Memory Management

Linux memory management subsystem is responsible, as the name implies, for managing the memory in the system. This includes implementation of virtual memory and demand paging, memory allocation both for kernel internal structures and user space programs, mapping of files into processes address space and many other cool things.

Linux memory management is a complex system with many configurable settings. Most of these settings are available via `/proc` filesystem and can be quired and adjusted using `sysctl`. These APIs are described in Documentation/admin-guide/sysctl/vm.rst and in man 5 proc.

Linux memory management has its own jargon and if you are not yet familiar with it, consider reading :ref:`Documentation/admin-guide/mm/concepts.rst <mm_concepts>`.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\admin-guide\mm\[linux-master][Documentation][admin-guide][mm]index.rst, line 18); *backlink*

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Here we document in detail how to interact with various mechanisms in the Linux memory management.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\linux-master\Documentation\admin-guide\mm\[linux-master][Documentation][admin-guide][mm]index.rst, line 25)

Unknown directive type "toctree".

```
.. toctree::
   :maxdepth: 1

   concepts
   cma_debugfs
   damon/index
   hugetlbpage
   idle_page_tracking
   ksm
   memory-hotplug
   nommu-mmap
   numa_memory_policy
   numaperf
   pagemap
   soft-dirty
   swap_numa
   transhuge
   userfaultfd
   zswap
```