

**NAME**

Sys::Virt::Error – error object for libvirt APIs

**DESCRIPTION**

The `Sys::Virt::Error` class provides an encoding of the libvirt errors. Instances of this object can be thrown by pretty much any of the Sys::Virt APIs.

**METHODS**

`$err->stringify`

Convert the object into string format suitable for printing on a console to inform a user of the error.

`my $code = $err->level`

Return the raw error level represented by this error. One of the ERROR LEVEL CONSTANTS

`my $code = $err->code`

Return the raw error code represented by this error. One of the ERROR CODE CONSTANTS

`my $from = $err->domain`

Return the error domain raising this error. One of the ERROR DOMAIN CONSTANTS

`my $msg = $err->message`

Return an informative message describing the error condition.

**CONSTANTS****ERROR LEVEL CONSTANTS**

`Sys::Virt::Error::LEVEL_NONE`

Undefined error level

`Sys::Virt::Error::LEVEL_WARNING`

Warning error level

`Sys::Virt::Error::LEVEL_ERROR`

Fatal error level

**ERROR DOMAIN CONSTANTS**

The error domain indicates which internal part of libvirt the error report was raised from.

`Sys::Virt::Error::FROM_CONF`

Configuration file handling

`Sys::Virt::Error::FROM_DOM`

Error while operating on a domain

`Sys::Virt::Error::FROM_DOMAIN`

Domain configuration handling

`Sys::Virt::Error::FROM_LXC`

LXC virtualization driver

`Sys::Virt::Error::FROM_NET`

Error while operating on a network

`Sys::Virt::Error::FROM_NETWORK`

Network configuration handling

`Sys::Virt::Error::FROM_NODEDEV`

Node device configuration handling

`Sys::Virt::Error::FROM_NONE`

No specific error domain.

`Sys::Virt::Error::FROM_OPENVZ`

OpenVZ virtualization driver

Sys::Virt::Error::FROM\_PROXY  
Xen proxy virtualization driver

Sys::Virt::Error::FROM\_QEMU  
QEMU virtualization driver

Sys::Virt::Error::FROM\_REMOTE  
Remote client virtualization driver

Sys::Virt::Error::FROM\_RPC  
XML-RPC handling code

Sys::Virt::Error::FROM\_SECURITY  
Security services driver

Sys::Virt::Error::FROM\_SEXP  
SEXP parsing code

Sys::Virt::Error::FROM\_STATS\_LINUX  
Device statistics code

Sys::Virt::Error::FROM\_STORAGE  
Storage configuration handling

Sys::Virt::Error::FROM\_TEST  
Test virtualization driver

Sys::Virt::Error::FROM\_UML  
UML virtualization driver

Sys::Virt::Error::FROM\_XEN  
Xen hypervisor driver

Sys::Virt::Error::FROM\_XEND  
XenD daemon driver

Sys::Virt::Error::FROM\_XENSTORE  
XenStore driver

Sys::Virt::Error::FROM\_XENXM  
Xen XM configuration file driver

Sys::Virt::Error::FROM\_XEN\_INOTIFY  
Xen Inotify events driver

Sys::Virt::Error::FROM\_XML  
Low level XML parser

Sys::Virt::Error::FROM\_ESX  
The VMWare ESX driver

Sys::Virt::Error::FROM\_INTERFACE  
The host network interface driver

Sys::Virt::Error::FROM\_ONE  
The Open Nebula driver. This constant is no longer used and retained only for backwards compatibility

Sys::Virt::Error::FROM\_PHYP  
The IBM Power Hypervisor driver

Sys::Virt::Error::FROM\_SECRET  
The secret management driver

Sys::Virt::Error::FROM\_VBOX  
The VirtualBox driver

Sys::Virt::Error::FROM\_AUDIT  
The audit driver

Sys::Virt::Error::FROM\_CPU  
The CPU information driver

Sys::Virt::Error::FROM\_DOMAIN\_SNAPSHOT  
The domain snapshot driver

Sys::Virt::Error::FROM\_HOOK  
The daemon hook driver

Sys::Virt::Error::FROM\_NWFILTER  
The network filter driver

Sys::Virt::Error::FROM\_STREAMS  
The data streams driver

Sys::Virt::Error::FROM\_SYSINFO  
The system information driver

Sys::Virt::Error::FROM\_VMWARE  
The VMWare driver

Sys::Virt::Error::FROM\_XENAPI  
The XenAPI driver

Sys::Virt::Error::FROM\_EVENT  
The event driver

Sys::Virt::Error::FROM\_LIBXL  
The libxl Xen driver

Sys::Virt::Error::FROM\_LOCKING  
The lock manager drivers

Sys::Virt::Error::FROM\_HYPERV  
The Hyper-V driver

Sys::Virt::Error::FROM\_CAPABILITIES  
The capabilities driver

Sys::Virt::Error::FROM\_AUTH  
The authentication handling code

Sys::Virt::Error::FROM\_URI  
The URI handling code

Sys::Virt::Error::FROM\_DBUS  
The DBus handling code

Sys::Virt::Error::FROM\_DEVICE  
The device handling code

Sys::Virt::Error::FROM\_SSH  
The libSSH2 socket client

Sys::Virt::Error::FROM\_PARALLELS  
The Parallels virtualization driver

Sys::Virt::Error::FROM\_LOCKSPACE  
The lockspace handling code

Sys::Virt::Error::FROM\_INITCTL  
The initctl client code

Sys::Virt::Error::FROM\_CGROUP  
The cgroups code

Sys::Virt::Error::FROM\_IDENTITY  
The identity management code

Sys::Virt::Error::FROM\_ACCESS  
The access control code

Sys::Virt::Error::FROM\_SYSTEMD  
The systemd init service

Sys::Virt::Error::FROM BHYVE  
The FreeBSD BHyve driver

Sys::Virt::Error::FROM\_CRYPTOP  
The cryptographic helper APIs.

Sys::Virt::Error::FROM\_FIREWALL  
The firewall helper APIs.

Sys::Virt::Error::FROM\_POLKIT  
The polkit authentication / authorization APIs

Sys::Virt::Error::FROM\_THREAD  
The thread helper utils

Sys::Virt::Error::FROM\_ADMIN  
The administrative service

Sys::Virt::Error::FROM\_LOGGING  
The logging service

Sys::Virt::Error::FROM\_XENXL  
The Xen XL driver

Sys::Virt::Error::FROM\_PERF  
The performance events subsystem

Sys::Virt::Error::FROM\_LIBSSH  
The libSSH socket client

Sys::Virt::Error::FROM\_RESCTRL  
The resource control subsystem

Sys::Virt::Error::FROM\_FIREWALLD  
The firewalld service

Sys::Virt::Error::FROM\_DOMAIN\_CHECKPOINT  
The domain checkpoint

Sys::Virt::Error::FROM\_TPM  
The TPM subsystem

Sys::Virt::Error::FROM\_BPF  
The BPF subsystem

Sys::Virt::Error::FROM\_CH  
The Cloud Hypervisor driver

#### **ERROR CODE CONSTANTS**

The error codes allow for specific problems to be identified and handled separately from generic error handling.

Sys::Virt::Error::ERR\_AUTH\_FAILED  
Authentication failure when connecting to a driver

Sys::Virt::Error::ERR\_CALL\_FAILED  
Operation not supported by driver (DEPRECATED & unused)

Sys::Virt::Error::ERR\_CONF\_SYNTAX  
Configuration file syntax error

Sys::Virt::Error::ERR\_DOM\_EXIST  
The domain already exists

Sys::Virt::Error::ERR\_DRIVER\_FULL  
Too many hypervisor drivers have been registered

Sys::Virt::Error::ERR\_GET\_FAILED  
HTTP GET command failed talking to XenD

Sys::Virt::Error::ERR\_GNUTLS\_ERROR  
GNUTLS encryption error in RPC driver

Sys::Virt::Error::ERR\_HTTP\_ERROR  
Unexpected HTTP error code from XenD

Sys::Virt::Error::ERR\_INTERNAL\_ERROR  
Generic internal error

Sys::Virt::Error::ERR\_INVALID\_ARG  
Invalid argument supplied to function

Sys::Virt::Error::ERR\_INVALID\_CONN  
Invalid connection object

Sys::Virt::Error::ERR\_INVALID\_DOMAIN  
Invalid domain object

Sys::Virt::Error::ERR\_INVALID\_MAC  
Invalid MAC address string

Sys::Virt::Error::ERR\_INVALID\_NETWORK  
Invalid network object

Sys::Virt::Error::ERR\_INVALID\_NODE\_DEVICE  
Invalid node device object

Sys::Virt::Error::ERR\_INVALID\_STORAGE\_POOL  
Invalid storage pool object

Sys::Virt::Error::ERR\_INVALID\_STORAGE\_VOL  
Invalid storage vol object

Sys::Virt::Error::ERR\_NETWORK\_EXIST  
Network with this name/uuid already exists

Sys::Virt::Error::ERR\_NO\_CONNECT  
Unable to connect to requested hypervisor driver

Sys::Virt::Error::ERR\_NO\_DEVICE  
Missing device information

Sys::Virt::Error::ERR\_NO\_DOMAIN  
No such domain with that name/uuid/id

Sys::Virt::Error::ERR\_NO\_KERNEL  
Missing kernel information in domain configuration

Sys::Virt::Error::ERR\_NO\_MEMORY  
Missing memory information in domain configuration

Sys::Virt::Error::ERR\_NO\_NAME  
Missing name in object configuration

Sys::Virt::Error::ERR\_NO\_NETWORK  
No such network with that name/uuid

Sys::Virt::Error::ERR\_NO\_NODE\_DEVICE  
No such node device with that name

Sys::Virt::Error::ERR\_NO\_OS  
Missing OS information in domain configuration

Sys::Virt::Error::ERR\_NO\_ROOT  
Missing root device information in domain configuration

Sys::Virt::Error::ERR\_NO\_SECURITY\_MODEL  
Missing security model information in domain configuratio

Sys::Virt::Error::ERR\_NO\_SOURCE  
Missing source device information in domain configuration

Sys::Virt::Error::ERR\_NO\_STORAGE\_POOL  
No such storage pool with that name/uuid

Sys::Virt::Error::ERR\_NO\_STORAGE\_VOL  
No such storage volume with that name/path/key

Sys::Virt::Error::ERR\_NO\_SUPPORT  
This operation is not supported by the active driver

Sys::Virt::Error::ERR\_NO\_TARGET  
Missing target device information in domain configuration

Sys::Virt::Error::ERR\_NO\_XEN  
Unable to connect to Xen hypervisor

Sys::Virt::Error::ERR\_NO\_XENSTORE  
Unable to connect to XenStorage daemon

Sys::Virt::Error::ERR\_OK  
No error code. This should never be see

Sys::Virt::Error::ERR\_OPEN\_FAILED  
Unable to open a configuration file

Sys::Virt::Error::ERR\_OPERATIONED\_DENIED  
The operation is forbidden for the current connection

Sys::Virt::Error::ERR\_OPERATION\_FAILED  
The operation failed to complete

Sys::Virt::Error::ERR\_OS\_TYPE  
Missing/incorrect OS type in domain configuration

Sys::Virt::Error::ERR\_PARSE\_FAILED  
Failed to parse configuration file

Sys::Virt::Error::ERR\_POST\_FAILED  
HTTP POST failure talking to XenD

Sys::Virt::Error::ERR\_READ\_FAILED  
Unable to read from configuration file

Sys::Virt::Error::ERR\_RPC  
Generic RPC error talking to XenD

Sys::Virt::Error::ERR\_SEXPR\_SERIAL  
Failed to generic SEXPR for XenD

Sys::Virt::Error::ERR\_SYSTEM\_ERROR  
Generic operating system error

Sys::Virt::Error::ERR\_UNKNOWN\_HOST  
Unknown hostname

Sys::Virt::Error::ERR\_WRITE\_FAILED  
Failed to write to configuration file

Sys::Virt::Error::ERR\_XEN\_CALL  
Failure while talking to Xen hypervisor

Sys::Virt::Error::ERR\_XML\_DETAIL  
Detailed XML parsing error

Sys::Virt::Error::ERR\_XML\_ERROR  
Generic XML parsing error

Sys::Virt::Error::WAR\_NO\_NETWORK  
Warning that no network driver is activated

Sys::Virt::Error::WAR\_NO\_NODE  
Warning that no node device driver is activated

Sys::Virt::Error::WAR\_NO\_STORAGE  
Warning that no storage driver is activated

Sys::Virt::Error::ERR\_INVALID\_INTERFACE  
Invalid network interface object

Sys::Virt::Error::ERR\_NO\_INTERFACE  
No interface with the matching name / mac address

Sys::Virt::Error::ERR\_OPERATION\_INVALID  
The requested operation is not valid for the current object state

Sys::Virt::Error::WAR\_NO\_INTERFACE  
The network interface driver is not available

Sys::Virt::Error::ERR\_MULTIPLE\_INTERFACES  
There are multiple interfaces with the requested MAC address

Sys::Virt::Error::ERR\_BUILD\_FIREWALL  
The firewall could not be constructed

Sys::Virt::Error::WAR\_NO\_NWFILTER  
The network filter driver could not be activated

Sys::Virt::Error::ERR\_NO\_NWFILTER  
There is no network filter driver available

Sys::Virt::Error::ERR\_INVALID\_NWFILTER  
The network filter object was invalid

Sys::Virt::Error::WAR\_NO\_SECRET  
There secret management driver is not available

Sys::Virt::Error::ERR\_NO\_SECRET  
No secret with the matching uuid / usage ID

Sys::Virt::Error::ERR\_INVALID\_SECRET  
Invalid secret object

Sys::Virt::Error::ERR\_CONFIG\_UNSUPPORTED  
The requested XML configuration is not supported by the hypervisor

Sys::Virt::Error::ERR\_OPERATION\_TIMEOUT  
The operation could not be completed in a satisfactory time

Sys::Virt::Error::ERR\_MIGRATE\_PERSIST\_FAILED  
Unable to persistent the domain configuration after migration successfully completed

Sys::Virt::Error::ERR\_HOOK\_SCRIPT\_FAILED  
Execution of a daemon hook script failed

Sys::Virt::Error::ERR\_INVALID\_DOMAIN\_SNAPSHOT  
The domain snapshot object pointer was invalid

Sys::Virt::Error::ERR\_NO\_DOMAIN\_SNAPSHOT  
No matching domain snapshot was found

Sys::Virt::Error::ERR\_INVALID\_STREAM  
The stream object pointer was invalid

Sys::Virt::Error::ERR\_ARGUMENT\_UNSUPPORTED  
The argument value was not supported by the driver

Sys::Virt::Error::ERR\_STORAGE\_POOL\_BUILT  
The storage pool has already been built

Sys::Virt::Error::ERR\_STORAGE\_PROBE\_FAILED  
Probing the storage pool failed

Sys::Virt::Error::ERR\_SNAPSHOT\_REVERT\_RISKY  
Reverting the snapshot could cause data loss

Sys::Virt::Error::ERR\_OPERATION\_ABORTED  
The asynchronous operation was aborted at admin request

Sys::Virt::Error::ERR\_AUTH\_CANCELLED  
The user cancelled the authentication process

Sys::Virt::Error::ERR\_NO\_DOMAIN\_METADATA  
The requested metadata does not exist

Sys::Virt::Error::ERR\_MIGRATE\_UNSAFE  
The migration operation would be unsafe to perform

Sys::Virt::Error::ERR\_OVERFLOW  
The calculation would overflow

Sys::Virt::Error::ERR\_BLOCK\_COPY\_ACTIVE  
Action prevented by block copy job

Sys::Virt::Error::ERR\_AGENT\_UNRESPONSIVE  
The guest agent is not responding

Sys::Virt::Error::ERR\_OPERATION\_UNSUPPORTED  
The operation is not supported on this host

Sys::Virt::Error::ERR\_SSH  
The SSH operation failed

Sys::Virt::Error::ERR\_RESOURCE\_BUSY  
The resource requested is already in use

Sys::Virt::Error::ERR\_ACCESS\_DENIED  
Not authorized to perform the operation



Sys::Virt::Error::ERR\_DBUS\_SERVICE  
An error from a DBus service API

Sys::Virt::Error::ERR\_STORAGE\_VOL\_EXIST  
The storage volume already exists

Sys::Virt::Error::ERR\_CPU\_INCOMPATIBLE  
The CPUs are not compatible

Sys::Virt::Error::ERR\_INVALID\_SCHEMA  
The XML document does not comply with the XML schema

Sys::Virt::Error::ERR\_MIGRATE\_FINISH\_OK  
Migration finished but expected to return NULL domain.

Sys::Virt::Error::ERR\_AUTH\_UNAVAILABLE  
Authentication services were not available

Sys::Virt::Error::ERR\_NO\_SERVER  
Libvirt server was not found

Sys::Virt::Error::ERR\_NO\_CLIENT  
Libvirt client was not found

Sys::Virt::Error::ERR\_AGENT\_UNSYNCED  
Libvirt guest agent replies with wrong id to guest-sync command

Sys::Virt::Error::ERR\_LIBSSH  
The libSSH operation failed

Sys::Virt::Error::ERR\_DEVICE\_MISSING  
Libvirt fail to find the desired device.

Sys::Virt::Error::ERR\_INVALID\_NWFILTER\_BINDING  
Invalid nwfilter binding

Sys::Virt::Error::ERR\_NO\_NWFILTER\_BINDING  
No nwfilter binding

Sys::Virt::Error::ERR\_INVALID\_DOMAIN\_CHECKPOINT  
Invalid domain checkpoint

Sys::Virt::Error::ERR\_NO\_DOMAIN\_BACKUP  
Domain checkpoint not found

Sys::Virt::Error::ERR\_NO\_DOMAIN\_CHECKPOINT  
Domain backup job id not found

Sys::Virt::Error::ERR\_NO\_NETWORK\_PORT  
No matching network port

Sys::Virt::Error::ERR\_INVALID\_NETWORK\_PORT  
Invalid network port object

Sys::Virt::Error::ERR\_NETWORK\_PORT\_EXIST  
Network port already exists

Sys::Virt::Error::ERR\_NO\_HOSTNAME  
No domain hostname found

Sys::Virt::Error::ERR\_CHECKPOINT\_INCONSISTENT  
The checkpoint is inconsistent

Sys::Virt::Error::ERR\_MULTIPLE\_DOMAINS  
More than one matching domain found

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**SEE ALSO**

Sys::Virt::Domain, Sys::Virt, <http://libvirt.org>