

# Hugepages Plugin Executed Tests

## hugepages plugin tests:

### Test Environment details:

- Bare Metal, Ubuntu 16.04.1 LTS
- Kernel version: 4.4.0-43-generic

### Repo/branch used:

- collectd/master

### Tests precondition:

#### Hugepages plugin configuration:

- Open collectd config file: vim /install\_folder/etc/collectd.conf
- Uncomment LoadPlugin "hugepages" fields.
- Add global to collectd.conf: Interval 2

### NOTE:

The following set of tests is parametrized and run for 1G and 2M hugepage sizes. So, it means that number of executed tests is multiplied by 2 - 1(last test case #12 is run once because it covers mixed of 1G and 2M sizes).

#	Test summary	Steps	Actual result	Expected result	Status - PASS /FAIL	Automated status
#	Test summary	Steps	Actual result	Expected result	Status - PASS /FAIL	Automated status
1.	<b>Verify that collectd hugepages plugin operates with default custom config</b>	1. Start collectd daemon : /install_folder/sbin/collectd  2. Navigate to: /tmp /hostname_folder/  3. Check that files were created in hugepages folder.	Folder hugepages-mm-2048Kb was created.  Files in format \$vmpage_number-{0}-{1}  {0} - [free, used]  {1} - YYYY-MM-DD were created	Folder hugepages-mm-2048Kb was created.  Files in format \$vmpage_number-{0}-{1}  {0} - [free, used]  {1} - YYYY-MM-DD were created	PASS	TRUE
2.	<b>Verify that data from hugepages plugin is not collected when collectd is stopped</b>	1. Start collectd daemon : /install_folder/sbin/collectd  2. Parse hugepages datafile  3. Stop collectd.	Data from hugepages plugin does not collected	Data from hugepages plugin does not collected	PASS	TRUE
3	<b>Verify that hugepages collectd plugin displays expected free memory</b>	1. Start collectd daemon : /install_folder/sbin/collectd  2. Parse hugepages datafile.  3. Change free hugepages  4. Parse hugepages datafile	Free memory written by write plugin is equal to value from proc/meminfo  Free memory has changed in hugepages datafile	Free memory written by write plugin is equal to value from proc/meminfo  Free memory has changed in hugepages datafile	PASS	TRUE
4	<b>Verify hugepages plugin handle data after collectd was restarted</b>	1. Start collectd daemon : /install_folder/sbin/collectd  2. Parse hugepages datafile.  3. Restart collectd.  4. Parse hugepages datafile.	Free memory written by write plugin is equal to value from proc/meminfo  Free memory written by write plugin is equal to value from proc/meminfo	Free memory written by write plugin is equal to value from proc/meminfo  Free memory written by write plugin is equal to value from proc/meminfo	PASS	TRUE

5	<i>Verify that hugepages collectd plugin displays expected percent used and free memory</i>	1. Set ValuesPercentage true 2. Start collectd daemon : /install_folder/sbin/collectd 3. Parse hugepages datafile	Percentage of used and free memory written by write plugin are equal to expected values	Percentage of used and free memory written by write plugin are equal to expected values	PASS	TRUE
6	<i>Verify that hugepages collectd plugin displays expected used memory</i>	1. Start collectd daemon : /install_folder/sbin/collectd 2. Parse hugepages datafile	Used memory written by write plugin is equal to value from proc/meminfo	Used memory written by write plugin is equal to value from proc/meminfo	PASS	TRUE
7	<i>Verify hugepages plugin does not collect data about hugepage number when ValuesPages false</i>	1. Set ValuesPages false 2. Start collectd daemon : /install_folder/sbin/collectd 3. Set ValuesPages true 4. Restart collectd daemon : /install_folder/sbin/collectd	Folder / file were not created for handling number of hugepages  Folder / file were created for handling number of hugepages	Folder / file were not created for handling number of hugepages  Folder / file were created for handling number of hugepages	PASS	TRUE
8	<i>Verify hugepages plugin does not collect data about hugepage per node number when ReportPerNodeHP false</i>	1. Set ReportPerNodeHP false 2. Start collectd daemon : /install_folder/sbin/collectd 3. Set ReportPerNodeHP true 4. Restart collectd daemon : /install_folder/sbin/collectd	Folder / file were not created for handling number of hugepages  Folder / file were created for handling number of hugepages	Folder / file were not created for handling number of hugepages  Folder / file were created for handling number of hugepages	PASS	TRUE
9	<i>Verify hugepages plugin does not collect data about hugepage per root number when ReportRootHP false</i>	1. Set ReportRootHP false 2. Start collectd daemon : /install_folder/sbin/collectd 3. Set ReportRootHP true 4. Restart collectd daemon : /install_folder/sbin/collectd	Folder / file were not created for handling number of hugepages  Folder / file were created for handling number of hugepages	Folder / file were not created for handling number of hugepages  Folder / file were created for handling number of hugepages	PASS	TRUE
10	<i>Verify that data are collected by collectd from hugepages with a defined interval</i>	1. Start collectd daemon : /install_folder/sbin/collectd 2. Verify that data writes into hugepages file with defined time interval	Data writes into hugepages file with defined time interval = 2 seconds	Data writes into hugepages file with defined time interval = 2 seconds	PASS	TRUE
11.	<i>Verify that hugepages collectd plugin displays expected used and free memory when testpmd is run</i>	1. Start collectd 2. Start testpmd 3. Verify that used and free memory reported by collectd have been changed.	Used and free memory reported by collectd have been changed after testpmd was run.	Used and free memory reported by collectd have been changed after testpmd was run.	PASS	TRUE
12.	<i>Verify that hugepages collectd plugin displays expected used and free memory for mixed hugepages</i>	1. Set 1G and 2M hugepages. 2. Start collectd 3. Verify that used and free memory reported by collectd are valid for both 1G and 2M hugepage sizes	Used and free memory reported by collectd are valid for both 1G and 2M hugepage sizes	Used and free memory reported by collectd are valid for both 1G and 2M hugepage sizes	PASS	PASS