IRQ: 1831] [Core: 12] [Task: 348/902] [RAM: 64374] [Swap: 65477] [Unit: %/MB]
=====
 ID   | CPU (Usr/Ker/Blk/IRQ) | Mem (Free/Anon/File/Slab) | Swap (Used/ InOut ) | Reclaim | BlkRW | NrFlt | NrBlk | NrSIRQ | NrMlk | NrDrt | NetIO |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Total | 0 % ( 0 / 0 / 0 / 0 ) | 3545 ( -2 / 1 / -1 / 0 ) | 1226 ( 0 / 0/0 ) | 0/0 | 0/0 | 0 | 0 | 176 | 17 | 22 | 2K/9K |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Process ( ID / Pid / Nr / Pri) | CPU(Usr/Ker/Dly) | Mem(RSS/Txt/Shr/Swp) | Blk( RD / WR /NrFlt) | Yld | Prmt | FD | LifeTime | SignalHandler |
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
init ( 1/ 0/ 1/C 0) | 0( 0/ 0/ -) | 33( 3/ 0/ 1/ 0) | 0( -/ -/ 0) | 0 | 0 | 128 | 620:14:41 | 1a0016623 |
100% | poll_schedule_timeout+0x49/0x70 <- do_select+0x5b6/0x780 <- core_sys_select+0x1cc/0x2e0 <-
Sys_select+0xab/0x100 <- system_call_fastpath+0x1a/0x1f
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
init ( 1814/ 1804/ 1/C 0) | 0( 0/ 0/ -) | 37( 2/ 0/ 1/ 0) | 0( -/ -/ 0) | 0 | 0 | 256 | 620:14:37 | 180016001 |
100% | poll_schedule_timeout+0x49/0x70 <- do_select+0x5b6/0x780 <- core_sys_select+0x1cc/0x2e0 <-
Sys_select+0xab/0x100 <- system_call_fastpath+0x1a/0x1f
-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
```

Top analysis (report)

- Show system report

```
$ guider top -o ./ -b
```

```
$ guider stop
```

```
View guider.out
```

Run in background
Set path of report file

- System summary information

[Top Summary Info]

IDX	Interval	CPU(%)	MEM(MB)	BlkRW(MB)	BlkWait(%)	SWAP(MB)	Rclm(MB)	NrFlt	NrCtxt	NrIRQ	NrTask	NetIO
1	START - 14562.390	27	274	0/0	0	0	0/0	0	10549	7122	211/863	4K/4K
2	14562.390 - 14563.420	24	274	0/0	0	0	0/0	0	10458	6932	211/864	0K/2K
3	14563.420 - 14564.450	30	274	0/0	0	0	0/0	0	10563	6927	211/864	8K/6K
4	14564.450 - 14565.490	25	274	0/0	0	0	0/0	0	10596	6762	211/864	3K/3K
5	14565.490 - 14566.520	29	274	0/0	0	0	0/0	0	10504	6889	211/864	3K/3K
6	14566.520 - 14567.550	27	274	0/0	0	0	0/0	0	10297	6553	211/863	3K/3K
7	14567.550 - 14568.580	25	274	0/0	0	0	0/0	0	10035	6645	211/863	3K/3K
8	14568.580 - 14569.610	31	274	0/0	0	0	0/0	0	10191	6996	211/863	3K/3K
9	14569.610 - 14570.640	28	274	0/0	0	0	0/0	0	9993	6763	211/863	4K/3K
10	14570.640 - 14571.680	31	274	0/0	0	0	0/0	0	10172	6703	211/863	3K/3K
11	14571.680 - 14572.710	33	274	0/0	0	0	0/0	0	10326	6628	211/863	4K/4K
12	14572.710 - 14573.740	27	274	0/0	0	0	0/0	0	10258	6802	211/863	4K/5K
13	14573.740 - 14574.770	29	274	0/0	0	0	0/0	0	10199	6501	211/863	4K/5K

Top analysis (report)

- Memory usage(MB) per process

[Top Memory Info] [Unit: MB]

COMM	(ID / Pid / Nr / Pri)	Diff	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
			22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
			43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
			64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
			85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
			106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
			127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147
			148	149	150	151	152	153	154	155	156												
[FREE]	(- / - / - / -)	226	0	0	0	0	0	0	-1	0	0	-1	0	0	0	0	-1	0	-1	0	0	-1	
			0	-1	0	-1	0	-1	0	-1	0	-1	0	-1	0	-1	0	-1	0	-1	-1	0	0
			0	-1	-1	0	-1	0	0	0	0	-1	0	-1	-1	0	0	-1	0	-1	0	-1	0
			0	0	0	0	0	0	-1	0	-1	0	-1	0	-1	0	-1	-1	0	-1	0	-1	0
			0	0	0	0	0	-1	0	0	-1	0	0	0	0	-1	0	0	-1	0	0	0	-1
			0	-1	0	-1	0	-1	0	-1	0	-1	-1	0	-1	-1	0	0	-1	0	0	0	4
			0	0	-1	-2	0	-1	0	0	-2	299	4	-6	-11	-7	-15	-3	-8	-43	23	-8	-8
			20	-1	-4	-2	-8	2	-3	-5	-1												
chrome	(29381/ 3861/ 25/C 0)	104	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	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	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	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	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	36	-6	7	16	13	11	12	6	-3	1	3	2
			4	1	0	0	1	0	0	0	0												
chrome	(29422/ 3861/ 10/C 0)	67	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	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	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	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	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	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	0	0	0	0	0	0
			3	0	3	1	4	0	5	5	0									59	-24	6	5

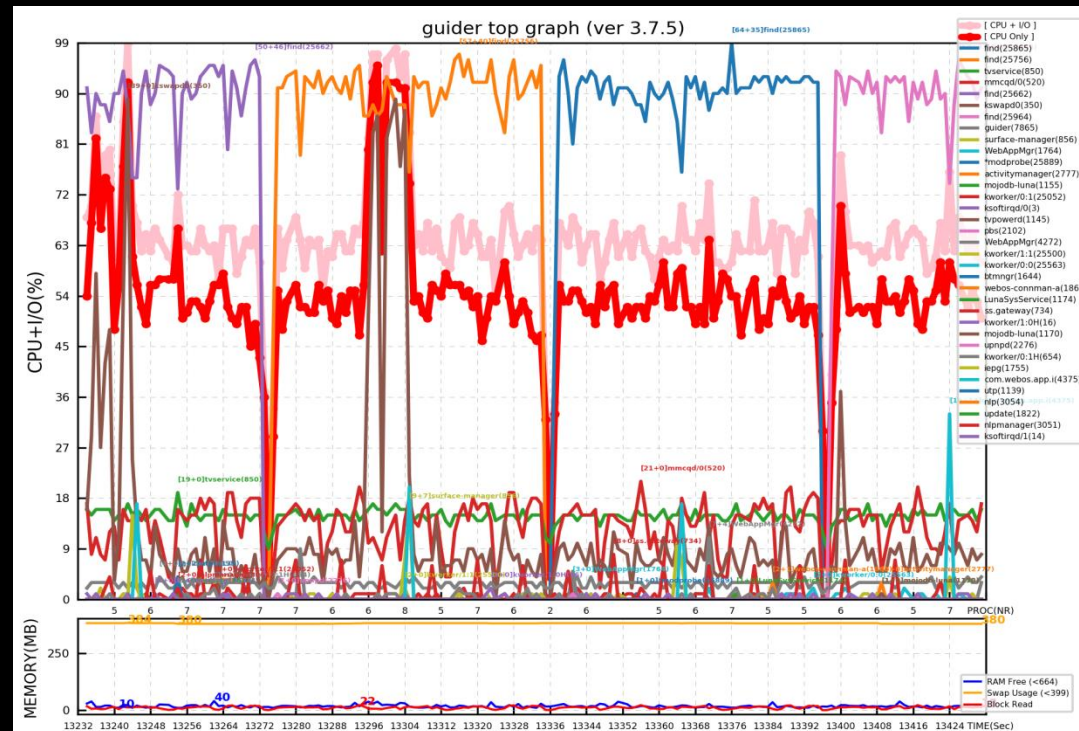
Top analysis (report)

- Saved system stat list

```
***** Detailed Statistics *****
[Top Info] [Time: 14722.250] [Interval: 1.0] [Ctxt: 9270] [Fork: 0] [IRQ: 6000] [Core: 4] [Task: 211/872] [RAM: 3000] [Swap: 599] [Unit: %/MB]
=====
ID | CPU (Usr/Ker/Blk/IRQ) | Mem (Free/Anon/File/Slab) | Swap (Used/ InOut ) | Reclaim | BlkRW | NrFlt | NrBlk | NrSIRQ | NrMlk | NrDrt | NetIO |
-----
Total | 16 % (12 / 4 / 0 / 0 ) | 500 ( -1 / 0 / -1 / 0 ) | 0 ( 0 / 0/0 ) | 0/0 | 0/0 | 0 | 0 | 894 | 3 | 8 | 2K/2K |
=====
Process ( ID / Pid / Nr / Pri) | CPU(Usr/Ker/Dly) | Mem(RSS/Txt/Shr/Swp) | Blk( RD / WR /NrFlt) | Yld | Prmt | FD | LifeTime | SignalHandler |
-----
surface-manager ( 1380/ 1/ 23/C 0) | 18( 17/ 1/ 5) | 563(243/ 0/141/ 0) | 0( -/ -/ 0) | 52 | 189 | 256 | 4: 5:20 | 18001c4e8 |
chrome (29381/ 3861/ 25/C 0) | 16( 15/ 1/ 1) | 520(121/ 0/ 56/ 0) | 0( -/ -/ 0) | 79 | 51 | 256 | 0: 0:21 | 18000c4e8 |
tvservice ( 1378/ 1/ 140/C 0) | 6( 1/ 5/ -) | 1109( 41/ 20/ 22/ 0) | 0( -/ -/ 0) | 0 | 0 | 512 | 4: 5:20 | 180018eee |
qml-runner ( 1487/ 1448/ 13/C 0) | 5( 0/ 5/ 0) | 202( 43/ 0/ 31/ 0) | 0( -/ -/ 0) | 104 | 4 | 32 | 4: 5:11 | 1800184e8 |
guider ( 3994/ 1/ 1/C 0) | 3( 3/ 0/ 0) | 30( 25/ 0/ 1/ 0) | 0( -/ -/ 0) | 1 | 34 | 512 | 4: 4:10 | 1800084ee |
chrome (29422/ 3861/ 10/C 0) | 1( 1/ 0/ 0) | 347( 80/ 0/ 34/ 0) | 0( -/ -/ 0) | 67 | 8 | 256 | 0: 0:13 | 18000c4e8 |
=====
[Top Info] [Time: 14721.210] [Interval: 1.0] [Ctxt: 9178] [Fork: 3] [IRQ: 6166] [Core: 4] [Task: 211/872] [RAM: 3000] [Swap: 599] [Unit: %/MB]
=====
ID | CPU (Usr/Ker/Blk/IRQ) | Mem (Free/Anon/File/Slab) | Swap (Used/ InOut ) | Reclaim | BlkRW | NrFlt | NrBlk | NrSIRQ | NrMlk | NrDrt | NetIO |
-----
Total | 45 % (36 / 9 / 0 / 0 ) | 500 ( -5 / 4 / 0 / 0 ) | 0 ( 0 / 0/0 ) | 0/0 | 0/0 | 0 | 0 | 985 | 3 | 8 | 8K/4K |
=====
Process ( ID / Pid / Nr / Pri) | CPU(Usr/Ker/Dly) | Mem(RSS/Txt/Shr/Swp) | Blk( RD / WR /NrFlt) | Yld | Prmt | FD | LifeTime | SignalHandler |
-----
chrome (29422/ 3861/ 10/C 0) | 86( 86/ 0/ 3) | 347( 80/ 0/ 34/ 0) | 0( -/ -/ 0) | 14 | 491 | 256 | 0: 0:12 | 18000c4e8 |
surface-manager ( 1380/ 1/ 23/C 0) | 19( 10/ 9/ 3) | 563(243/ 0/141/ 0) | 0( -/ -/ 0) | 102 | 191 | 256 | 4: 5:19 | 18001c4e8 |
chrome (29381/ 3861/ 25/C 0) | 17( 12/ 5/ 3) | 520(121/ 0/ 56/ 0) | 0( -/ -/ 0) | 74 | 22 | 256 | 0: 0:20 | 18000c4e8 |
qml-runner ( 1487/ 1448/ 13/C 0) | 5( 0/ 5/ 0) | 202( 43/ 0/ 31/ 0) | 0( -/ -/ 0) | 78 | 105 | 32 | 4: 5:10 | 1800184e8 |
tvservice ( 1378/ 1/ 140/C 0) | 5( 2/ 3/ -) | 1109( 41/ 20/ 22/ 0) | 0( -/ -/ 0) | 0 | 0 | 512 | 4: 5:19 | 180018eee |
guider ( 3994/ 1/ 1/C 0) | 4( 4/ 0/ 0) | 30( 25/ 0/ 1/ 0) | 0( -/ -/ 0) | 1 | 64 | 512 | 4: 4: 9 | 1800084ee |
chrome ( 3861/ 1450/ 38/C 0) | 1( 1/ 0/ 0) | 523(146/ 0/110/ 0) | 0( -/ -/ 0) | 7 | 2 | 256 | 4: 4:26 | 18001c4eb |
=====
```

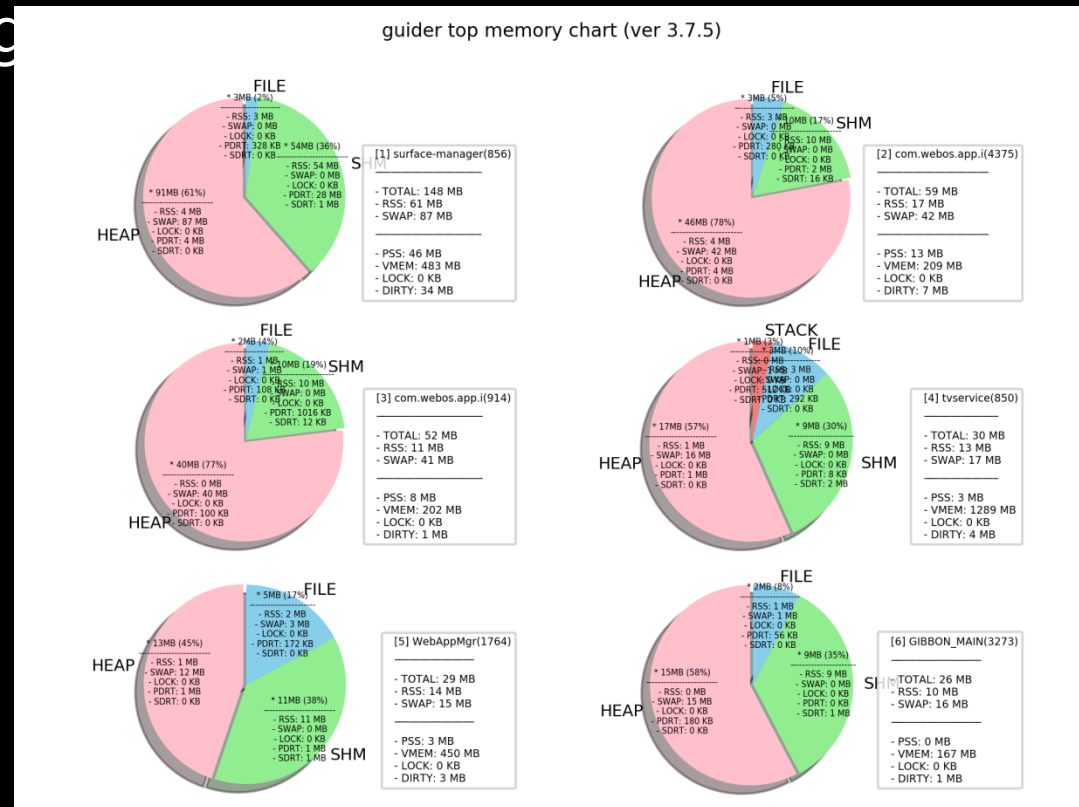

Top analysis (graph)

- Show system graph and memory chart
\$ guider top -e g -I guider.out
View guider_graph.png



Top analysis (chart)

- Show system graph and memory chart
\$ guider top -e g -I guider.out
View guider_chart.png



Thanks 😊

<https://github.com/iipeace/guider>