

Description of Linux Features

Process activity		
Feature	Type	Description
ts	Number	Timestamp of the activity
PID	Number	Process identifier which is active in a Linux kernel
TRUN	Number	Number of threads in state 'running' (R)
TSLPI	Number	Number of threads in state 'interruptible sleeping' (S)
TSLPU	Number	Number of threads in state 'uninterruptible sleeping' (D)
POLI	String	Scheduling policy (normal timesharing, realtime round-robin, realtime fifo)
NICE	Number	Nice value which is the more or less static priority that can be given to a proces on a scale from -20 (high priority) to +19 (low priority)
PRI	Number	Priority which is the process' priority ranges from 0 (highest priority) to 139 (lowest priority). Priority 0 to 99 are used for realtime processes (fixed priority independent of their behavior) and priority 100 to 139 for timesharing processes (variable priority depending on their recent CPU consumption and the nice value).
RTPR	Number	Realtime priority which is according the POSIX standard. Value can be 0 for a timesharing process (policy 'norm', 'btch' or 'idle') or ranges from 1 (lowest) till 99 (highest) for a realtime process (policy 'rr' or 'fifo').
CPUNR	Number	Current processor which is the identification of the CPU the main thread of the process is running on or has recently been running on
Status	String	Status of a process, where the first position indicates if the process has been started during the last interval (the value N means 'new process').
EXC	Number	Exit code of a terminated process (second position of column 'ST' is E) or the fatal signal number (second position of column 'ST' is S or C).
State	String	Current state of the main thread of the process: 'R' for running (currently processing or in the runqueue), 'S' for sleeping interruptible (wait for an event to occur), 'D' for sleeping non-interruptible, 'Z' for zombie (waiting to be synchronized with its parent process), 'T' for stopped (suspended or traced), 'W' for swapping, and 'E' (exit) for processes which have finished during the last interval.
CPU	Number	CPU time consumption of this process in system mode (kernel mode), usually due to system call handling.
CMD	String	The name of the process. This name can be surrounded by "less/greater than" signs ("") which means that the process has finished during the last interval.
attack	Number	Tag normal and attack records, where 0 indicates normal and 1 indicates attacks
type	String	Tag attack categories, such as normal, DoS, DDoS and backdoor attacks, and normal records

Memory activity		
Feature	Type	Description
ts	Number	Timestamp of the activity
PID	Number	Process identifier which is active in a Linux kernel
MINFLT	Number	The number of page faults issued by this process that have been solved by reclaiming the requested memory page from the free list of pages.
MAJFLT	Number	The number of page faults issued by this process that have been solved by creating/loading the requested memory page.
VSTEXT	Number	The virtual memory size used by the shared text of this process.
VSIZE	Number	The total virtual memory usage consumed by this process (or user).
RSIZE	Number	The total resident memory usage consumed by this process (or user).
VGROW	Number	The amount of virtual memory that the process has grown during the last interval.
RGROW	Number	The amount of resident memory that the process has grown during the last interval.
MEM	Number	Memory occupation percentage
CMD	String	The name of the process. This name can be surrounded by "less/greater than" signs ("") which means that the process has finished during the last interval.
attack	Number	Tag normal and attack records, where 0 indicates normal and 1 indicates attacks
type	String	Tag attack categories, such as normal, DoS, DDoS and backdoor attacks, and normal records