Memory RAS

Metrics List & Descriptions:

| Technol ogy /Category | Metric/Feature Name | Date Type | Format Example | Collec td Release | Internal Collectd Version | Colle ctd Plugin | Description | Depe nden cies | Lim itati ons | Comments |
|-----------------------------|--|-----------------------------|----------------------------------|-------------------------|---------------------------------|------------------------|---|----------------------|---------------------|--|
| Memory RAS | Memory corrected errors | Int | 51522 | 5.8 | None | mcelog | Number of Corrected memory errors since the system boot | | | gets metrics from mcelog daemon. |
| Memory RAS | Memory corrected errors in 24 Hours | Int | 51522 | 5.8 | None | mcelog | Number of Corrected memory errors since previous 24 hours | | | gets metrics from mcelog daemon. |
| Memory RAS | Memory Uncorrected errors | Int | 51522 | 5.8 | None | mcelog | Number of Corrected memory errors since the system boot | | | gets metrics from mcelog daemon. |
| Memory RAS | Memory Uncorrected errors in 24 Hours | Int | 51522 | 5.8 | None | mcelog | Number of Corrected memory errors since previous 24 hours | | | gets metrics from mcelog daemon. |
| Memory RAS | Socket | Int | 0 | 5.8 | None | mcelog | Socker number error occurred on | | | gets metrics from mcelog daemon. |
| Memory RAS | Channel | Char | 0 | 5.8 | None | mcelog | Memory channel each channel represents a DIMM module | | | gets metrics from mcelog daemon. |
| Memory RAS | Memory DIMM | Char | B1 | 5.8 | None | mcelog | Memory DIMM corresponding the memory used by the cores errors occurred on | | | gets metrics from mcelog daemon. |
| Memory RAS | Memory Slot | Char | 1 | 5.8 | None | mcelog | Memory slot corresponding the memory used by the cores errors occurred on | | | gets metrics from mcelog daemon. |
| Memory RAS | CPU ID | Int | 0 | Future | Future | EDAC | CPU ID of the cores errors occurred on. Will be added to new EDAC plugin | | | |
| Memory RAS | Memory Page | Hex | 0x12345 | Future | Future | EDAC | Memory page corresponding the memory used by the cores errors occurred on. Will be added to new EDAC plugin | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | Memory Offset | Hex | 0x0 | Future | Future | EDAC | Memory offset in the page. Will be added to new EDAC plugin | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | Memory Row | Hex | 0x12345 | | | | | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | Memory Grain | Int | 8 | Future | Future | EDAC | The byte granularity or the error grain. Will be added to new EDAC plugin | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | Error Syndrome | Hex | 0x6ce3 | Future | Future | EDAC | Memory syndrome corresponding the memory used by the cores errors occurred on. Will be added to new EDAC plugin | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | Error Type | Text | | Future | Future | EDAC | Error type. Will be added to new EDAC plugin | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | Error code | Integer | 0101: 0090 | Future | Future | EDAC | Error code put out by EDAC. Will be added to new EDAC plugin | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | Logging | Log path | | ? | | EDAC | Configurable logging path | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | dimmX or rankX directory info | Varying | | Future | Future | EDAC | Expose interface files provided by sysfs through mcX /dimmX or rankX directories | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | csrowX directory info | Varying | | Future | Future | EDAC | Expose interface files provided by sysfs through mcX /csrowX directories | | | Not part of Collectd. Currently available with kernel EDAC logs |
| Memory RAS | RAS interrupts | Count on each core | [CoreID]: [Interrupt Cont] | Future | Future | EDAC | Expose the RAS related interrupts on cores of interest via Collectd | | | Discussion open to see if this info can be exposed through the plugin. |

Sub-sections:

RAS/mcelog Plugin High Level Design

Memory RAS Plugin Executed Tests

RAS Other Executed Tests