



Measurement Overview

Invary determines the Runtime Integrity of operating systems, finding hidden malware that other threat detection solutions can't. Invary strengthens an organization's Zero Trust Architecture by removing assumptions about the OS at runtime. A vital first step in validating the Runtime Integrity of an operating system is measuring the current running state of a system. The Invary sensor performs this measurement process to examine a system, which is then sent to the Invary platform for appraisal. This measurement process involves capturing important pieces of kernel data for analysis. This document describes what information the Invary sensor collects during such measurements.

Measurements are taken periodically, defaulting to every 15 minutes. Each new periodic measurement gathered by the Invary sensor takes on average less than 10 seconds and results in a new appraisal run on our platform.

Measurement Data

The following is a list of objects and structures Invary gathers in each measurement. Linked to each is the exact definition of each structure and the kernel versions for which it is present. As a note, we can analyze pre 3.x kernels, but from a practical perspective, these are rarely in use (or *should* not be) now.

Object/Structure	Description	Kernels
Qdisc	Queue functions and scheduling data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/Qdisc) - latest(https://elixir.bootlin.com/linux/latest/A/ident/Qdisc)
Qdisc_class_ops	Queue class and filtering functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/Qdisc_class_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/Qdisc_class_ops)
Qdisc_ops	Queue general operation functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/Qdisc_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/Qdisc_ops)
address_space_operations	File system page related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/address_space_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/address_space_operations)

acpi_bus_type	ACPI (Advanced Configuration and Power Interface) bus device functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/acpi_bus_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/acpi_bus_type)
acpi_device_attribute	ACPI device attribute sysfs data and show/store functions.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/acpi_device_attribute)-v2.6.20(https://elixir.bootlin.com/linux/v2.6.20/A/ident/acpi_device_attribute)
acpi_pci_driver	ACPI PCI driver functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/acpi_pci_driver) - v3.9(https://elixir.bootlin.com/linux/v3.9/A/ident/acpi_pci_driver)
acpi_processor_throttling	ACPI processor throttling data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/acpi_processor_throttling) - latest(https://elixir.bootlin.com/linux/latest/A/ident/acpi_processor_throttling)
as_io_context	Per-process anticipatory I/O scheduler state for block devices; data and functions.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/as_io_context)-v2.6.32(https://elixir.bootlin.com/linux/v2.6.32/A/ident/as_io_context)
attribute_container	Attribute container data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/attribute_container) - latest(https://elixir.bootlin.com/linux/latest/A/ident/attribute_container)
backing_dev_info	Backing device data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/backing_dev_info) - latest(https://elixir.bootlin.com/linux/latest/A/ident/backing_dev_info)
bin_attribute	Sysfs bin attribute data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/bin_attribute) - latest(https://elixir.bootlin.com/linux/latest/A/ident/bin_attribute)
block_device_operations	File system block device related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/block_device_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/block_device_operations)
bus_attribute	Bus attribute data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/bus_attribute) - latest(https://elixir.bootlin.com/linux/latest/A/ident/bus_attribute)
bus_type	Device bus type data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/bus_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/bus_type)
cache_detail	Cache control information and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/cache_detail) - latest(https://elixir.bootlin.com/linux/latest/A/ident/cache_detail)
call_data_struct	Generic call data function and information.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/call_data_struct) - v4.0(https://elixir.bootlin.com/linux/v4.0/A/ident/call_data_struct)
cfq_io_context	Control files I/O context data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/cfq_io_context) - v3.2(https://elixir.bootlin.com/linux/v3.2/A/ident/cfq_io_context)
cftype	Cgroup control files data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/cftype) - latest(https://elixir.bootlin.com/linux/latest/A/ident/cftype)
cipher_alg	Single-block symmetric ciphers definition and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/cipher_alg) - latest(https://elixir.bootlin.com/linux/latest/A/ident/cipher_alg)
cipher_desc	Cipher description related data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/cipher_desc) - v5.0(https://elixir.bootlin.com/linux/v5.0/A/ident/cipher_desc)
cipher_tfm	Cipher transforms related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/cipher_tfm) - v5.5(https://elixir.bootlin.com/linux/v5.5/A/ident/cipher_tfm)

class	Device class data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/class) - latest(https://elixir.bootlin.com/linux/latest/A/ident/class)
class_attribute	Device class sysfs show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/class_attribute) - latest(https://elixir.bootlin.com/linux/latest/A/ident/class_attribute)
class_device	VHCI device class data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/class_device) - v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/class_device)
class_device_attribute	Class device attribute sysfs data and show/store functions.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/class_device_attribute)-v2.6.25(https://elixir.bootlin.com/linux/v2.6.25/A/ident/class_device_attribute)
class_interface	Device class add/remove functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/class_interface) - latest(https://elixir.bootlin.com/linux/latest/A/ident/class_interface)
clocksource	Hardware abstraction for a free running counter data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/clocksource) - latest(https://elixir.bootlin.com/linux/latest/A/ident/clocksource)
compress_alg	Compression/decompression algorithm functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/compress_alg) - latest(https://elixir.bootlin.com/linux/latest/A/ident/compress_alg)
compress_tfm	Compression/decompression transform functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/compress_tfm) - v5.5(https://elixir.bootlin.com/linux/v5.5/A/ident/compress_tfm)
console	The console descriptor structure data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/console) - latest(https://elixir.bootlin.com/linux/latest/A/ident/console)
consw	Callback functions for console devices.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/consw) - latest(https://elixir.bootlin.com/linux/latest/A/ident/consw)
cont_t	Floppy device control functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/cont_t) - latest(https://elixir.bootlin.com/linux/latest/A/ident/cont_t)
crypto_alg	Definition of a cryptographic cipher algorithm data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/crypto_alg) - latest(https://elixir.bootlin.com/linux/latest/A/ident/crypto_alg)
datalink_proto	Datalink protocol data and receive/request functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/datalink_proto) - latest(https://elixir.bootlin.com/linux/latest/A/ident/datalink_proto)
dentry_operations	Directory entry cache operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dentry_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/dentry_operations)
device	The basic device structure.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/device) - latest(https://elixir.bootlin.com/linux/latest/A/ident/device)
device_attribute	Interface for exporting device attributes via show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/device_attribute) - latest(https://elixir.bootlin.com/linux/latest/A/ident/device_attribute)
device_driver	The basic device driver structure; data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/device_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/device_driver)
devprobe2	A unified ethernet device probe function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/devprobe2) - latest(https://elixir.bootlin.com/linux/latest/A/ident/devprobe2)
dev_gso_cb	Device generic segment offload callback function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dev_gso_cb) - v3.17(https://elixir.bootlin.com/linux/v3.17/A/ident/dev_gso_cb)
dev_pm_ops	Device power management callback functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dev_pm_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/dev_pm_ops)

digest_alg	Digest algorithm functions, RTL wireless driver specific.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/digest_alg) - v4.1(https://elixir.bootlin.com/linux/v4.1/A/ident/digest_alg)
digest_tfm	Digest transform functions, RTL wireless driver specific.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/digest_tfm) - v4.1(https://elixir.bootlin.com/linux/v4.1/A/ident/digest_tfm)
disk_attribute	Structure for sysfs attributes on block devices, data and show function.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/disk_attribute) - v2.6.24(https://elixir.bootlin.com/linux/v2.6.24/A/ident/disk_attribute)
dma_device	Information on the entity supplying DMA services including callback functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dma_device) - latest(https://elixir.bootlin.com/linux/latest/A/ident/dma_device)
dmi_system_id	Module device table id data and callback.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dmi_system_id) - latest(https://elixir.bootlin.com/linux/latest/A/ident/dmi_system_id)
dquot_operations	File system disk quota related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dquot_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/dquot_operations)
driver_attribute	Sysfs interface for exporting driver attributes via show/store callbacks.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/driver_attribute) - latest(https://elixir.bootlin.com/linux/latest/A/ident/driver_attribute)
dst_entry	Destination cache data and callbacks.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dst_entry) - latest(https://elixir.bootlin.com/linux/latest/A/ident/dst_entry)
dst_ops	Destination cache operations functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/dst_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/dst_ops)
edd_attribute	Enhanced Disk Drive Services (EDD) attribute data and callback functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/edd_attribute) - latest(https://elixir.bootlin.com/linux/latest/A/ident/edd_attribute)
elevator_ops	Block device elevator/IO-scheduler operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/elevator_ops) - v4.20(https://elixir.bootlin.com/linux/v4.20/A/ident/elevator_ops)
elv_fs_entry	Elevator sysfs attributes show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/elv_fs_entry) - latest(https://elixir.bootlin.com/linux/latest/A/ident/elv_fs_entry)
ethtool_ops	Ethtool optional netdev operations functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/ethtool_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/ethtool_ops)
export_operations	File system NFS daemon communication related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/export_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/export_operations)
fb_ops	Frame buffer operations functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/fb_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/fb_ops)
fb_pixmap	Frame buffer pixmap structure definition, data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/fb_pixmap) - latest(https://elixir.bootlin.com/linux/latest/A/ident/fb_pixmap)
fb_tile_ops	Frame buffer tile operations functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/fb_tile_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/fb_tile_ops)
fd_routine_1	Floppy drive routine functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/fd_routine_1) - latest(https://elixir.bootlin.com/linux/latest/A/ident/fd_routine_1)

fib6_walker_t	IPv6 route table walker data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/fib6_walker_t) - v3.17(https://elixir.bootlin.com/linux/v3.17/A/ident/fib6_walker_t)
fib_table	IP Forwarding Information Base table data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/fib_table) - latest(https://elixir.bootlin.com/linux/latest/A/ident/fib_table)
file_operations	General file system file operations functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/file_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/file_operations)
file_lock_operations	File system file lock related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/file_lock_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/file_lock_operations)
file_system_type	File system type and key data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/file_system_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/file_system_type)
genl_ops	Generic netlink operations data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/genl_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/genl_ops)
gnttab_free_callback	Xen grant table free callback function and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/gnttab_free_callback) - latest(https://elixir.bootlin.com/linux/latest/A/ident/gnttab_free_callback)
hh_cache	Hardware header cache data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/hh_cache) - latest(https://elixir.bootlin.com/linux/latest/A/ident/hh_cache)
hrtimer	The basic high-resolution timer structure; data and restart function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/hrtimer) - latest(https://elixir.bootlin.com/linux/latest/A/ident/hrtimer)
hrtimer_base	Timer base for a specific high-resolution clock; data and functions.	v2.6.16(https://elixir.bootlin.com/linux/v2.6.16/A/ident/hrtimer_base) - v2.6.20(https://elixir.bootlin.com/linux/v2.6.20/A/ident/hrtimer_base)
hwgroup_s	IDE hardware group data and handler functions.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/hwgroup_s) - v2.6.28(https://elixir.bootlin.com/linux/v2.6.28/A/ident/hwgroup_s)
hwif_s	IDE hardware interface data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/hwif_s) - v5.13(https://elixir.bootlin.com/linux/v5.13/A/ident/hwif_s)
hwrng	Hardware Random Number Generator driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/hwrng) - latest(https://elixir.bootlin.com/linux/latest/A/ident/hwrng)
hypercall_page	Xen hypervisor hypercall entries.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/hypercall_page) - latest(https://elixir.bootlin.com/linux/latest/A/ident/hypercall_page)
hyp_sysfs_attr	Xen hypervisor sysfs attributes data and show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/hyp_sysfs_attr) - latest(https://elixir.bootlin.com/linux/latest/A/ident/hyp_sysfs_attr)
icmp_control	IPv4 ICMP control array, functions which specify what to do with each ICMP packet type.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/icmp_control) - latest(https://elixir.bootlin.com/linux/latest/A/ident/icmp_control)
ide_driver_s	IDE driver data and functions.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/ide_driver_s) - v2.6.28(https://elixir.bootlin.com/linux/v2.6.28/A/ident/ide_driver_s)
ide_pci_device_s	IDE PCI device driver data and functions.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/ide_pci_device_s)- v2.6.23(https://elixir.bootlin.com/linux/v2.6.23/A/ident/ide_pci_device_s)

inet_connection_sock	INET connection-oriented socket data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/inet_connection_sock) - latest(https://elixir.bootlin.com/linux/latest/A/ident/inet_connection_sock)
inet_connection_sock_af_ops	IP address family related TCP functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/inet_connection_sock_af_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/inet_connection_sock_af_ops)
inode_operations	File system inode related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/inode_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/inode_operations)
inotify_operations	Watch request on a specific inode handle_event / destroy_watch functions.	v2.6.18(https://elixir.bootlin.com/linux/v2.6.18/A/ident/inotify_operations) - v2.6.35(https://elixir.bootlin.com/linux/v2.6.35/A/ident/inotify_operations)
input_handler	Implements interface for input devices; functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/input_handler) - latest(https://elixir.bootlin.com/linux/latest/A/ident/input_handler)
io_context	I/O subsystem state of the associated processes data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/io_context) - latest(https://elixir.bootlin.com/linux/latest/A/ident/io_context)
ipc_proc_iface	Inter-process communications (IPC) interface data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/ipc_proc_iface) - latest(https://elixir.bootlin.com/linux/latest/A/ident/ipc_proc_iface)
ip_ra_chain	Special input handler for IP packets caught by router alert option.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/ip_ra_chain) - latest(https://elixir.bootlin.com/linux/latest/A/ident/ip_ra_chain)
irqaction	Per interrupt action descriptor; data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/irqaction) - latest(https://elixir.bootlin.com/linux/latest/A/ident/irqaction)
irq_chip	Hardware interrupt chip descriptor functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/irq_chip) - latest(https://elixir.bootlin.com/linux/latest/A/ident/irq_chip)
irq_desc	Interrupt descriptor data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/irq_desc) - latest(https://elixir.bootlin.com/linux/latest/A/ident/irq_desc)
irq_router	PCI interrupt routing data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/irq_router) - latest(https://elixir.bootlin.com/linux/latest/A/ident/irq_router)
irq_router_handler	PCI interrupt routing handler function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/irq_router_handler) - latest(https://elixir.bootlin.com/linux/latest/A/ident/irq_router_handler)
iw_handler_def	Wireless extension data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/iw_handler_def) - latest(https://elixir.bootlin.com/linux/latest/A/ident/iw_handler_def)
key_type	Kernel managed key type definition and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/key_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/key_type)
kiocb	Kernel I/O callback; data and complete function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/kiocb) - latest(https://elixir.bootlin.com/linux/latest/A/ident/kiocb)
klist	Kernel list get/put functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/klist) - latest(https://elixir.bootlin.com/linux/latest/A/ident/klist)
kmem_cache	Kernel memory allocation data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/kmem_cache) - latest(https://elixir.bootlin.com/linux/latest/A/ident/kmem_cache)

kobj_type	Kernel object type data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/kobj_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/kobj_type)
kset_uevent_ops	Generic kernel object infrastructure set user event functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/kset_uevent_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/kset_uevent_ops)
kthread_create_info	Kernel thread creation function and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/kthread_create_info) - latest(https://elixir.bootlin.com/linux/latest/A/ident/kthread_create_info)
k_clock	Kernel timer related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/k_clock) - latest(https://elixir.bootlin.com/linux/latest/A/ident/k_clock)
led_classdev	LED driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/led_classdev) - latest(https://elixir.bootlin.com/linux/latest/A/ident/led_classdev)
led_trigger	LED triggers data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/led_trigger) - latest(https://elixir.bootlin.com/linux/latest/A/ident/led_trigger)
linux_binfmt	Defines the functions that are used to load the binary formats that Linux accepts.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/linux_binfmt) - latest(https://elixir.bootlin.com/linux/latest/A/ident/linux_binfmt)
llc_sap	Defines the SAP component, data and receive function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/llc_sap) - latest(https://elixir.bootlin.com/linux/latest/A/ident/llc_sap)
lock_manager_operations	File lock manager functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/lock_manager_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/lock_manager_operations)
loop_device	Linux loop device data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/loop_device) - latest(https://elixir.bootlin.com/linux/latest/A/ident/loop_device)
loop_func_table	Support for loadable transfer modules functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/loop_func_table) - v5.15(https://elixir.bootlin.com/linux/v5.15/A/ident/loop_func_table)
mb_cache_op	In memory cache entry data.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/mb_cache_op) - v2.6.35(https://elixir.bootlin.com/linux/v2.6.35/A/ident/mb_cache_op)
mdk_personality	Multiple device (MD) (aka RAID) operations functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/mdk_personality) - v3.1(https://elixir.bootlin.com/linux/v3.1/A/ident/mdk_personality)
mdk_thread_s	Multiple device (MD) (aka RAID) thread data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/mdk_thread_s) - v3.1(https://elixir.bootlin.com/linux/v3.1/A/ident/mdk_thread_s)
md_sysfs_entry	Multiple device (MD) (aka RAID) sysfs attributes show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/md_sysfs_entry) - latest(https://elixir.bootlin.com/linux/latest/A/ident/md_sysfs_entry)
mm_struct	Linux virtual memory data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/mm_struct) - latest(https://elixir.bootlin.com/linux/latest/A/ident/mm_struct)
msi_ops	PCI MSI operations handler functions.	v2.6.18(https://elixir.bootlin.com/linux/v2.6.18/A/ident/msi_ops) - v3.1(https://elixir.bootlin.com/linux/v2.6.18/A/ident/msi_ops)
mtrr_ops	Intel memory type range register (MTRR) data and operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/mtrr_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/mtrr_ops)
neighbour	Generic neighbor manipulation data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/neighbour) - latest(https://elixir.bootlin.com/linux/latest/A/ident/neighbour)

neigh_ops	Generic neighbor manipulation operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/neigh_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/neigh_ops)
neigh_parms	Generic neighbor manipulation parameter data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/neigh_parms) - latest(https://elixir.bootlin.com/linux/latest/A/ident/neigh_parms)
neigh_seq_state	Generic neighbor manipulation sequence table and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/neigh_seq_state) - latest(https://elixir.bootlin.com/linux/latest/A/ident/neigh_seq_state)
neigh_table	Generic neighbor manipulation table data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/neigh_table) - latest(https://elixir.bootlin.com/linux/latest/A/ident/neigh_table)
netlink_callback	Netlink callback data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/netlink_callback) - latest(https://elixir.bootlin.com/linux/latest/A/ident/netlink_callback)
netlink_sock	Netlink socket data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/netlink_sock) - latest(https://elixir.bootlin.com/linux/latest/A/ident/netlink_sock)
netpoll	Low-level network console information.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/netpoll) - latest(https://elixir.bootlin.com/linux/latest/A/ident/netpoll)
net_protocol	Structure used to register protocols (handler and error handler functions.)	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/net_protocol) - latest(https://elixir.bootlin.com/linux/latest/A/ident/net_protocol)
net_proto_family	Network protocol family data and create handler function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/net_proto_family) - latest(https://elixir.bootlin.com/linux/latest/A/ident/net_proto_family)
nf_afinfo	Netfilter address family information and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/nf_afinfo) - v4.15(https://elixir.bootlin.com/linux/v4.15/A/ident/nf_afinfo)
nf_conntrack	Netfilter connection tracking data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/nf_conntrack) - latest(https://elixir.bootlin.com/linux/latest/A/ident/nf_conntrack)
nf_info	Netfilter data and hook function.	v2.6.16(https://elixir.bootlin.com/linux/v2.6.16/A/ident/nf_info) - v2.6.24(https://elixir.bootlin.com/linux/v2.6.24/A/ident/nf_info)
nf_queue_handler	Netfilter queue handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/nf_queue_handler) - latest(https://elixir.bootlin.com/linux/latest/A/ident/nf_queue_handler)
nf_sockopt_ops	Netfilter socket options data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/nf_sockopt_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/nf_sockopt_ops)
nls_table	Unicode table data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/nls_table) - latest(https://elixir.bootlin.com/linux/latest/A/ident/nls_table)
notifier_block	Notifier chain data and handler function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/notifier_block) - latest(https://elixir.bootlin.com/linux/latest/A/ident/notifier_block)
param_table	Floppy parameter handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/param_table) - latest(https://elixir.bootlin.com/linux/latest/A/ident/param_table)
part_attribute	Partition sysfs attribute data and show function.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/part_attribute) - v2.6.24(https://elixir.bootlin.com/linux/v2.6.24/A/ident/part_attribute)
pci_driver	PCI driver structure, data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pci_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pci_driver)

pci_error_handlers	PCI bus error event callbacks functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pci_error_handlers) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pci_error_handlers)
pci_fixup	Hooks to fix up broken PCI devices.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pci_fixup) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pci_fixup)
pci_ops	PCI low-level architecture-dependent routines.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pci_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pci_ops)
pci_raw_ops	PCI raw operations handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pci_raw_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pci_raw_ops)
pdflush_work	Structure for passing work to a pdflush thread; data and callback function.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/pdflush_work) - v2.6.31(https://elixir.bootlin.com/linux/v2.6.31/A/ident/pdflush_work)
pipe_buf_operations	Pipe buffer related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pipe_buf_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pipe_buf_operations)
platform_suspend_ops	Callbacks for managing platform dependent system sleep states.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/platform_suspend_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/platform_suspend_ops)
pnp_card_driver	Plug and Play card driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pnp_card_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pnp_card_driver)
pnp_driver	Plug and Play driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pnp_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pnp_driver)
pnp_fixup	Plug and Play driver fix up functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pnp_fixup) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pnp_fixup)
pnp_protocol	Plug and Play protocol management data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pnp_protocol) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pnp_protocol)
probe	Kernel object map probe data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/probe) - latest(https://elixir.bootlin.com/linux/latest/A/ident/probe)
proto	Networking protocol blocks attached to sockets; data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/proto) - latest(https://elixir.bootlin.com/linux/latest/A/ident/proto)
proto_ops	Network protocol operation handler functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/proto_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/proto_ops)
psmouse	PS mouse data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/psmouse) - latest(https://elixir.bootlin.com/linux/latest/A/ident/psmouse)
psmouse_attribute	PS mouse sysfs attributes data and show/set functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/psmouse_attribute) - latest(https://elixir.bootlin.com/linux/latest/A/ident/psmouse_attribute)
psmouse_protocol	PS mouse protocol data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/psmouse_protocol) - latest(https://elixir.bootlin.com/linux/latest/A/ident/psmouse_protocol)
pv_apic_ops	Para-virtual APIC operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pv_apic_ops) - v4.4(https://elixir.bootlin.com/linux/v4.4/A/ident/pv_apic_ops)
pv_cpu_ops	Para-virtual CPU operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pv_cpu_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pv_cpu_ops)

pv_init_ops	Para-virtual initialization operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pv_init_ops) - v5.12(https://elixir.bootlin.com/linux/v5.12/A/ident/pv_init_ops)
pv_irq_ops	Para-virtual interrupt operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pv_irq_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pv_irq_ops)
pv_lock_ops	Para-virtual lock operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pv_lock_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pv_lock_ops)
pv_mmu_ops	Para-virtual memory management operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pv_mmu_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/pv_mmu_ops)
pv_time_ops	Para-virtual clock operation functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/pv_time_ops) - v5.12(https://elixir.bootlin.com/linux/v5.12/A/ident/pv_time_ops)
qdisc_walker	Queue walking data and function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/qdisc_walker) - latest(https://elixir.bootlin.com/linux/latest/A/ident/qdisc_walker)
queue_sysfs_entry	Queue sysfs attributes data and show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/queue_sysfs_entry) - latest(https://elixir.bootlin.com/linux/latest/A/ident/queue_sysfs_entry)
quota_format_ops	Disk quota format related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/quota_format_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/quota_format_ops)
quotactl_ops	Quota operations handling requests from user space.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/quotactl_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/quotactl_ops)
quotactl_operations	Operations handling requests from user space.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/quotactl_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/quotactl_ops)
rchan_callbacks	Relay channel client callback functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/rchan_callbacks) - latest(https://elixir.bootlin.com/linux/latest/A/ident/rchan_callbacks)
rdev_sysfs_entry	RAM device sysfs attributes data and show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/rdev_sysfs_entry) - latest(https://elixir.bootlin.com/linux/latest/A/ident/rdev_sysfs_entry)
request_sock_ops	Request socket data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/request_sock_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/request_sock_ops)
restart_block	System call restart block data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/restart_block) - latest(https://elixir.bootlin.com/linux/latest/A/ident/restart_block)
rtnetlink_link	Routing/neighbor discovery messages link handler routines.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/rtnetlink_link) - v2.6.21(https://elixir.bootlin.com/linux/v2.6.21/A/ident/rtnetlink_link)
security_operations	Main security structure, operations handlers.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/security_operations) - v4.1(https://elixir.bootlin.com/linux/v4.1/A/ident/security_operations)
seq_operations	Sequence operations functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/seq_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/seq_operations)
serio	Serial port I/O data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/serio) - latest(https://elixir.bootlin.com/linux/latest/A/ident/serio)
serio_driver	Serial port I/O driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/serio_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/serio_driver)
shrinker	Callback to apply pressure to ageable caches; data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/shrinker) - latest(https://elixir.bootlin.com/linux/latest/A/ident/shrinker)

simple_attr	Simple attribute files data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/simple_attr) - latest(https://elixir.bootlin.com/linux/latest/A/ident/simple_attr)
sk_buff	Socket buffer data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sk_buff) - latest(https://elixir.bootlin.com/linux/latest/A/ident/sk_buff)
sock	Network layer representation of sockets data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sock) - latest(https://elixir.bootlin.com/linux/latest/A/ident/sock)
softirq_action	Software interrupt handler function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/softirq_action) - latest(https://elixir.bootlin.com/linux/latest/A/ident/softirq_action)
spi_driver	SPI host side "protocol" driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/spi_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/spi_driver)
spi_master	Interface to SPI master controller data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/spi_master) - v4.12(https://elixir.bootlin.com/linux/v4.12/A/ident/spi_master)
spi_message	Multi-segment SPI transaction data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/spi_message) - latest(https://elixir.bootlin.com/linux/latest/A/ident/spi_message)
stop_machine_data	CPU stop machine data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/stop_machine_data) - v3.12(https://elixir.bootlin.com/linux/v3.12/A/ident/stop_machine_data)
subsys_attribute	Sub system sysfs attribute data and show/store functions.	v2.6.12(https://elixir.bootlin.com/linux/v2.6.12/A/ident/subsys_attribute) - v2.6.24(https://elixir.bootlin.com/linux/v2.6.24/A/ident/subsys_attribute)
super_operations	File system super block related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/super_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/super_operations)
super_type	Handles super block details, data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/super_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/super_type)
sys_call_table	Linux global system call table of functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sys_call_table) - latest(https://elixir.bootlin.com/linux/latest/A/ident/sys_call_table)
sysdev_class	System device class data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sysdev_class) - v3.2(https://elixir.bootlin.com/linux/v3.2/A/ident/sysdev_class)
sysdev_class_attribute	System device sysfs class attribute data and show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sysdev_class_attribute) - v3.2(https://elixir.bootlin.com/linux/v3.2/A/ident/sysdev_class_attribute)
sysdev_driver	System device driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sysdev_driver) - v3.2(https://elixir.bootlin.com/linux/v3.2/A/ident/sysdev_driver)
sysfs_ops	Device driver file system show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sysfs_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/sysfs_ops)
sysrq_key_op	Linux Magic System Request Key Hacks data and handler function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/sysrq_key_op) - latest(https://elixir.bootlin.com/linux/latest/A/ident/sysrq_key_op)
tasklet_struct	Interrupt tasklet data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tasklet_struct) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tasklet_struct)
tcf_ematch_ops	Target communications framework (TCF) e-match	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tcf_ematch_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tcf_ematch_ops)

	module operations data and functions.	
tcf_proto	Target communications framework (TCF) protocol data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tcf_proto) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tcf_proto)
tcf_proto_ops	Target communications framework (TCF) protocol operations handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tcf_proto_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tcf_proto_ops)
tcf_walker	Target communications framework (TCF) walker data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tcf_walker) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tcf_walker)
tcp_congestion_ops	TCP congestion operation handler functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tcp_congestion_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tcp_congestion_ops)
tcp_seq_afinfo	TCP sequence address family data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tcp_seq_afinfo) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tcp_seq_afinfo)
timer_list	Timer list handler function and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/timer_list) - latest(https://elixir.bootlin.com/linux/latest/A/ident/timer_list)
timewait_sock_ops	Socket time wait handler functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/timewait_sock_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/timewait_sock_ops)
transport_class	Generic container for all transport classes, handler functions and data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/transport_class) - latest(https://elixir.bootlin.com/linux/latest/A/ident/transport_class)
ts_config	Text search configuration data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/ts_config) - latest(https://elixir.bootlin.com/linux/latest/A/ident/ts_config)
ts_ops	Text search module operations data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/ts_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/ts_ops)
tty_driver	Driver for TTY devices; data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tty_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tty_driver)
tty_ldisc	TTY ldisc (line discipline) related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tty_ldisc) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tty_ldisc)
tty_operations	Interface between driver and tty functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/tty_operations) - latest(https://elixir.bootlin.com/linux/latest/A/ident/tty_operations)
udp_seq_afinfo	UDP sequence address family data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/udp_seq_afinfo) - latest(https://elixir.bootlin.com/linux/latest/A/ident/udp_seq_afinfo)
uevent_ops	User event related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/uevent_ops) - latest(https://elixir.bootlin.com/linux/latest/A/ident/uevent_ops)
vm_operations_struct	Virtual memory management related functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/vm_operations_struct) - latest(https://elixir.bootlin.com/linux/latest/A/ident/vm_operations_struct)
work_struct	Work queue data and handler function.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/work_struct) - latest(https://elixir.bootlin.com/linux/latest/A/ident/work_struct)
xattr_handler	Extended attributes handling, data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xattr_handler) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xattr_handler)

xenbus_driver	XEN bus driver data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xenbus_driver) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xenbus_driver)
xenbus_watch	Callback function and data to watch a Xen bus node.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xenbus_watch) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xenbus_watch)
xen_bus_type	XEN bus type data and functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xen_bus_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xen_bus_type)
xfrm_mgr	IP packet transformation manager callback functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xfrm_mgr) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xfrm_mgr)
xfrm_mode	IP packet transformation mode data.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xfrm_mode) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xfrm_mode)
xfrm_policy_afinfo	IP packet transformation policy address family information handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xfrm_policy_afinfo) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xfrm_policy_afinfo)
xfrm_state_afinfo	IP packet transformation state address family information data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xfrm_state_afinfo) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xfrm_state_afinfo)
xfrm_type	IP packet transformation type data and handler functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/xfrm_type) - latest(https://elixir.bootlin.com/linux/latest/A/ident/xfrm_type)
_cache_attr	Intel X86 sysfs cache attribute show/store functions.	v3.0(https://elixir.bootlin.com/linux/v3.0/A/ident/_cache_attr) - v4.0(https://elixir.bootlin.com/linux/v4.0/A/ident/_cache_attr)

System Data

In addition to the kernel data mentioned in the last section, the Invary sensor also optionally gathers the following Linux system information:

- Device hostname
- Current system time
- Linux distribution name (e.g., “Ubuntu”)
- Linux distribution version (e.g., “22.04”)
- Linux distribution code name (e.g., “jammy”)
- Linux kernel version (e.g., “5.19.0-43-generic”)
- Linux kernel release (e.g., “#44~22.04.1-Ubuntu”)
- Linux machine information
- List of network interfaces
- The hardware MAC address of each network interface.
- IPv4 address, netmask, broadcast address and gateway address of each network interface.
- IPv6 address, netmask, broadcast address and gateway address of each network interface.
- IPv4 and IPv6 network routing table information.