

.62.01.11.000.003 34 01-

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1.1.

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1.2.

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« - » .62.01.11.000.002

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- (NTFS, Ext2, Ext3, Ext4, Xfs, Vfat
(fat32));

- (WEB- , (« - »
.62.01.11.000.013), , ,
);

- USB- , PCI- ;

- OpenSSL,

28147-

89, 34.10-2012.

2.

2.1.

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 1) ,
 « » («
 « ») .62.01.11.000.004, :
 – « »
 .62.01.11.000.005 (« - »);
 – « » .62.01.11.000.006
 (« - »);
 – « »
 .62.01.11.000.007 (« - »);
 – « »
 .62.01.11.000.008 (« - »);
 – « »
 .62.01.11.000.009 (« - »).
 2) « »
 (« ») .62.01.11.000.010,
 :
 – « »
 .62.01.11.000.011 (« - »);
 – « » .62.01.11.000.012
 (« - »);

2.2.

,
,
« - » (60412878.00051-02) (.6.4).

« - »
(.62.01.11.000.002)

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« - »

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:

- 86_ 64 c 2 ;
- 4 ;
- 15 ;
- 100

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- 1024×768;

- (./ .);

- « ».

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- 86_ 64 c 2 ;
- 4 ;
- 15 .

2.3.

.62.01.11.000.002 « -

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2.3.1.

1.

DHCP- PXE- .

2.

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3.

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4.

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- /var/lib/aide/sintez;
- /etc/init.d/aide_startup;
- counthash;
- /etc/aide.startup.conf;
- /etc/cron.d/counthash_timetable;
- /etc/aide.conf;
- /usr/bin/file_tree;
- /etc/sintez/integrity_client.conf;
- /etc/passwd;
- /etc/default/useradd;
- /etc/group;
- /etc/shadow;
- /etc/skel;
- /etc/selinux/targeted/seusers;

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- /etc/selinux/targeted/contexts;
- /var/www/Sintez-Repo/web/.htaccess;
- /etc/httpd/conf.d/z-ovirt-engine-proxy.conf;
- /etc/aide.user-group.conf.

5.

BIOS,

6.

7.

counthash.

8.

/etc/init.d/aide_startup

/

/etc/rc.d/.

9.

10.

TGT-

Kerberos

11.

/root/.ssh/authorized_keys

12.

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./etc/sysconfig/rsyslog;

./etc/rsyslog.conf;

./etc/rsyslog.d/;

./etc/audit/.

13.

auditd Rsyslog.

14.

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15.

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· , ;
 · , ;

· RAM-based

· , ;

· UDP NetLink ;

· user-space ;

· user-space.

16. , ,
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· Netlink ;

· UDP .

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— upcall

17. ,

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18. , « », , « » (6.4)

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SELinux

libselinux. (

) libselinux .

3.

3.1.

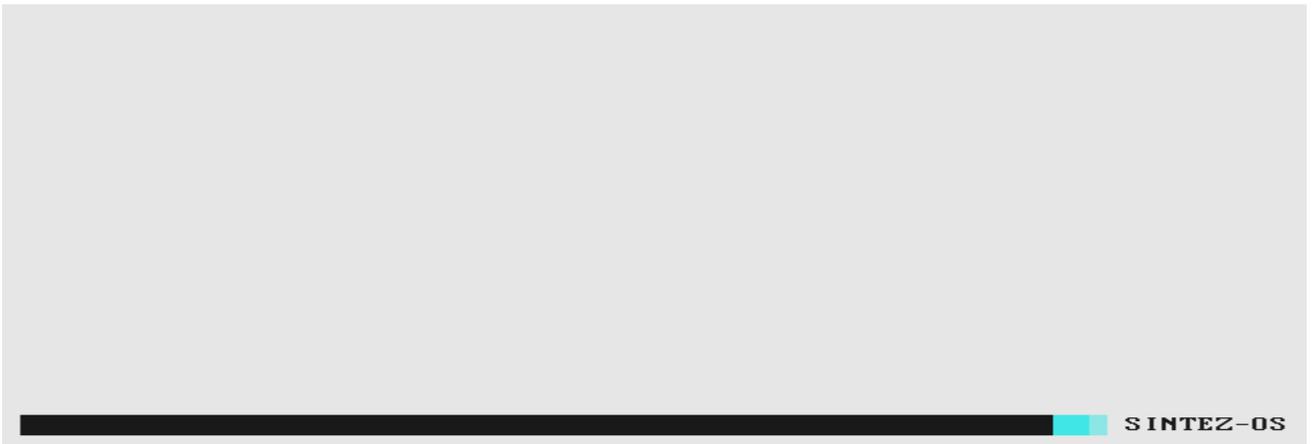
3.1.1.

«Power»,

3.1.2.

PXE

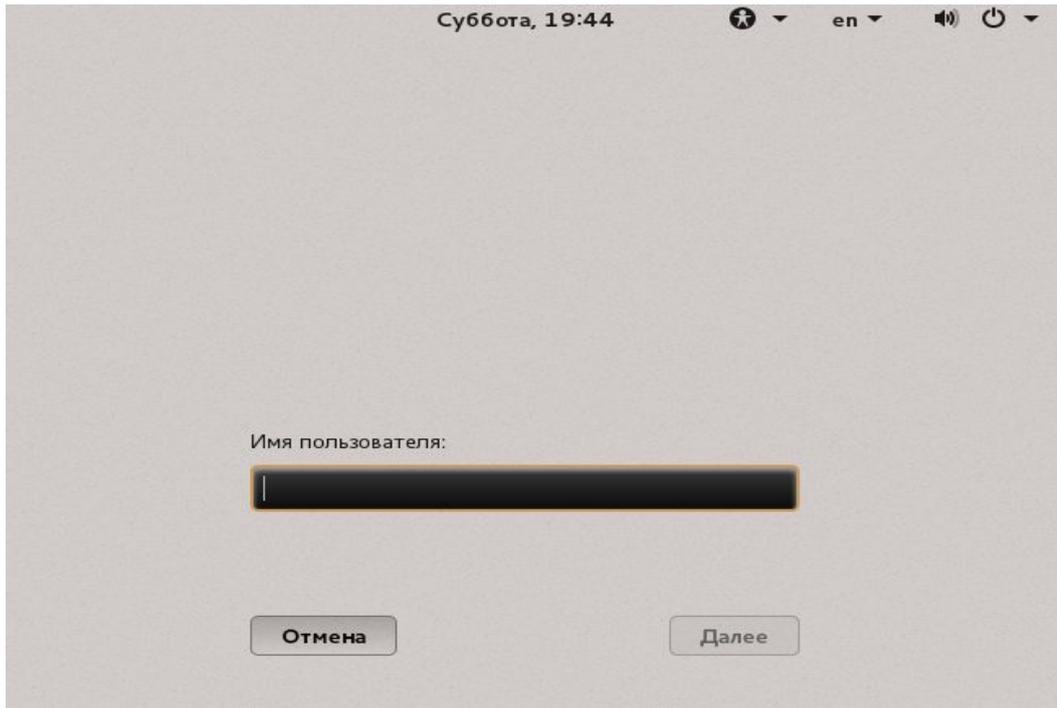
« - » (1).



1 –

3.1.3.

« - »
(2).



2 –

(« - / »)

(3) USB-

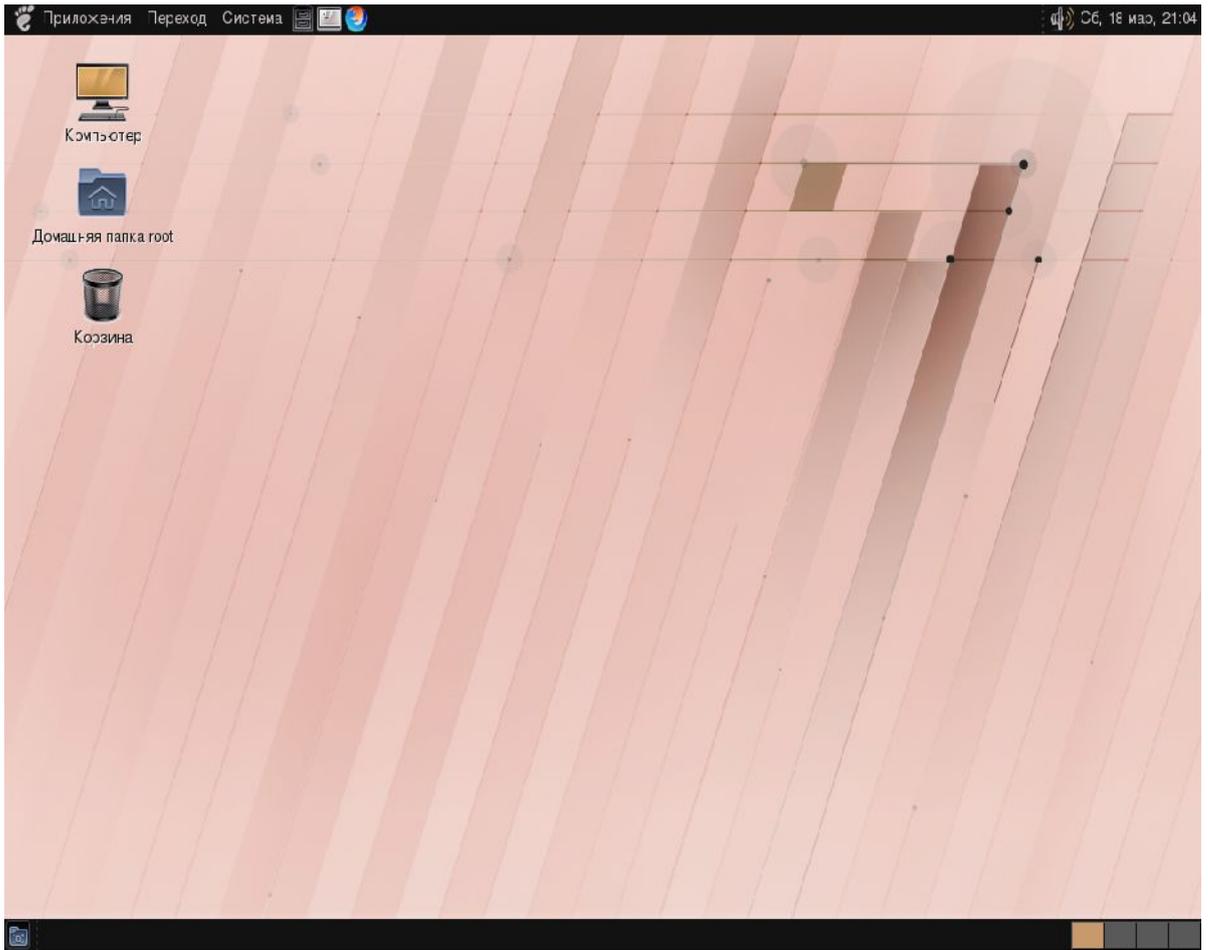


3. « - / »

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, « ».

, 4.



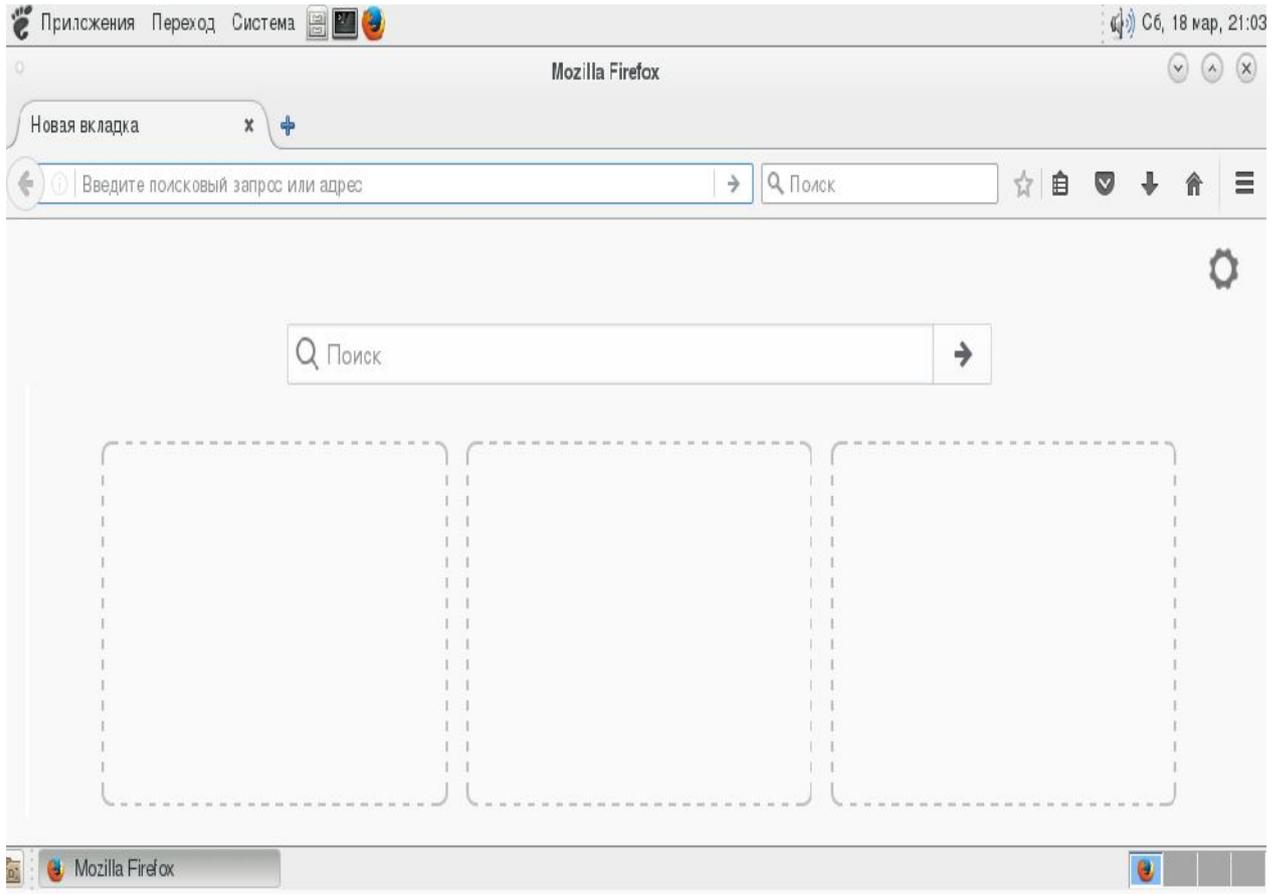
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3.2.

3.2.1.

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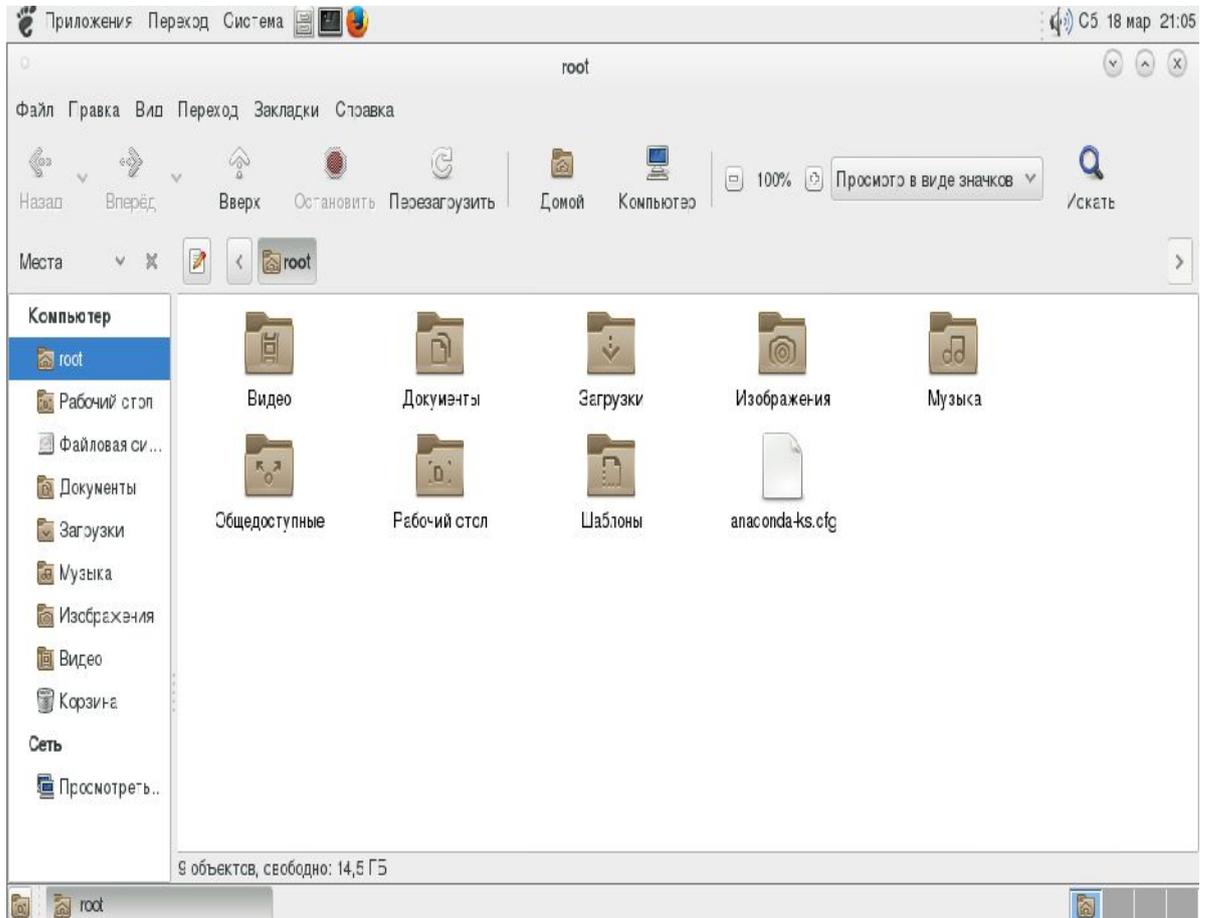
3.2.2.

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3.2.3.

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3.3.

3.4.

, USB-

3.4.1.

« - / ».

«Power»,

3.4.2.

« - / » USB-

(.3.1.3).

4.

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LIBSELINUX

avc_add_callback	
avc_audit	<pre> avc_has_perm (3) , avc_has_perm_noaudit (3), , , , </pre>
avc_av_stats	
avc_cache_stats	<pre> AVC avc_init (3) avc_reset (3). </pre>
avc_cleanup	<pre> SID SID AVC. AVC, </pre>
avc_compute_create	<pre> SID , </pre>
avc_compute_member	<pre> SID , </pre>
avc_context_to_sid	<pre> SID ctx SID, , ctx SID sid, 0 -1 erno. </pre>
avc_context_to_sid_raw	<pre> SID </pre>
avc_destroy	<pre> AVC AVC. , </pre>

	SID avc_init (3), AVC.
avc_get_initial_sid	SID security_get_initial_context (3), avc_context_to_sid (3),
avc_has_perm	AVC, SID (ssid, tsid), tclass aeref, AVC 0, , -1 errno, EACCES,
avc_has_perm_noaudit	AVC, tsid), SID (ssid, tclass aeref, AVC avd. 0, , -1 errno, EACCES, avc_has_perm (3), (),
avc_init	avc_open. AVC. -1 errno, 0

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avc_netlink_acquire_fd	netlink .
avc_netlink_check_nb	netlink .
avc_netlink_close	netlink.
avc_netlink_loop	netlink fd. netlink .
avc_netlink_open	netlink fd. netlink .
avc_netlink_release_fd	netlink .
avc_open	AVC. avc_init (3), «avc», selinux_set_callback (3).
avc_reset	(avc_cache_stats (3)) SID . 0 , -1 errno,
avc_sid_stats	SID . SID.
avc_sid_to_context	, SID. sid , ctx.
avc_sid_to_context_raw	, SID. sid , ctx.
checkPasswdAccess	selinux_check_passwd_access (3) selinux_check_access (3). passwd. 0, -1 " "
context_free	, .
context_new	, .
context_range_get	.
context_range_set	, .
context_role_get	.
context_role_set	, .
context_str	context_t.

	context_str context_free context_t*.
context_type_get	.
context_type_set	.
context_user_get	.
context_user_set	,
fgetfilecon	Wrapper xattr API. *con. freecon.
fgetfilecon_raw	xattr API. *con. freecon.
fini_selinuxmnt	selinuxmnt .
freecon	, get *.
freeconary	, security_compute_user (3).
fsetfilecon	API xattr -
fsetfilecon_raw	API xattr -
getcon	*con freecon (3).
getcon_raw	*con freecon (3).
get_default_context	« », «fromcon», *newcon, , , 'fromcon' NULL, 0 -1 freecon.
get_default_context_with_level	, get_default_context (3), MLS,
get_default_context_with_role	, get_default_context (3),
get_default_context_with_rolelevel	, get_default_context (3),

get_default_type	() « » « ». free(3). 0 -1
getexeccon	exec *con *con NULL, exec, . . .
getexeccon_raw	exec *con *con NULL, exec, . . .
getfilecon	Wrapper xattr API. *con . freecon (3).
getfilecon_raw	Wrapper xattr API. *con . freecon (3).
getfscreatecon	fscreate *con *con NULL, fs , . . .
getfscreatecon_raw	fscreate *con *con NULL, fs , . . .
getkeycreatecon	keycreate *con *con NULL, , . . .
getkeycreatecon_raw	keycreate *con *con NULL, , . . .
get_ordered_context_list	*conary NULL. , 'fromcon' NULL, *conary. freeconary(3).
get_ordered_context_list_with_level	, get_ordered_context_list (3), MLS, .
getpeercon	Wrapper API.

	*con freecon (3).
getpeercon_raw	Wrapper API. *con freecon (3).
getpidcon	pid, *con freecon (3).
getpidcon_raw	pid, *con freecon (3).
getprevcon	exec) *con freecon (3).
getprevcon_raw	exec) *con freecon (3).
getseuser	Linux SELinux get_ordered_context_list* get_default_context* -1 0 free(3).
getseuserbyname	Linux SELinux get_ordered_context_list* get_default_context* -1 0 free(3).
getsockcreatecon	sockcreate *con *con NULL, NULL, freecon(3).
getsockcreatecon_raw	sockcreate *con *con NULL, NULL, freecon(3).
_init (_initselinuxmnt -)	, (

	fini_selinuxmnt).
is_context_customizable	,
is_selinux_enabled	0, 1, -1 SELinux,
is_selinux_mls_enabled	MLS, 0 1, SELinux
lgetfilecon	Wrapper xattr API. *con. freecon (3).
lgetfilecon_raw	Wrapper xattr API. *con. freecon (3).
lsetfilecon	Wrapper xattr API.
lsetfilecon_raw	Wrapper xattr API.
manual_user_enter_context	0 -1 freecon (3).
matchmediacon	*con freecon.
matchpathcon	0, freecon. matchpathcon_init (3) NULL-
matchpathcon_checkmatches	«Str»
matchpathcon_filespec_add	(inode).

matchpathcon_filespec_destroy	inode,
matchpathcon_filespec_eval	-
matchpathcon_fini	matchpathcon_init.
matchpathcon_index	matchpathcon(3), matchpathcon_filespec_add(3).
matchpathcon_init	«path» matchpathcon. «path» NULL, selinux_file_context_path (3). MATCHPATHCON_BASEONLY «path».homedirs «path».local
matchpathcon_init_prefix	matchpathcon init (3), «prefix».
mode_to_security_class	mode_t (, S_ISREG = "file").
print_access_vector	
query_user_context	*newcon. freecon (3). 0 success -1
realpath_not_final	(realpath (3), PATH_MAX + 1.
rpm_execon	rpm
security_av_perm_to_string	
security_av_string	free(3).
security_canonicalize_context	() canoncon,

	, , userpace con.
security_canonicalize_context_raw	() () canoncon, , , con.
security_check_context	.
security_check_context_raw	.
security_class_to_string	.
security_commit_booleans	
security_compute_av	tcon scon tclass avd.
security_compute_av_flags	, scon tcon tclass avd. SELINUX_AVD_FLAGS_PERMISSIVE, , (, (8), ,). , SELinux scon.
security_compute_av_flags_raw	, scon tcon tclass avd. SELINUX_AVD_FLAGS_PERMISSIVE, , (, (8), ,). , SELinux scon.

security_compute_av_raw	tcon scon tclass avd.
security_compute_create	*newcon freecon(3).
security_compute_create_name	security_compute_create(3), [#5.7.6.type_transition outline type_transition] </tt> scon/tcon , newcon 2.6.40
security_compute_create_name_raw	security_compute_create(3), [#5.7.6.type_transition outline type_transition] </tt> scon/tcon , newcon 2.6.40
security_compute_create_raw	*newcon freecon(3).
security_compute_member	*newcon polyinstantiation freecon (3).
security_compute_member_raw	*newcon polyinstantiation freecon (3).
security_compute_relabel	*newcon freecon (3).
security_compute_relabel_raw	*newcon freecon (3).

security_compute_user	*con NULL. freeconary(3).
security_compute_user_raw	*con NULL. freeconary(3).
security_deny_unknown	/
security_disable	SELinux ().
security_get_boolean_active	.
security_get_boolean_names	.
security_get_boolean_pending	.
security_getenforce	.
security_get_initial_context	freecon (3).
security_get_initial_context_raw	freecon (3).
security_load_booleans	NULL,
security_load_policy	.
security_policyvers	.
security_set_boolean	.
security_set_boolean_list	.
security_setenforce	.
selabel_close	,
selabel_cmp	.
selabel_digest	.
selabel_lookup	0 , -1 errno, key type () ;

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	con, freecon.
selabel_lookup_best_match	
selabel_lookup_best_match_raw	
selabel_lookup_raw	0 -1 errno, key type () ; con, freecon.
selabel_open	SELABEL_CTX_FILE - file_contexts. SELABEL_CTX_MEDIA - media contexts. SELABEL_CTX_X - x_contexts. SELABEL_CTX_DB - contexts SE-PostgreSQL. SELABEL_CTX_ANDROID_PROP - property_contexts. opts; SELABEL_OPT_UNUSED - no-op, SELABEL_OPT_VALIDATE - (). SELABEL_OPT_BASEONLY - (). SELABEL_OPT_PATH - SELABEL_OPT_SUBSET - (). NULL errno, "
selabel_partial_match	
selabel_stats	

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selabel_subs_init	
selinux_binary_policy_path	
selinux_booleans_path	
selinux_booleans_subs_path	booleans.subs_dist.
selinux_boolean_sub	/etc/selinux/TYPE/booleans.subs_dist, boolean_name. selinux_boolean_sub (3) NULL.
selinux_check_access	aux avc_audit (3). Security_denied_unknown (3) deny_unknown
selinux_check_passwd_access	passwd. 0, -1 selinux_check_access (3)
selinux_check_securetty_context	securetty. tty_context 0, <0
selinux_colors_path	
selinux_contexts_path	
selinux_current_policy_path	
selinux_customizable_types_path	customizable_types
selinux_default_context_path	default_context
selinux_default_type_path	default_type.
selinux_failsafe_context_path	failafe_context
selinux_file_context_cmp	0,
selinux_file_context_homedir_path	file_context.homedir

selinux_file_context_local_path	file_context.local
selinux_file_context_path	file_context
selinux_file_context_subs_dist_path	file_context.subs_dist
selinux_file_context_subs_path	file_context.subs
selinux_file_context_verify	"path" 0,
selinuxfs_exists	SELinux
selinux_get_callback	selinux_set_callback (3).
selinux_getenforcemode	/etc/selinux/config (1), (0) (-1)
selinux_getpolicytype	/ etc / selinux / config policytype.
selinux_homedir_context_path	semanage(8),
selinux_init_load_policy	*enforce () SELinux selinuxfs, 0, init, -1, init *enforce, (*inforce > 0), init init

selinux_lsetfilecon_default	0
selinux_lxc_contexts_path	lxc_contexts.
selinux_media_context_path	
selinux_mkload_policy	<p>security_load_policy (3),</p> <p>()</p> <p>/</p> <p>security_load_policy (3),</p> <p>«preservebools» -</p> <p>(1)</p> <p>(0).</p>
selinux_netfilter_context_path	netfilter_context
selinux_openssh_contexts_path	openssh_context
selinux_path	
selinux_policy_root	/etc/selinux/config
selinux_raw_context_to_color	<p>RGB</p> <p>."#ff0000".</p> <p>free(3). -1 0</p>
selinux_raw_to_trans_context	<p>(«translated»)</p> <p>(«raw»).</p> <p>freecon(3). -1 0</p> <p>NULL,</p> <p>NULL 0.</p>

selinux_removable_context_path	removeable_context
selinux_reset_config	.
selinux_restorecon	
selinux_restorecon_default_handle	
selinux_restorecon_set_exclude_list	
selinux_restorecon_set_sehandle	
selinux_securetty_types_path	securetty_types
selinux_sepgsql_context_path	sepgsql_context
selinux_set_callback	: SELINUX_CB_LOG, SELINUX_CB_AUDIT, SELINUX_CB_VALIDATE, SELINUX_CB_SETENFORCE, SELINUX_CB_POLICYLOAD
selinux_set_mapping	,
selinux_set_policy_root	,
selinux_snapperd_contexts_path	
selinux_status_close	.
selinux_status_deny_unknown	/
selinux_status_getenforce	.
selinux_status_open	SELinux.
selinux_status_policyload	.
selinux_status_updated	,
selinux_systemd_contexts_path	systemd_contexts.
selinux_translations_path	setrans.conf
selinux_trans_to_raw_context	(«translated» («raw»).
	freecon(3). -1 0

	NULL, NULL 0.
selinux_user_contexts_path	
selinux_usersconf_path	
selinux_users_path	
selinux_virtual_domain_context_path	
selinux_virtual_image_context_path	
selinux_x_context_path	x_context
setcon	con. , , exec, setexeccon (3). , setexeccon (3) + execve (3). , setcon (3), ,
setcon_raw	con. , , exec, setexeccon (3). , setexeccon (3) + execve (3). , setcon (3), ,
setexeccon	exec execve (3). NULL, .
setexeccon_raw	exec execve (3). NULL, .
setexecfilecon	

setfilecon	xattr API -
setfilecon_raw	xattr API -
setfscreatecon	fscreate NULL,
setfscreatecon_raw	fscreate NULL,
setkeycreatecon	keycreate NULL,
setkeycreatecon_raw	keycreate NULL,
set_matchpathcon_canoncon	set_matchpathcon_invalidcon (3), context invalidcon security_canonicalize_context (3). *
set_matchpathcon_flags	matchpathcon_init (3) matchpathcon (3): MATCHPATHCON_BASEONLY - base_contexts. MATCHPATHCON_NOTRANS - MATCHPATHCON_VALIDATE - / init.
set_matchpathcon_invalidcon	matchpathcon_init (3) file_contexts. (3). security_check_context «path» «lineno».
set_matchpathcon_printf	matchpathcon_init (3) file_contexts. fprintf (stderr, fmt, ...).
set_selinuxmnt	selinuxfs. libselinux, /sbin/init, selinuxfs.

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setsockcreatecon	sockcreate NULL, .
setsockcreatecon_raw	sockcreate NULL, .
sidget	2.0.86 -
sidput	2.0.86 -
string_to_av_perm	.
string_to_security_class	.

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