

computing - Bug #2089

install sysstat on idmecluster head node

30/05/2012 18:27 - Jonathan Barber

Status:	Closed	Start date:	30/05/2012
Priority:	Normal	Due date:	
Assignee:	Jonathan Barber	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Description			
To find out why the IO is so slow.			

History

#1 - 30/05/2012 18:30 - Jonathan Barber

Use "rug" to install packages:

```
idmecluster:~ # rug sl

# | Status | Type | Name | URI
--+-+-----+-----+-----+-----+
1 | Active | ZYPP | SUSE-Linux-Enterprise-Server-x86_64-10-0-20080129-181407 | iso:///?iso=/cluster/BACKUPS_FSC/SLES10_64.iso&alias=SUSE-Linux-Enterprise-Server-x86_64-10-0-20080129-181407
2 | Active | ZYPP | SUSE-Linux-Enterprise-Server-x86_64-10-0-20110325-102358 | dir:///cluster/home2/setupcds/x86/SLES10_x64/?alias=SUSE-Linux-Enterprise-Server-x86_64-10-0-20110325-102358
3 | Active | ZYPP | SUSE-Linux-Enterprise-Server-x86_64-10-0-20110325-151617 | iso:///?iso=/cluster/home2/setu
pcds/x86/SLES-10-AMD64-EM64T-CD1.iso&alias=SUSE-Linux-Enterprise-Server-x86_64-10-0-20110325-151617
```

Check the package is found:

```
idmecluster:~ # rug if "*sysstat*"
Waking up ZMD...Done
Catalog: dir:///cluster/home2/setupcds/x86/SLES10_x64/?alias=SUSE-Linux-Enterprise-Server-x86_64-10-0-20110325-102358
Name: sysstat
Version: 6.0.2-16.4
Arch: x86_64
Installed: No
Status: up-to-date
Installed Size: 421807
Summary: Sar and Iostat Commands for Linux
Description: <!-- DT:Rich -->
Sar and Iostat commands for Linux.
The sar command collects and reports system activity information. The iostat command reports CPU statistics and I/O statistics for TTY devices and disks. The information collected by sar and iostat can be saved in a binary file for future inspection. Both commands now support SMP machines when displaying CPU utilization.
```

Installation fails because Service 1 doesn't exists, so delete it:

```
idmecluster:~ # rug sd 1
Successfully removed service 'iso:///?iso=/cluster/BACKUPS_FSC/SLES10_64.iso&alias=SUSE-Linux-Enterprise-Serve
r-x86_64-10-0-20080129-181407'
```

Now install it (slow...):

```
idmecluster:~ # rug in sysstat
```

#2 - 30/05/2012 18:47 - Jonathan Barber

"iostat -x 10" shows very high wait times on sda, but why?:

avg-cpu:	%user	%nice	%system	%iowait	%steal	%idle
	0.40	0.00	14.90	232.50	0.00	152.20

Device:	rrqm/s	wrqm/s	r/s	w/s	rsec/s	wsec/s	rkB/s	wkB/s	avgrq-sz	avgqu-sz	await	svctm	%util
sda	0.00	5.10	0.00	120.50	0.00	1004.00	0.00	502.00	8.33	124.52	1154.12	8.30	100.00
sdb	0.00	3399.50	0.10	132.40	0.80	28281.60	0.40	14140.80	213.45	95.42	719.99	5.83	77.28
sdc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
dm-0	0.00	0.00	0.10	3535.20	0.80	28281.60	0.40	14140.80	8.00	4109.82	1162.51	0.22	77.28
dm-1	0.00	0.00	0.10	3535.20	0.80	28281.60	0.40	14140.80	8.00	4109.83	1162.51	0.22	77.28
dm-2	0.00	0.00	0.10	3534.40	0.80	28275.20	0.40	14137.60	8.00	4109.33	1162.63	0.22	77.28
dm-3	0.00	0.00	0.00	0.80	0.00	6.40	0.00	3.20	8.00	0.51	640.50	311.50	24.92
dm-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(sdb and sdc are the multipath'd iSCSI block devices from the Clariion).

No swapping:

```
idmecluster:~ # sar -r 1 10
```

Linux 2.6.16.21-0.8-smp (idmecluster)	05/30/2012
---------------------------------------	------------

06:37:35 PM	kmemfree	kmemused	%memused	kbbuffers	kbcached	kbswpfree	kbswpused	%swpused	kbswpcad
06:37:36 PM	56748	7610408	99.26	41536	6825504	8393736	216	0.00	0
06:37:37 PM	56748	7610408	99.26	41544	6825496	8393736	216	0.00	0
06:37:38 PM	56024	7611132	99.27	41564	6825476	8393736	216	0.00	0
06:37:39 PM	56040	7611116	99.27	41564	6825476	8393736	216	0.00	0
06:37:40 PM	56148	7611008	99.27	41564	6825476	8393736	216	0.00	0
06:37:41 PM	56148	7611008	99.27	41564	6825476	8393736	216	0.00	0
06:37:42 PM	56156	7611000	99.27	41564	6825476	8393736	216	0.00	0
06:37:43 PM	56300	7610856	99.27	41568	6825472	8393736	216	0.00	0
06:37:44 PM	56968	7610188	99.26	41568	6825472	8393736	216	0.00	0
06:37:44 PM	kmemfree	kmemused	%memused	kbbuffers	kbcached	kbswpfree	kbswpused	%swpused	kbswpcad
06:37:45 PM	54716	7612440	99.29	41576	6825464	8393736	216	0.00	0
Average:	56200	7610956	99.27	41561	6825479	8393736	216	0.00	0

Hmm, see rpc.mountd, kjournald, pdfflush in D state (later 2 occasionally).

#3 - 31/05/2012 10:53 - Jonathan Barber

- Assignee set to Jonathan Barber

#4 - 31/05/2012 11:14 - Jonathan Barber

nfs was blocking on all of the clients. Solved by "service nfsserver restart" on idmecluster.

Related?

rpc.mountd no longer in D state. iostat still shows high utilisation.

#5 - 31/05/2012 11:55 - Jonathan Barber

Could be that the high wait time on the local disk is due to lack of battery backed RAID controller and therefore no writeback cache?

#6 - 13/06/2012 16:14 - Jonathan Barber

sar isn't included by default in cron on SuSE:

```
chkconfig sysstat on
service sysstat start
```

#7 - 13/06/2012 16:16 - Jonathan Barber

- Status changed from New to Closed

Machine crashed at Thu May 31 03:36:00 WEST 2012 after running smartctl to query local SCSI interface. Load is now more normal.