



TEST REPORT SEAPATH ORACLE LINUX

Receiver: SEAPATH

Contact: <florent.carli@rte-france.com>

2 April 2025, 08:59:29 UTC

Copyright © 2025 Savoir-faire Linux

The registered trademark Linux® is used pursuant to a sublicense from LMI, the exclusive license of Linus Torvalds, owner of the mark on a world-wide basis.

Table of Contents

| | |
|---|----|
| Test reports..... | 1 |
| Tests common for vmtest12..... | 1 |
| Tests common security for vmtest12..... | 1 |
| Tests common for vmtest12s..... | 4 |
| Tests common security for vmtest12s..... | 4 |
| Tests common for vmtest12rt..... | 7 |
| Tests common security for vmtest12rt..... | 8 |
| Tests common for standalone..... | 11 |
| Tests common for node3..... | 11 |
| Tests common for node2..... | 11 |
| Tests common for node1..... | 11 |
| Tests common cluster for ciol91..... | 12 |
| About this documentation..... | 13 |

Test reports

Tests common for vmtest12

| Test ID | Tests | Results |
|---------------|--|---------|
| SEAPATH-00078 | no paging error | PASS |
| SEAPATH-00079 | no rcu stall | PASS |
| SEAPATH-00080 | no backtraces | PASS |
| SEAPATH-00075 | kernel is PREEMPT RT | PASS |
| SEAPATH-00076 | kernel is realtime | PASS |
| SEAPATH-00081 | kernel is >= 4.19.106 | PASS |
| SEAPATH-00083 | syslog-ng service is running | PASS |
| SEAPATH-00084 | syslog-ng is configured to send log on network | PASS |

- number of tests: 8
- number of failures: 0

Tests common security for vmtest12

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00197 | Only wanted apt repositories configured: only one repo in sources.list.d (ceph) | PASS |
| SEAPATH-00198 | No unrecognized packages installed | PASS |
| SEAPATH-00215 | auditd service is active | PASS |
| SEAPATH-00216 | auditd is configured to output in syslog | PASS |
| SEAPATH-00217 | insmod call is logged | PASS |
| SEAPATH-00217 | kmod call is logged | PASS |
| SEAPATH-00217 | modprobe call is logged | PASS |
| SEAPATH-00217 | rmmod call is logged | PASS |
| SEAPATH-00218 | modification in /etc/ is logged | PASS |
| SEAPATH-00219 | mount/umount call is logged | PASS |
| SEAPATH-00220 | ioperm call is logged | PASS |
| SEAPATH-00220 | prctl call is logged | PASS |
| SEAPATH-00220 | ptrace call is logged | PASS |
| SEAPATH-00221 | file deletion is logged | PASS |
| SEAPATH-00222 | open monitoring is logged | PASS |
| SEAPATH-00222 | openat monitoring is logged | PASS |
| SEAPATH-00222 | unlink monitoring is logged | PASS |
| SEAPATH-00106 | Check /etc/shadow permissions | PASS |
| SEAPATH-00107 | Check /etc/passwd permissions | PASS |
| SEAPATH-00108 | Check /etc/syslog-ng/cert.d/clientkey.pem permissions | PASS |
| SEAPATH-00049 | Check /etc/ssh/ssh_host_ed25519_key permissions | PASS |

| Test ID | Tests | Results |
|---------------|--|---------|
| SEAPATH-00090 | Check /etc/ssh/ssh_host_rsa_key permissions | PASS |
| SEAPATH-00192 | All files have a known owner and group | PASS |
| SEAPATH-00193 | All directories writable by all users have the sticky bit | PASS |
| SEAPATH-00194 | All directories writable by all users are owned by root | PASS |
| SEAPATH-00195 | Ceph OSD are owned by ceph | PASS |
| SEAPATH-00196 | No unexpected file has setuid/setgid enabled | PASS |
| SEAPATH-00088 | root password was randomized at boot | PASS |
| SEAPATH-00089 | root password is randomized at each boot | PASS |
| SEAPATH-00091 | root password is encrypted with a crypto at least equivalent as sha512 | PASS |
| SEAPATH-00092 | bash timeout is set read-only to 300s | PASS |
| SEAPATH-00093 | sshd forbids setting environment variables | PASS |
| SEAPATH-00094 | sshd server time-out is set to 300s of client inactivity | PASS |
| SEAPATH-00097 | pam password authentication uses sha512 with 65536 rounds or yescrypt | PASS |
| SEAPATH-00098 | password set to expire after 90 days | PASS |
| SEAPATH-00099 | 'su' is denied | PASS |
| SEAPATH-00100 | /etc/securetty is empty | PASS |
| SEAPATH-00101 | PAM securetty module is active in 'login' policy | PASS |
| SEAPATH-00202 | grub root superuser is set in /boot/grub/grub.cfg | PASS |
| SEAPATH-00203 | grub root superuser is password protected | PASS |
| SEAPATH-00204 | main menuentry is unrestricted in /boot/grub/grub.cfg | PASS |
| SEAPATH-00205 | TMPDIR env var is defined and readonly | PASS |
| SEAPATH-00206 | TMPDIR is set with 700 mode and root as owner and group | PASS |
| SEAPATH-00225 | Umask is set correctly set | PASS |
| SEAPATH-00227 | AppArmor processes are confined in enforce mode | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SECURITY_YAMA is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : DEBUG_WX is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SECURITY_DMESG_RESTRICT is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : LEGACY_VSYSCALL_NONE is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SLAB_FREELIST_RANDOM is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SLAB_FREELIST_HARDENED is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : HARDENED_USERCOPY is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : FORTIFY_SOURCE is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : PAGE_POISONING is enabled | PASS |
| SEAPATH-00170 | Wipe slab and page allocations enabled on cmdline | PASS |
| SEAPATH-00174 | Randomize kstack offset in on | PASS |
| SEAPATH-00175 | Disable slab usercopy fallback | PASS |
| SEAPATH-00201 | LSM Yama is enabled | PASS |
| SEAPATH-00210 | MCE is disabled | PASS |
| SEAPATH-00211 | rng_core.default_quality is set to 500 | PASS |
| SEAPATH-00226 | Test AppArmor is enabled | PASS |

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00223 | All sockets are bound to an interface | PASS |
| SEAPATH-00224 | IPv6 is disabled | PASS |
| SEAPATH-00164 | sudo requires password for group operator (operator) | PASS |
| SEAPATH-00165 | sudo requires password for group maintenance-N1 (maint-n1) | PASS |
| SEAPATH-00166 | sudo requires password for group maintenance-N3 (maint-n3) | PASS |
| SEAPATH-00167 | sudo requires password for group administrator (admincluster) | PASS |
| SEAPATH-00168 | sudo requires password for group super-administrator (adminsys) | PASS |
| SEAPATH-00103 | /usr/bin/sudo exists | PASS |
| SEAPATH-00104 | /usr/bin/sudo belongs to group privileged | PASS |
| SEAPATH-00105 | /usr/bin/sudo has permissions 4750 | PASS |
| SEAPATH-00148 | sudoers files include directive noexec | PASS |
| SEAPATH-00148 | sudoers files include directive requiretty | PASS |
| SEAPATH-00148 | sudoers files include directive use_pty | PASS |
| SEAPATH-00148 | sudoers files include directive umask=0027 | PASS |
| SEAPATH-00148 | sudoers files include directive ignore_dot | PASS |
| SEAPATH-00148 | sudoers files include directive env_reset | PASS |
| SEAPATH-00149 | sudo commands don't target privileged user | PASS |
| SEAPATH-00150 | all commands require authentication | PASS |
| SEAPATH-00152 | EXEC option is not used | PASS |
| SEAPATH-00153 | rules are not defined by negation | PASS |
| SEAPATH-00154 | sudo commands always specify arguments | PASS |
| SEAPATH-00154 | no user can run all commands as root | PASS |
| SEAPATH-00155 | sudo commands don't use wildcard * argument | PASS |
| SEAPATH-00156 | /etc/sudoers - /etc/sudoers is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00156 | /etc/sudoers.d/admin - /etc/sudoers.d/admin is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00156 | /etc/sudoers.d/00-security - /etc/sudoers.d/00-security is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00171 | Check coredumps are disabled | PASS |
| SEAPATH-00172 | Check kexec is disabled | PASS |
| SEAPATH-00173 | Check binfmt_misc is disabled | PASS |
| SEAPATH-00176 | Check kptr_restrict is set to 2 | PASS |
| SEAPATH-00177 | Check dmesg_restrict is set to 1 | PASS |
| SEAPATH-00178 | Check pid_max is set to 4194304 | PASS |
| SEAPATH-00179 | Check perf_cpu_time_max_percent is set to 1 | PASS |
| SEAPATH-00180 | Check perf_event_max_sample_rate is set to 1 | PASS |
| SEAPATH-00181 | Check perf_event_paranoid is set to 2 | PASS |
| SEAPATH-00182 | Check randomize_va_space is set to 2 | PASS |
| SEAPATH-00183 | Check sysrq is set to 0 | PASS |
| SEAPATH-00184 | Check unprivileged_bpf_disabled is set to 1 | PASS |
| SEAPATH-00185 | Check panic_on_oops is set to 1 | PASS |

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00186 | Check kernel.yama.ptrace_scope is set to 2 | PASS |
| SEAPATH-00187 | Check suid_dumpable is set to 0 | PASS |
| SEAPATH-00188 | Check protected_fifos is set to 2 | PASS |
| SEAPATH-00189 | Check protected_regular is set to 2 | PASS |
| SEAPATH-00190 | Check protected_symlinks is set to 1 | PASS |
| SEAPATH-00191 | Check protected_hardlinks is set to 1 | PASS |
| SEAPATH-00082 | /var/log is mounted on a separate partition | PASS |
| SEAPATH-00085 | syslog-ng can not acquire new privileges | PASS |
| SEAPATH-00086 | syslog-ng capabilities are bounded | PASS |
| SEAPATH-00087 | syslog-ng system calls are filtered | PASS |
| SEAPATH-00199 | No systemd service failed | PASS |
| SEAPATH-00200 | No unrecognized service enabled | PASS |

- number of tests: 111
- number of failures: 0

Tests common for vmtest12s

| Test ID | Tests | Results |
|---------------|--|---------|
| SEAPATH-00078 | no paging error | PASS |
| SEAPATH-00079 | no rcu stall | PASS |
| SEAPATH-00080 | no backtraces | PASS |
| SEAPATH-00075 | kernel is PREEMPT RT | PASS |
| SEAPATH-00076 | kernel is realtime | PASS |
| SEAPATH-00081 | kernel is >= 4.19.106 | PASS |
| SEAPATH-00083 | syslog-ng service is running | PASS |
| SEAPATH-00084 | syslog-ng is configured to send log on network | PASS |

- number of tests: 8
- number of failures: 0

Tests common security for vmtest12s

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00197 | Only wanted apt repositories configured: only one repo in sources.list.d (ceph) | PASS |
| SEAPATH-00198 | No unrecognized packages installed | PASS |
| SEAPATH-00215 | auditd service is active | PASS |
| SEAPATH-00216 | auditd is configured to output in syslog | PASS |
| SEAPATH-00217 | insmod call is logged | PASS |
| SEAPATH-00217 | kmod call is logged | PASS |
| SEAPATH-00217 | modprobe call is logged | PASS |

| Test ID | Tests | Results |
|---------------|--|---------|
| SEAPATH-00217 | rmmod call is logged | PASS |
| SEAPATH-00218 | modification in /etc/ is logged | PASS |
| SEAPATH-00219 | mount/umount call is logged | PASS |
| SEAPATH-00220 | ioperm call is logged | PASS |
| SEAPATH-00220 | prctl call is logged | PASS |
| SEAPATH-00220 | ptrace call is logged | PASS |
| SEAPATH-00221 | file deletion is logged | PASS |
| SEAPATH-00222 | open monitoring is logged | PASS |
| SEAPATH-00222 | openat monitoring is logged | PASS |
| SEAPATH-00222 | unlink monitoring is logged | PASS |
| SEAPATH-00106 | Check /etc/shadow permissions | PASS |
| SEAPATH-00107 | Check /etc/passwd permissions | PASS |
| SEAPATH-00108 | Check /etc/syslog-ng/cert.d/clientkey.pem permissions | PASS |
| SEAPATH-00049 | Check /etc/ssh/ssh_host_ed25519_key permissions | PASS |
| SEAPATH-00090 | Check /etc/ssh/ssh_host_rsa_key permissions | PASS |
| SEAPATH-00192 | All files have a known owner and group | PASS |
| SEAPATH-00193 | All directories writable by all users have the sticky bit | PASS |
| SEAPATH-00194 | All directories writable by all users are owned by root | PASS |
| SEAPATH-00195 | Ceph OSD are owned by ceph | PASS |
| SEAPATH-00196 | No unexpected file has setuid/setgid enabled | PASS |
| SEAPATH-00088 | root password was randomized at boot | PASS |
| SEAPATH-00089 | root password is randomized at each boot | PASS |
| SEAPATH-00091 | root password is encrypted with a crypto at least equivalent as sha512 | PASS |
| SEAPATH-00092 | bash timeout is set read-only to 300s | PASS |
| SEAPATH-00093 | sshd forbids setting environment variables | PASS |
| SEAPATH-00094 | sshd server time-out is set to 300s of client inactivity | PASS |
| SEAPATH-00097 | pam password authentication uses sha512 with 65536 rounds or yescrypt | PASS |
| SEAPATH-00098 | password set to expire after 90 days | PASS |
| SEAPATH-00099 | 'su' is denied | PASS |
| SEAPATH-00100 | /etc/securetty is empty | PASS |
| SEAPATH-00101 | PAM securetty module is active in 'login' policy | PASS |
| SEAPATH-00202 | grub root superuser is set in /boot/grub/grub.cfg | PASS |
| SEAPATH-00203 | grub root superuser is password protected | PASS |
| SEAPATH-00204 | main menuentry is unrestricted in /boot/grub/grub.cfg | PASS |
| SEAPATH-00205 | TMPDIR env var is defined and readonly | PASS |
| SEAPATH-00206 | TMPDIR is set with 700 mode and root as owner and group | PASS |
| SEAPATH-00225 | Umask is set correctly set | PASS |
| SEAPATH-00227 | AppArmor processes are confined in enforce mode | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SECURITY_YAMA is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : DEBUG_WX is enabled | PASS |

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00050 | Linux kernel 'hardening' : SECURITY_DMESG_RESTRICT is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : LEGACY_VSYSCALL_NONE is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SLAB_FREELIST_RANDOM is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SLAB_FREELIST_HARDENED is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : HARDENED_USERCOPY is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : FORTIFY_SOURCE is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : PAGE_POISONING is enabled | PASS |
| SEAPATH-00170 | Wipe slab and page allocations enabled on cmdline | PASS |
| SEAPATH-00174 | Randomize kstack offset in on | PASS |
| SEAPATH-00175 | Disable slab usercopy fallback | PASS |
| SEAPATH-00201 | LSM Yama is enabled | PASS |
| SEAPATH-00210 | MCE is disabled | PASS |
| SEAPATH-00211 | rng_core.default_quality is set to 500 | PASS |
| SEAPATH-00226 | Test AppArmor is enabled | PASS |
| SEAPATH-00223 | All sockets are bound to an interface | PASS |
| SEAPATH-00224 | IPv6 is disabled | PASS |
| SEAPATH-00164 | sudo requires password for group operator (operator) | PASS |
| SEAPATH-00165 | sudo requires password for group maintenance-N1 (maint-n1) | PASS |
| SEAPATH-00166 | sudo requires password for group maintenance-N3 (maint-n3) | PASS |
| SEAPATH-00167 | sudo requires password for group administrator (admincluster) | PASS |
| SEAPATH-00168 | sudo requires password for group super-administrator (adminsys) | PASS |
| SEAPATH-00103 | /usr/bin/sudo exists | PASS |
| SEAPATH-00104 | /usr/bin/sudo belongs to group privileged | PASS |
| SEAPATH-00105 | /usr/bin/sudo has permissions 4750 | PASS |
| SEAPATH-00148 | sudoers files include directive noexec | PASS |
| SEAPATH-00148 | sudoers files include directive requiretty | PASS |
| SEAPATH-00148 | sudoers files include directive use_ptty | PASS |
| SEAPATH-00148 | sudoers files include directive umask=0027 | PASS |
| SEAPATH-00148 | sudoers files include directive ignore_dot | PASS |
| SEAPATH-00148 | sudoers files include directive env_reset | PASS |
| SEAPATH-00149 | sudo commands don't target privileged user | PASS |
| SEAPATH-00150 | all commands require authentication | PASS |
| SEAPATH-00152 | EXEC option is not used | PASS |
| SEAPATH-00153 | rules are not defined by negation | PASS |
| SEAPATH-00154 | sudo commands always specify arguments | PASS |
| SEAPATH-00154 | no user can run all commands as root | PASS |
| SEAPATH-00155 | sudo commands don't use wildcard * argument | PASS |
| SEAPATH-00156 | /etc/sudoers - /etc/sudoers is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00156 | /etc/sudoers.d/admin - /etc/sudoers.d/admin is owned by root:root with 0440 permissions | PASS |

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00156 | /etc/sudoers.d/00-security - /etc/sudoers.d/00-security is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00171 | Check coredumps are disabled | PASS |
| SEAPATH-00172 | Check kexec is disabled | PASS |
| SEAPATH-00173 | Check binfmt_misc is disabled | PASS |
| SEAPATH-00176 | Check kptr_restrict is set to 2 | PASS |
| SEAPATH-00177 | Check dmesg_restrict is set to 1 | PASS |
| SEAPATH-00178 | Check pid_max is set to 4194304 | PASS |
| SEAPATH-00179 | Check perf_cpu_time_max_percent is set to 1 | PASS |
| SEAPATH-00180 | Check perf_event_max_sample_rate is set to 1 | PASS |
| SEAPATH-00181 | Check perf_event_paranoid is set to 2 | PASS |
| SEAPATH-00182 | Check randomize_va_space is set to 2 | PASS |
| SEAPATH-00183 | Check sysrq is set to 0 | PASS |
| SEAPATH-00184 | Check unprivileged_bpf_disabled is set to 1 | PASS |
| SEAPATH-00185 | Check panic_on_oops is set to 1 | PASS |
| SEAPATH-00186 | Check kernel.yama.ptrace_scope is set to 2 | PASS |
| SEAPATH-00187 | Check suid_dumpable is set to 0 | PASS |
| SEAPATH-00188 | Check protected_fifos is set to 2 | PASS |
| SEAPATH-00189 | Check protected_regular is set to 2 | PASS |
| SEAPATH-00190 | Check protected_symlinks is set to 1 | PASS |
| SEAPATH-00191 | Check protected_hardlinks is set to 1 | PASS |
| SEAPATH-00082 | /var/log is mounted on a separate partition | PASS |
| SEAPATH-00085 | syslog-ng can not acquire new privileges | PASS |
| SEAPATH-00086 | syslog-ng capabilities are bounded | PASS |
| SEAPATH-00087 | syslog-ng system calls are filtered | PASS |
| SEAPATH-00199 | No systemd service failed | PASS |
| SEAPATH-00200 | No unrecognized service enabled | PASS |

- number of tests: 111
- number of failures: 0

Tests common for vmtest12rt

| Test ID | Tests | Results |
|---------------|------------------------------|---------|
| SEAPATH-00078 | no paging error | PASS |
| SEAPATH-00079 | no rcu stall | PASS |
| SEAPATH-00080 | no backtraces | PASS |
| SEAPATH-00075 | kernel is PREEMPT RT | PASS |
| SEAPATH-00076 | kernel is realtime | PASS |
| SEAPATH-00081 | kernel is >= 4.19.106 | PASS |
| SEAPATH-00083 | syslog-ng service is running | PASS |

| Test ID | Tests | Results |
|---------------|--|---------|
| SEAPATH-00084 | syslog-ng is configured to send log on network | PASS |

- number of tests: 8
- number of failures: 0

Tests common security for vmtest12rt

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00197 | Only wanted apt repositories configured: only one repo in sources.list.d (ceph) | PASS |
| SEAPATH-00198 | No unrecognized packages installed | PASS |
| SEAPATH-00215 | auditd service is active | PASS |
| SEAPATH-00216 | auditd is configured to output in syslog | PASS |
| SEAPATH-00217 | insmod call is logged | PASS |
| SEAPATH-00217 | kmod call is logged | PASS |
| SEAPATH-00217 | modprobe call is logged | PASS |
| SEAPATH-00217 | rmmod call is logged | PASS |
| SEAPATH-00218 | modification in /etc/ is logged | PASS |
| SEAPATH-00219 | mount/umount call is logged | PASS |
| SEAPATH-00220 | ioperm call is logged | PASS |
| SEAPATH-00220 | prctl call is logged | PASS |
| SEAPATH-00220 | ptrace call is logged | PASS |
| SEAPATH-00221 | file deletion is logged | PASS |
| SEAPATH-00222 | open monitoring is logged | PASS |
| SEAPATH-00222 | openat monitoring is logged | PASS |
| SEAPATH-00222 | unlink monitoring is logged | PASS |
| SEAPATH-00106 | Check /etc/shadow permissions | PASS |
| SEAPATH-00107 | Check /etc/passwd permissions | PASS |
| SEAPATH-00108 | Check /etc/syslog-ng/cert.d/clientkey.pem permissions | PASS |
| SEAPATH-00049 | Check /etc/ssh/ssh_host_ed25519_key permissions | PASS |
| SEAPATH-00090 | Check /etc/ssh/ssh_host_rsa_key permissions | PASS |
| SEAPATH-00192 | All files have a known owner and group | PASS |
| SEAPATH-00193 | All directories writable by all users have the sticky bit | PASS |
| SEAPATH-00194 | All directories writable by all users are owned by root | PASS |
| SEAPATH-00195 | Ceph OSD are owned by ceph | PASS |
| SEAPATH-00196 | No unexpected file has setuid/setgid enabled | PASS |
| SEAPATH-00088 | root password was randomized at boot | PASS |
| SEAPATH-00089 | root password is randomized at each boot | PASS |
| SEAPATH-00091 | root password is encrypted with a crypto at least equivalent as sha512 | PASS |
| SEAPATH-00092 | bash timeout is set read-only to 300s | PASS |
| SEAPATH-00093 | sshd forbids setting environment variables | PASS |
| SEAPATH-00094 | sshd server time-out is set to 300s of client inactivity | PASS |

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00097 | pam password authentication uses sha512 with 65536 rounds or yescrypt | PASS |
| SEAPATH-00098 | password set to expire after 90 days | PASS |
| SEAPATH-00099 | 'su' is denied | PASS |
| SEAPATH-00100 | /etc/securetty is empty | PASS |
| SEAPATH-00101 | PAM securetty module is active in 'login' policy | PASS |
| SEAPATH-00202 | grub root superuser is set in /boot/grub/grub.cfg | PASS |
| SEAPATH-00203 | grub root superuser is password protected | PASS |
| SEAPATH-00204 | main menuentry is unrestricted in /boot/grub/grub.cfg | PASS |
| SEAPATH-00205 | TMPDIR env var is defined and readonly | PASS |
| SEAPATH-00206 | TMPDIR is set with 700 mode and root as owner and group | PASS |
| SEAPATH-00225 | Umask is set correctly set | PASS |
| SEAPATH-00227 | AppArmor processes are confined in enforce mode | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SECURITY_YAMA is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : DEBUG_WX is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SECURITY_DMESG_RESTRICT is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : LEGACY_VSYSCALL_NONE is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SLAB_FREELIST_RANDOM is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : SLAB_FREELIST_HARDENED is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : HARDENED_USERCOPY is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : FORTIFY_SOURCE is enabled | PASS |
| SEAPATH-00050 | Linux kernel 'hardening' : PAGE_POISONING is enabled | PASS |
| SEAPATH-00170 | Wipe slab and page allocations enabled on cmdline | PASS |
| SEAPATH-00174 | Randomize kstack offset in on | PASS |
| SEAPATH-00175 | Disable slab usercopy fallback | PASS |
| SEAPATH-00201 | LSM Yama is enabled | PASS |
| SEAPATH-00210 | MCE is disabled | PASS |
| SEAPATH-00211 | rng_core.default_quality is set to 500 | PASS |
| SEAPATH-00226 | Test AppArmor is enabled | PASS |
| SEAPATH-00223 | All sockets are bound to an interface | PASS |
| SEAPATH-00224 | IPv6 is disabled | PASS |
| SEAPATH-00164 | sudo requires password for group operator (operator) | PASS |
| SEAPATH-00165 | sudo requires password for group maintenance-N1 (maint-n1) | PASS |
| SEAPATH-00166 | sudo requires password for group maintenance-N3 (maint-n3) | PASS |
| SEAPATH-00167 | sudo requires password for group administrator (admincluster) | PASS |
| SEAPATH-00168 | sudo requires password for group super-administrator (adminsyz) | PASS |
| SEAPATH-00103 | /usr/bin/sudo exists | PASS |
| SEAPATH-00104 | /usr/bin/sudo belongs to group privileged | PASS |
| SEAPATH-00105 | /usr/bin/sudo has permissions 4750 | PASS |
| SEAPATH-00148 | sudoers files include directive noexec | PASS |
| SEAPATH-00148 | sudoers files include directive requiretty | PASS |

| Test ID | Tests | Results |
|---------------|---|---------|
| SEAPATH-00148 | sudoers files include directive use_pty | PASS |
| SEAPATH-00148 | sudoers files include directive umask=0027 | PASS |
| SEAPATH-00148 | sudoers files include directive ignore_dot | PASS |
| SEAPATH-00148 | sudoers files include directive env_reset | PASS |
| SEAPATH-00149 | sudo commands don't target privileged user | PASS |
| SEAPATH-00150 | all commands require authentication | PASS |
| SEAPATH-00152 | EXEC option is not used | PASS |
| SEAPATH-00153 | rules are not defined by negation | PASS |
| SEAPATH-00154 | sudo commands always specify arguments | PASS |
| SEAPATH-00154 | no user can run all commands as root | PASS |
| SEAPATH-00155 | sudo commands don't use wildcard * argument | PASS |
| SEAPATH-00156 | /etc/sudoers - /etc/sudoers is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00156 | /etc/sudoers.d/00-security - /etc/sudoers.d/00-security is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00156 | /etc/sudoers.d/admin - /etc/sudoers.d/admin is owned by root:root with 0440 permissions | PASS |
| SEAPATH-00171 | Check coredumps are disabled | PASS |
| SEAPATH-00172 | Check kexec is disabled | PASS |
| SEAPATH-00173 | Check binfmt_misc is disabled | PASS |
| SEAPATH-00176 | Check kptr_restrict is set to 2 | PASS |
| SEAPATH-00177 | Check dmesg_restrict is set to 1 | PASS |
| SEAPATH-00178 | Check pid_max is set to 4194304 | PASS |
| SEAPATH-00179 | Check perf_cpu_time_max_percent is set to 1 | PASS |
| SEAPATH-00180 | Check perf_event_max_sample_rate is set to 1 | PASS |
| SEAPATH-00181 | Check perf_event_paranoid is set to 2 | PASS |
| SEAPATH-00182 | Check randomize_va_space is set to 2 | PASS |
| SEAPATH-00183 | Check sysrq is set to 0 | PASS |
| SEAPATH-00184 | Check unprivileged_bpf_disabled is set to 1 | PASS |
| SEAPATH-00185 | Check panic_on_oops is set to 1 | PASS |
| SEAPATH-00186 | Check kernel.yama.ptrace_scope is set to 2 | PASS |
| SEAPATH-00187 | Check suid_dumpable is set to 0 | PASS |
| SEAPATH-00188 | Check protected_fifos is set to 2 | PASS |
| SEAPATH-00189 | Check protected_regular is set to 2 | PASS |
| SEAPATH-00190 | Check protected_symlinks is set to 1 | PASS |
| SEAPATH-00191 | Check protected_hardlinks is set to 1 | PASS |
| SEAPATH-00082 | /var/log is mounted on a separate partition | PASS |
| SEAPATH-00085 | syslog-ng can not acquire new privileges | PASS |
| SEAPATH-00086 | syslog-ng capabilities are bounded | PASS |
| SEAPATH-00087 | syslog-ng system calls are filtered | PASS |
| SEAPATH-00199 | No systemd service failed | PASS |
| SEAPATH-00200 | No unrecognized service enabled | PASS |

- number of tests: 111
- number of failures: 0

Tests common for standalone

| Test ID | Tests | Results |
|---------------|--------------------------------------|---------|
| SEAPATH-00066 | define VM from a valid configuration | PASS |
| SEAPATH-00067 | define VM from a valid configuration | PASS |
| SEAPATH-00068 | list VM | PASS |
| SEAPATH-00069 | export VM configuration | PASS |
| SEAPATH-00070 | VM configuration has been export | PASS |

- number of tests: 5
- number of failures: 0

Tests common for node3

| Test ID | Tests | Results |
|---------------|--------------------------------------|---------|
| SEAPATH-00066 | define VM from a valid configuration | PASS |
| SEAPATH-00067 | define VM from a valid configuration | PASS |
| SEAPATH-00068 | list VM | PASS |
| SEAPATH-00069 | export VM configuration | PASS |
| SEAPATH-00070 | VM configuration has been export | PASS |

- number of tests: 5
- number of failures: 0

Tests common for node2

| Test ID | Tests | Results |
|---------------|--------------------------------------|---------|
| SEAPATH-00066 | define VM from a valid configuration | PASS |
| SEAPATH-00067 | define VM from a valid configuration | PASS |
| SEAPATH-00068 | list VM | PASS |
| SEAPATH-00069 | export VM configuration | PASS |
| SEAPATH-00070 | VM configuration has been export | PASS |

- number of tests: 5
- number of failures: 0

Tests common for node1

| Test ID | Tests | Results |
|---------------|--------------------------------------|---------|
| SEAPATH-00066 | define VM from a valid configuration | PASS |
| SEAPATH-00067 | define VM from a valid configuration | PASS |
| SEAPATH-00068 | list VM | PASS |
| SEAPATH-00069 | export VM configuration | PASS |
| SEAPATH-00070 | VM configuration has been export | PASS |

- number of tests: 5
- number of failures: 0

Tests common cluster for ciol91

| Test ID | Tests | Results |
|---------------|---------------------------------------|---------|
| SEAPATH-00071 | Test add VM | PASS |
| SEAPATH-00072 | Test stop VM | PASS |
| SEAPATH-00073 | Test start VM | PASS |
| SEAPATH-00074 | Test remove VM | PASS |
| SEAPATH-00306 | Test clone disk | PASS |
| SEAPATH-00307 | Test groups | PASS |
| SEAPATH-00308 | Test namespaces | PASS |
| SEAPATH-00309 | Test metadata | PASS |
| SEAPATH-00060 | Test snapshots | PASS |
| SEAPATH-00061 | Test snapshots rollback | PASS |
| SEAPATH-00062 | Test write rbd | PASS |
| SEAPATH-00051 | health is not error | PASS |
| SEAPATH-00052 | 3 monitors are configured | PASS |
| SEAPATH-00053 | 3 monitors are up | PASS |
| SEAPATH-00054 | at least 2 osds are configured and up | PASS |
| SEAPATH-00055 | a manager is active | PASS |
| SEAPATH-00119 | corosync service is running | PASS |
| SEAPATH-00122 | pacemaker service is running | PASS |
| SEAPATH-00063 | no OFFLINE node | PASS |
| SEAPATH-00064 | 3 nodes are configured | PASS |
| SEAPATH-00065 | list secrets | PASS |

- number of tests: 19
- number of failures: 0

About this documentation

This documentation uses the AsciiDoc documentation generator. It is a convenient format that allows using plain-text formatted writing that can later be converted to various output formats such as HTML and PDF.

In order to generate an HTML version of this documentation, use the following command (the asciidoc package will need to be installed in your Linux distribution):

```
$ asciidoc test-report.adoc
```

This will result in a README.html file being generated in the current directory.

If you prefer a PDF version of the documentation instead, use the following command (the dblatex package will need to be installed on your Linux distribution):

```
$ asciidoctor-pdf test-report.adoc
```