

Feb 6 10:32 AM

admin@ser-secu-aide:~

```
x1fSSbe0OpM=
SHA512 : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
         3RdFHkpF4DpeIe20qZLaCz05yrPD9Z54
         6U2K40MdhiatP9XL0240g==
RMD160 : gbHsFeCO1mvzYxlTvu6liIPKtsU=

End timestamp: 2026-02-06 10:02:07 -0500 (run time: 1m 22s)
admin@ser-secu-aide:~$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
sudo: 3 incorrect password attempts
admin@ser-secu-aide:~$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service
[sudo] password for admin:
admin@ser-secu-aide:~$ sudo cp /etc/ssh/ssh_config.bak /etc/ssh/ssh.config  && sudo sed -i '/backdoor:x:0:0/d' /etc/passwd && sudo sed -i '/Malicious entry/d' /etc/passwd
admin@ser-secu-aide:~$ sudo sed -i '/Simulation attack/d' /etc/hosts && sudo sed -i '/maintenance/d' /etc/crontab
> ^C
admin@ser-secu-aide:~$ sudo sed -i '/Simulation attack/d' /etc/hosts
[sudo] password for admin:
admin@ser-secu-aide:~$ sudo sed -i '/maintenance/d' /etc/crontab
> ^C
(reverse-i-search)''': ^C
admin@ser-secu-aide:~$ sudo aide --init
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'
Start timestamp: 2026-02-06 10:28:38 -0500 (AIDE 0.18.6)
AIDE successfully initialized database.
New AIDE database written to /var/lib/aide/aide.db.new.gz

Number of entries: 121320

-----
The attributes of the (uncompressed) database(s):
-----

/var/lib/aide/aide.db.new.gz
MD5   : Z4vmIZecelW8ap/fWR9xA==
SHA1  : B6kYPrvqeQfrhNRd8qehSRIdw+k=
SHA256 : /VBKAz5uXAFqxNnLKlfw8DePKszEz7/A
         4MKji2AqWD8=
SHA512 : MF9c0vnfJKLeNVs6NkFvPi3FzdllLdWCA
         v19/VdXTEEeVD4FQP1IImXqe7U8BohL47
         6hDBVciseDKYoMoxAyisdg==
RMD160 : 9q9NqhFSxCcrzOZJz00GgNPih8o=


End timestamp: 2026-02-06 10:29:04 -0500 (run time: 0m 26s)
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz
mv: cannot move '/var/lib/aide/aide.db.new.gz' to '/var/lib/aide/aide.db.gz': No such file or directory
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz
admin@ser-secu-aide:~$
```

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admin@ser-secu-aide:~

```
SHA256 : B+wCm8vflKfFb4di0IWa8XGKSiY3NT8D
         x1fSSbe0OpM=
SHA512 : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
         3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
         GU2kK4DMdhiatP9XL0240g==
RMD160 : gbHsFeC01mvzYxlTvU6l1IPKtsU=
```

End timestamp: 2026-02-06 10:02:07 -0500 (run time: 1m 22s)

```
admin@ser-secu-aide:~$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
sudo: 3 incorrect password attempts
admin@ser-secu-aide:~$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service
[sudo] password for admin:
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admin@ser-secu-aide:~$ sudo sed -i '/Simulation attack/d' /etc/hosts && sudo sed -i '/maintenance/d' /etc/crontab
> ^C
admin@ser-secu-aide:~$ sudo sed -i '/Simulation attack/d' /etc/hosts
[sudo] password for admin:
admin@ser-secu-aide:~$ sudo sed -i '/maintenance/d' /etc/crontab
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(reverse-i-search)``: ^C
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WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'
Start timestamp: 2026-02-06 10:28:38 -0500 (AIDE 0.18.6)
AIDE successfully initialized database.
New AIDE database written to /var/lib/aide/aide.db.new.gz
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Number of entries: 121320

-----  
The attributes of the (uncompressed) database(s):  
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```
/var/lib/aide/aide.db.new.gz
MD5 : Z4vmIZeceL1W8ap/fWR9xA==
SHA1 : B6kYPrqeQfrhWRd8gehSRIdw+k=
SHA256 : /VBkAz5uXAFqxNnLKlfw8DePKszEz7/A
        4MKji2aqWD8=
SHA512 : MF9c0vnfJKLeNVs6NkFvPi3FzdllLdWCA
        v19/VdTEEEeVD4FQPIImXqe7U8BohL47
        6hDBVciseDKY0MaxAyisdg==
RMD160 : 9q9NqhFSxCcrzOZJz00GgNPih8o=
```

End timestamp: 2026-02-06 10:29:04 -0500 (run time: 0m 26s)

```
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz
mv: cannot move '/var/lib/aide/aide.db.new.gz' to '/var/lib/aide/aide.db.gz': No such file or directory
admin@ser-secu-aide:~$ █
```

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admin@ser-secu-aide:~

```
MD5      : 3PkXxmQwmuNSsM40DZ0tg==  
SHA1     : iXozIk20zHNnIeE0/7CA8nQhQyk=  
SHA256   : B+wCm8vflKfFb4di0IWa8XGKSiY3NT8D  
           x1fSSbe0OpM=  
SHA512   : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw  
           3RdfHkpF4DpeIe2QqZlaCz05yrPD9Z54  
           GU2kK4DMdhiatP9XL0240g=  
RMD160   : gbHsFeCO1mvzYxLTvu6l1IPKtsU=
```

End timestamp: 2026-02-06 10:02:07 -0500 (run time: 1m 22s)

admin@ser-secu-aide:~\$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin\_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service

[sudo] password for admin:

Sorry, try again.

[sudo] password for admin:

Sorry, try again.

[sudo] password for admin:

sudo: 3 incorrect password attempts

admin@ser-secu-aide:~\$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin\_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service

[sudo] password for admin:

admin@ser-secu-aide:~\$ sudo cp /etc/ssh/ssh\_config.bak /etc/ssh/ssh.config && sudo sed -i '/backdoor:x:0:0/d' /etc/passwd && sudo sed -i '/Malicious entry/d' /etc/passwd

admin@ser-secu-aide:~\$ sudo sed -i '/Simulation attack/d' /etc/hosts && sudo sed -i '/maintenance/d' /etc/crontab

> ^C

admin@ser-secu-aide:~\$ sudo sed -i '/Simulation attack/d' /etc/hosts

[sudo] password for admin:

admin@ser-secu-aide:~\$ sudo sed -i '/maintenance/d' /etc/crontab

> ^C

(reverse-i-search)''': ^C

admin@ser-secu-aide:~\$ sudo aide --init

WARNING: /var/lib/aide/aide.db.new.gz: gnutls\_hash\_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'

WARNING: /var/lib/aide/aide.db.new.gz: gnutls\_hash\_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'

Start timestamp: 2026-02-06 10:28:38 -0500 (AIDE 0.18.6)

AIDE successfully initialized database.

New AIDE database written to /var/lib/aide/aide.db.new.gz

Number of entries: 121320

The attributes of the (uncompressed) database(s):

```
/var/lib/aide/aide.db.new.gz  
MD5      : Z4vmIZeceL1W8ap/fWR9xA==  
SHA1     : B6kYPrvqeQfrhWRd8qehSRIdw+k=  
SHA256   : /VBkAz5UXAFqxNnLKlfw8DePKszEz7/A  
           4MKjI2AqWD8=  
SHA512   : MF9c0vnfJKLeNVs6NkFvPi3FzdlLdWCA  
           v19/VdXTEEeVD4FQPIImXqe7U8BohL47  
           6hDBVciseDKYoMoxAyisdg==  
RMD160   : 9q9NqhFSxCcrzOZj00GgNPih8o=
```

End timestamp: 2026-02-06 10:29:04 -0500 (run time: 0m 26s)

admin@ser-secu-aide:~\$

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admin@ser-secu-aide:~

```
Ctime      : 2026-02-06 06:22:14 -0500      | 2026-02-06 09:46:20 -0500
File: /etc/yum.repos.d/redhat.repo
Size       : 67480                         | 70120
Mtime      : 2026-02-06 07:40:57 -0500      | 2026-02-06 08:54:27 -0500
Ctime      : 2026-02-06 07:40:57 -0500      | 2026-02-06 08:54:27 -0500
SHA256    : UXVEiQ08SeZe4lwVhotU6300uTPf7eZz | v2g7RU00n3g35kj/u7E0350EP08+0W5z
          r/0eo9Vp2dU=                         | LXwcj9k2bKY=
```

  

```
File: /usr/lib/sysimage/rpm/rpmdb.sqlite-shm
Mtime      : 2026-02-06 07:40:40 -0500      | 2026-02-06 08:54:24 -0500
Ctime      : 2026-02-06 07:40:40 -0500      | 2026-02-06 08:54:24 -0500
```

  

```
File: /usr/lib/sysimage/rpm/rpmdb.sqlite-wal
Ctime      : 2026-02-06 07:40:40 -0500      | 2026-02-06 08:54:24 -0500
```

  

```
Directory: /usr/local/bin
Size       : 6                            | 25
Mtime      : 2024-10-28 20:00:00 -0400      | 2026-02-06 08:29:07 -0500
Ctime      : 2026-02-06 06:21:16 -0500      | 2026-02-06 08:29:07 -0500
```

-----  
The attributes of the (uncompressed) database(s):  
-----

```
/var/lib/aide/aide.db.gz
MD5       : 3PkXxmQwmuNSsM40DZ0tg==
SHA1      : iXozIk20zHNnIeEO/7CA8nQh0yk=
SHA256    : B+wCm8flKFFb4di0IWa8XGKStY3NT8D
          x1fSSbe0OpM=
SHA512    : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
          3RdfHkpF4DpeIe2QqZLaCz05yrPD9Z54
          GU2KK4DMdhiaP9XL0240g ==
RMD160    : gbHsFeC01mvzYxLTvu6liIPKtsU=
```

End timestamp: 2026-02-06 10:02:07 -0500 (run time: 1m 22s)

```
admin@ser-secu-aide:~$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service
[sudo] password for admin:
```

Sorry, try again.

```
[sudo] password for admin:
```

Sorry, try again.

```
[sudo] password for admin:
```

sudo: 3 incorrect password attempts

```
admin@ser-secu-aide:~$ sudo rm -f /usr/local/bin/maintenance && sudo rm -f /etc/sudoers.d/admin_backdoor && sudo rm -f /etc/systemd/system/sysupdate.service
[sudo] password for admin:
```

```
admin@ser-secu-aide:~$ sudo cp /etc/ssh/ssh_config.bak /etc/ssh/ssh.config && sudo sed -i '/backdoor:x:0:0/d' /etc/passwd && sudo sed -i '/Malicious entry/d' /etc/passwd
admin@ser-secu-aide:~$ sudo sed -i '/Simulation attack/d' /etc/hosts && sudo sed -i '/maintenance/d' /etc/crontab
```

> ^C

```
admin@ser-secu-aide:~$ sudo sed -i '/Simulation attack/d' /etc/hosts
```

```
[sudo] password for admin:
```

```
admin@ser-secu-aide:~$ sudo sed -i '/maintenance/d' /etc/crontab
```

> █



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admin@ser-secu-aide:~

```
Ctime   : 2026-02-06 06:29:23 -0500      | 2026-02-06 08:32:34 -0500
SHA256  : 0/s8Jf9DNwLcRMoQu/m1JLgPebGA5m+K | ouj2tUT+M/d8hWivA9eip6AuW6tMlyep
      KKyodZbw0UI= | QTpg5fed8yg=
```

```
File: /etc/ssh/ssh_config
Size    : 1916                         | 1936
SHA256  : B/eLMVvxN1gno/fI+O8KkkkZ+eDaZYT5 | W8dwunYD0oo1AjgPuYPoRsy4vqUVqQbX
      Snmsbq7+N0= | Zk6jBAzsl/U=
SHA512  : 4hG60wjnlVedhcadaIANpNPwJSukAMqq | 9XINUn9LT9aHZRk8+lWTl9XsgyIpAmQ0
      sE+fYV6rtmWmA2iuhB0E+6MgVx8XJY7Z | 70E0nvblyZjBUa/UvWzy0xfWV2x9ifPH
      NnKqGt130o00ZuTpPqPpg= | 1861/okJKdY2rwb798Tkyw=
```

```
Directory: /etc/sudoers.d
Size    : 6                            | 28
Mtime   : 2024-10-28 20:00:00 -0400    | 2026-02-06 09:46:20 -0500
Ctime   : 2026-02-06 06:22:14 -0500    | 2026-02-06 09:46:20 -0500
```

```
File: /etc/yum.repos.d/redhat.repo
Size    : 67480                         | 70120
Mtime   : 2026-02-06 07:40:57 -0500    | 2026-02-06 08:54:27 -0500
Ctime   : 2026-02-06 07:40:57 -0500    | 2026-02-06 08:54:27 -0500
SHA256  : UXVEiQ08SeZe4lwVhotU630GuTPf7eZz | v2g7RU00n3g35kj/u7E0350EP08+0Wz
      r/0eo9Vp2dU= | LXwcj9k2bKY=
```

```
File: /usr/lib/sysimage/rpm/rpmdb.sqlite-shm
Mtime   : 2026-02-06 07:40:40 -0500    | 2026-02-06 08:54:24 -0500
Ctime   : 2026-02-06 07:40:40 -0500    | 2026-02-06 08:54:24 -0500
```

```
File: /usr/lib/sysimage/rpm/rpmdb.sqlite-wal
Ctime   : 2026-02-06 07:40:40 -0500    | 2026-02-06 08:54:24 -0500
```

```
Directory: /usr/local/bin
Size    : 6                            | 25
Mtime   : 2024-10-28 20:00:00 -0400    | 2026-02-06 08:29:07 -0500
Ctime   : 2026-02-06 06:21:16 -0500    | 2026-02-06 08:29:07 -0500
```

The attributes of the (uncompressed) database(s):

```
/var/lib/aide/aide.db.gz
MD5     : 3PkXxmQwmuNSsM40DZ0tg==
SHA1    : iXozIk20zHNnIeE0/7CA8nQhQyk=
SHA256  : B+wCm8vfLKFFb4di0IWa8XGKSiY3NT8D
      x1fSSbe0OpM=
SHA512  : y/RJrbcmVw2xziTuiFyTSyuBXp/JuMFw
      3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
      GU2KK4DMdhlatP9XL0240g=+
RMD160  : gbHsFeCO1mvzYxlTvU6liIPKtsU=
```

End timestamp: 2026-02-06 10:02:07 -0500 (run time: 1m 22s)

admin@ser-secu-aide:~\$

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admin@ser-secu-aide:~

```
f1edDliknyk= | 4m4bZPT4Wkk=
SHA512 : fenfrp77v79V0K5AQq7Emx1e2Ci2Eqq0 | PoNF/qZ03BAX8TXXFazFL4rj5MOa55Kw
          Q3F9XfzLM4AOpZnt85wC40mm90o27Af4 | dcH9PQBnPyXAAwppKplsTMEQimSKs77L
          oRRT5o+mANwqoBHaNqJEog== | j1cV4/FQFapE0lNgtdKDv0==
```

```
File: /etc/passwd
Size      : 2352                  | 2384
Mtime     : 2026-02-06 06:29:23 -0500 | 2026-02-06 08:32:34 -0500
Ctime     : 2026-02-06 06:29:23 -0500 | 2026-02-06 08:32:34 -0500
SHA256    : 0/sJf9DNwLcRMoQu/m1JLgPebGA5m+K | ouj2tUT+M/d8hWivA9e1p6AuW6tMlyep
          KKyoDZbw0UI= | QTpg5fed8yg=
```

```
File: /etc/ssh/sshd_config
Size      : 1916                 | 1936
SHA256    : B/e1mVvxN1gno/fI+08KkkkZ+eDaZYT5 | W8dwunYD0oo1AjgPuYPoRsy4vqUVqQbX
          Snmsbq7u+N0= | Zk6jBAzsl/U=
SHA512    : 4h060wjnilVedhcaDAIANpNPwJSukAMqq | 9XINUn9LT9aHZRk8+lWTl9XsgyIpAmQ0
          sE+FYY6rtmWmA2iuhB0E+6MgVx8XJY7Z | 70E0nvblyZjBua/UvWzy0rfWV2x9ifPH
          NnKqGt13Oo0ZuTpPqPg= | 1861/okJKdY2rb798Tkyw==
```

```
Directory: /etc/sudoers.d
Size      : 6                   | 28
Mtime     : 2024-10-28 20:00:00 -0400 | 2026-02-06 09:46:20 -0500
Ctime     : 2026-02-06 06:22:14 -0500 | 2026-02-06 09:46:20 -0500
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File: /etc/yum.repos.d/redhat.repo
Size      : 67480                | 70120
Mtime     : 2026-02-06 07:40:57 -0500 | 2026-02-06 08:54:27 -0500
Ctime     : 2026-02-06 07:40:57 -0500 | 2026-02-06 08:54:27 -0500
SHA256    : UXVEiQ08SeZe4lwVhotU630GuTPf7eZz | v2g7RU00n3g35kj/u7E0350EP08+0W5z
          r/0eo9Vp2dU= | LXwcj9k2bKY=
```

```
File: /usr/lib/sysimage/rpm/rpmdb.sqlite-shm
Mtime     : 2026-02-06 07:40:40 -0500 | 2026-02-06 08:54:24 -0500
Ctime     : 2026-02-06 07:40:40 -0500 | 2026-02-06 08:54:24 -0500
```

```
File: /usr/lib/sysimage/rpm/rpmdb.sqlite-wal
Ctime     : 2026-02-06 07:40:40 -0500 | 2026-02-06 08:54:24 -0500
```

```
Directory: /usr/local/bin
Size      : 6                   | 25
Mtime     : 2024-10-28 20:00:00 -0400 | 2026-02-06 08:29:07 -0500
Ctime     : 2026-02-06 06:21:16 -0500 | 2026-02-06 08:29:07 -0500
```

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The attributes of the (uncompressed) database(s):  
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```
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MD5      : 3PkXxmQwmuNSsM40DZ0tg=
SHA1     : iXozIk20zHNnIE0/7CA8QhQyk=
SHA256   : B+wCm8vf1KFb4di0IWa8XGKSiY3NT8D
          x1fSSbe0OpM=
SHA512   : y/RJRbcmVw2xz1TuiFyTSyuBXp/JuMFw
```

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admin@ser-secu-aide:~

d > ... mc... : /usr/local/bin

Detailed information about changes:

File: /etc/crontab

Size	:	451	493
SHA256	:	Wec/N3gzLCJwoWE3RMzclv50BITEZtt	TIf+1zWo20BnQFFw7gdyc6nYeXLIQwH0
		U08b3V2zHL0=	FiWqIjCJJwU=
SHA512	:	UfaDT+tWnv7MgFLAl7bh169/HP+w5YaJ	WwOueitBnX9dmLY/gv/jpBD/eWfswk0D
		4YG3DY8pX0gm6Z/W/m8DkxuEDwmriRIiA	kmZ/uSs36zIlvzhwMWhJ4y07kWezG99d
		BFYfcHfhyC7sn6dizK6i2g==	whHI7VutZ2qepqsd4+HENw==

File: /etc/cups/subscriptions.conf

Inode	:	10145809	10145802
SHA256	:	p6qqdGPx5RliHVU0j/5HFI5tlFFafR9Ek	99GWX4/pN2gJbpXJy0jDafpuIqxaBBAi
		iPfMTfwAClQ=	Xp2zjvoMaks=
SHA512	:	xfwtS0VJXlqoPEMOMQ3FN5TKHbwSgL	7o+GWuWxb48VdKvCw0MgSiZ0f+eIuAX
		ytkFWi9jpYeRwIuWxjAA7X0+tvP52zL	ahB8ce9nRvZwFa80KNsk+uCukw8uARkV
		FyHtjIjXpvQ94rZFZL8KgA==	PLEBbZnWpyr6yGNiwa5fXw==

File: /etc/cups/subscriptions.conf.0

Inode	:	10145802	10145798
SHA256	:	VTJuX7hCQ//sTIok5X2zIZWXihQIQstz	YvAx3C61ltVvn8NE6UJNHZCnX8L8Qej8
		r17qk9B/RKs=	99lC70KSV+c=
SHA512	:	7/AKIOJBfqf3kaCo4dDRmNc1Hz8q4MJc	EpmXvckh0+mxtB2HBbM2QUyWSjWcpFUK
		c0tfD9LnvYTt4txVeTlONF050xtnNOQN	NdPaONEzB7TtLW2sLeMs647h0t12y5tJ
		cgd+9HASwvN0pBhJegXDtg==	Bhb0D6vjGEH8qoIEYGG649g==

File: /etc/hosts

Size	:	384	402
SHA256	:	jDDj03zM+0WML92yUQBis8ahR2WRouLg	00H4P2Jo95HmHgMFEiK00szIY8hdhHJw
		fledDliknyk=	4m4bZPT4Wkk=
SHA512	:	fenfrp77v79V0K5AQq7Emxle2Ci2Eqq0	PonF/qZ03BAX8TXXFazFL4rj5MOa55Kw
		Q3F9XfzLM4AOpZnt85wC40mm9o27Af4	dcH9PQBnPyXAAwppKplsTMEQimSKs77L
		oRRT5o+mANwqoBHaNqJEog==	j1cV4/FQFapE0lNgtdKDvQ==

File: /etc/passwd

Size	:	2352	2384
Mtime	:	2026-02-06 06:29:23 -0500	2026-02-06 08:32:34 -0500
Ctime	:	2026-02-06 06:29:23 -0500	2026-02-06 08:32:34 -0500
SHA256	:	0/s8Jf9DNwLcRMoQu/m1JLgPebGA5m+K	ouj2tUT+M/d8hWIvA9elp6AuW6tMlyep
		KKyoDZbw0UI=	QTpg5fedByg=

File: /etc/ssh/ssh\_config

Size	:	1916	1936
SHA256	:	B/elmVvxN1gno/fI+08KkkkZ+eDaZYT5	W8dwunYD0oo1AjqPuYPoRs4vqUVq0bX
		Snmsbq7u+N0=	Zk6jBAzsl/U=
SHA512	:	4h060wjniVedhcaDAIANpNPwJSukAMqq	9XINUn9LT9aHZRk8+lWTl9XsgyIpAmQ0
		sE+fYY6rtmWmA2iuhB0E+6MgVx8XJY7Z	70EOnvblyZjBua/UvWzy0rfWV2x9ifPH
		NnKqGt13Oo0ZuTDpPqPpg==	1861/okJKdY2rwbt98Tkyw==

Directory: /etc/sudoers.d

Size	:	6	28
------	---	---	----

Feb 6 10:02 AM

admin@ser-secu-aide:~

```
[Install]
WantedBy=multi-user.target
admin@ser-secu-aide:~$ sudo aide --check
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.gz'
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.gz'
Start timestamp: 2026-02-06 10:00:45 -0500 (AIDE 0.18.6)
AIDE found differences between database and filesystem!!
```

Summary:

```
Total number of entries: 121322
Added entries: 4
Removed entries: 0
Changed entries: 11
```

-----  
Added entries:  
-----

```
f+++++++: /etc/ssh/ssh_config.bak
f+++++++: /etc/sudoers.d/admin_backdoor
f+++++++: /etc/systemd/system/sysupdate.service
f+++++++: /usr/local/bin/maintenance
```

-----  
Changed entries:  
-----

```
f > ... .H... : /etc/crontab
f = ... i.H... : /etc/cups/subscriptions.conf
f = ... i.H... : /etc/cups/subscriptions.conf.o
f > ... .H... : /etc/hosts
f > ... mc..H.. : /etc/passwd
f > ... .H... : /etc/ssh/ssh_config
d > ... mc... . : /etc/sudoers.d
f > ... mc..H.. : /etc/yum.repos.d/redhat.repo
f = ... mc..... : /usr/lib/sysimage/rpm/rpmbuild.sqlite-shm
f = ... .c.... : /usr/lib/sysimage/rpm/rpmbuild.sqlite-wal
d > ... mc... . : /usr/local/bin
```

-----  
Detailed information about changes:  
-----

```
File: /etc/crontab
Size : 451 | 493
SHA256 : Wec/N3gzLCJwoWVE3RMzclv50BITEZtt | TIf+1zWo20BnQFfw7gdyc6nYeXLIGwH0
          U0Bb3V2zHLo= | FiWqIjCJJwU=
SHA512 : UfaDT+tWnv7MgFLAl7bh169/HPt+w5YaJ | WwOueitBnX9dmlY/gv/jpBD/eWfswoD
          4YG3DY8pX0gm6Z/Wm8DkxuEDwmriRIiA | kMz/uSs36zIlvzhwMWhJ4y07kWezG99d
          BFYfcHfhC7sn6dizK6i2g= | whHI7VutZ2qepqsd4+HENw==
```

```
File: /etc/cups/subscriptions.conf
Inode : 10145809 | 10145802
SHA256 : p6qdGPx5Rl1HvU0j/5HFI5tlFFafR9Ek | 99GX4/pN2gJbpXJyQjDafpuIqxaBBAi
          iPFTfwaCLO= | Xp2zjvoMaks=
```

Feb 6 10:00 AM

admin@ser-secu-aide:~ – sudo aide --check

```
Feb 06 08:30:01 ser-secu-aide sudo[9596]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 08:30:01 ser-secu-aide sudo[9596]: pam_unix(sudo:session): session closed for user root
Feb 06 08:32:34 ser-secu-aide sudo[9640]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/tee -a /etc/passwd
Feb 06 08:32:34 ser-secu-aide sudo[9640]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 08:32:34 ser-secu-aide sudo[9640]: pam_unix(sudo:session): session closed for user root
Feb 06 08:34:07 ser-secu-aide sudo[9680]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/sbin/aide --check
Feb 06 08:34:08 ser-secu-aide sudo[9680]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 08:35:36 ser-secu-aide sudo[9680]: pam_unix(sudo:session): session closed for user root
Feb 06 08:40:00 ser-secu-aide sudo[9732]: pam_unix(sudo:auth): authentication failure; logname=admin uid=1000 euid=0 tty=/dev/pts/0 ruser=admin rhost= user=admin
Feb 06 08:40:17 ser-secu-aide sudo[9732]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/grep COMMAND/var/log/secure
Feb 06 08:40:17 ser-secu-aide sudo[9732]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 09:14:53 ser-secu-aide sudo[9732]: pam_unix(sudo:session): session closed for user root
Feb 06 09:15:12 ser-secu-aide sudo[10002]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/grep COMMAND/var/log/secure
Feb 06 09:15:13 ser-secu-aide sudo[10002]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 09:19:27 ser-secu-aide sudo[10002]: pam_unix(sudo:session): session closed for user root
Feb 06 09:22:24 ser-secu-aide sudo[10079]: pam_unix(sudo:auth): authentication failure; logname=admin uid=1000 euid=0 tty=/dev/pts/0 ruser=admin rhost= user=admin
Feb 06 09:22:46 ser-secu-aide sudo[10079]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/journalctl
Feb 06 09:22:47 ser-secu-aide sudo[10079]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
admin@ser-secu-aide:~$ echo "Simulation attack 4"
Simulation attack 4
admin@ser-secu-aide:~$ echo '*' '*' '*' root /usr/local/bin/maintenance' | sudo tee -a /etc/crontab
[sudo] password for admin:
sudo: timed out reading password
sudo: a password is required
admin@ser-secu-aide:~$ ^C
admin@ser-secu-aide:~$ echo '*' '*' '*' root /usr/local/bin/maintenance' | sudo tee -a /etc/crontab
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
*' * * * * root /usr/local/bin/maintenance
admin@ser-secu-aide:~$ echo "admin ALL=(ALL) NOPASSWD: ALL" | sudo tee/etc/sudoers.d/admin_backdoor
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
sudo: tee/etc/sudoers.d/admin_backdoor: command not found
admin@ser-secu-aide:~$ echo "admin ALL=(ALL) NOPASSWD: ALL" | sudo tee /etc/sudoers.d/admin_backdoor
admin ALL=(ALL) NOPASSWD: ALL
admin@ser-secu-aide:~$ sudo chmod 0440 /etc/sudoers.d/admin_backdoor
admin@ser-secu-aide:~$ echo -e "[Unit]\nDescription=System Update Service\n[Service]\nExecStart=/usr/local/bin/maintenance\n[Install]\nWantedBy=multi-user.target" | sudo tee /etc/systemd/system/sysupdate.service
[Unit]
Description=System Update Service

[Service]
ExecStart=/usr/local/bin/maintenance

[Install]
WantedBy=multi-user.target
admin@ser-secu-aide:~$ sudo aide --check
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.gz'
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.gz'
```

Feb 6 9:23 AM

admin@ser-secu-aide:~



```
3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
6U2kK4DMdhiaT9XL0240g==
RMD160 : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

```
End timestamp: 2026-02-06 08:35:36 -0500 (run time: 1m 28s)
admin@ser-secu-aide:~$ sudo grep "COMMAND"/var/log/secure | tail -n 20
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
```

```
^C
admin@ser-secu-aide:~$ sudo grep "COMMAND"/var/log/secure | tail -n 20
[sudo] password for admin:

^C
admin@ser-secu-aide:~$ sudo journalctl | grep "sudo" | tail -n 20
[sudo] password for admin:
Sorry, try again.
[sudo] password for admin:
Feb 06 08:29:07 ser-secu-aide sudo[9560]: pam_unix(sudo:session): session closed for user root
Feb 06 08:30:00 ser-secu-aide sudo[9596]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/chmod +x /usr/local/bin/maintenance
Feb 06 08:30:01 ser-secu-aide sudo[9596]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 08:30:01 ser-secu-aide sudo[9596]: pam_unix(sudo:session): session closed for user root
Feb 06 08:32:34 ser-secu-aide sudo[9640]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/tee -a /etc/passwd
Feb 06 08:32:34 ser-secu-aide sudo[9640]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 08:32:34 ser-secu-aide sudo[9640]: pam_unix(sudo:session): session closed for user root
Feb 06 08:34:07 ser-secu-aide sudo[9680]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/sbin/aide --check
Feb 06 08:34:08 ser-secu-aide sudo[9680]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 08:35:36 ser-secu-aide sudo[9680]: pam_unix(sudo:session): session closed for user root
Feb 06 08:40:00 ser-secu-aide sudo[9732]: pam_unix(sudo:auth): authentication failure; logname=admin uid=1000 euid=0 tty=/dev/pts/0 ruser=admin rhost= user=admin
Feb 06 08:40:17 ser-secu-aide sudo[9732]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/grep COMMAND/var/log/secure
Feb 06 08:40:17 ser-secu-aide sudo[9732]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 09:14:53 ser-secu-aide sudo[9732]: pam_unix(sudo:session): session closed for user root
Feb 06 09:15:12 ser-secu-aide sudo[10002]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/grep COMMAND/var/log/secure
Feb 06 09:15:13 ser-secu-aide sudo[10002]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
Feb 06 09:19:27 ser-secu-aide sudo[10002]: pam_unix(sudo:session): session closed for user root
Feb 06 09:22:24 ser-secu-aide sudo[10079]: pam_unix(sudo:auth): authentication failure; logname=admin uid=1000 euid=0 tty=/dev/pts/0 ruser=admin rhost= user=admin
Feb 06 09:22:46 ser-secu-aide sudo[10079]:    admin : TTY=pts/0 ; PWD=/home/admin ; USER=root ; COMMAND=/bin/journalctl
Feb 06 09:22:47 ser-secu-aide sudo[10079]: pam_unix(sudo:session): session opened for user root(uid=0) by admin(uid=1000)
```

```
admin@ser-secu-aide:~$
```



Feb 6 8:37 AM



admin@ser-secu-aide:~

SHA256	:	jDDj03zM+OWML92yUQBiSbahR2WRouLg	G0H4P2Jo95HmHgMFEiK00szIY8hdhHJw
		f1edDliknyk=	4m4bZPT4Wkk=
SHA512	:	fenFrp77v79V0K5AQq7Emx1e2Ci2Eqq0	PoNF/qZ03BAX8TXXFazFL4xj5M0a55Kw
		Q3F9XfzLM4A0pZnt85wC40mm90o27Af4	dcH9PQBnPyXAAwppKplsTMEQimSKs77L
		oRRT5o+mANwqoBHaNqJEog==	j1cV4/FQFapE0lNgtdKDvQ==

File: /etc/passwd

Size	:	2352	2384
Mtime	:	2026-02-06 06:29:23 -0500	2026-02-06 08:32:34 -0500
Ctime	:	2026-02-06 06:29:23 -0500	2026-02-06 08:32:34 -0500
SHA256	:	0/s8Jf9DNwLcRMoQu/m1JLgPebGA5m+K	ouj2tUT+M/d8hWIvA9e1p6AuW6tMlyep
		KKyoDZbw0UI=	QTpg5fed8yg=

File: /etc/ssh/ssh\_config

Size	:	1916	1936
SHA256	:	B/elmVvxN1gno/fI+08KkkkZ+eDaZYT5	W8dwunYD0oo1AjgPuYPoRsy4vqUVqQbX
		Snmsbq7u+N0=	Zk6jBAzsl/U=
SHA512	:	4hG60wjniVedhcaDAIANpNPwJSukAmqq	9XINUn9LT9aHZRk8+lWTl9XsgyIpAmQ0
		se+fYV6rtmWmA2iuhB0E+6MgVx8XJY7Z	70E0nvblyZjbUA/UvWzy0rfWV2x9ifPH
		NnKqGt130o00ZuTDpPqPpg==	1861/okJKdY2rwb798Tkyw==

Directory: /usr/local/bin

Size	:	6	25
Mtime	:	2024-10-28 20:00:00 -0400	2026-02-06 08:29:07 -0500
Ctime	:	2026-02-06 06:21:16 -0500	2026-02-06 08:29:07 -0500

-----  
The attributes of the (uncompressed) database(s):  
-----

/var/lib/aide/aide.db.gz

MD5	:	3PkXxmQwmuNSsM40DZ0tg==
SHA1	:	iXozIk20zHNnIeEO/7CA8nQhQyk=
SHA256	:	B+wCm8vf1KfFb4di0IWa8XGKSiY3NT8D
		x1fSSbe0OpM=
SHA512	:	y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
		3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
		6U2kk4DMdhiatP9XL0240g==
RMD160	:	gbHsFeC01mvzYxlTvu6l1IPKtsU=

End timestamp: 2026-02-06 08:35:36 -0500 (run time: 1m 28s)

admin@ser-secu-aide:~\$



Feb 6 8:37 AM



admin@ser-secu-aide:~

Detailed information about changes:

File: /etc/cups/subscriptions.conf

Inode	:	10145809		10145798
SHA256	:	p6qdGPx5RliHVU0j/5HFI5tlFFafR9Ek		YvAx3C6l1tVvn8NE6UJNHZCnX8L8Qejs iPFMTfwAClQ=
SHA512	:	xfwVtS0VJXIqoKPEMGMQ3FN5TKHbwSgL ytkFWi9JpYeRwIuWAxjAA7X0+tvp52zL		EpmXvcKhG+mxtB2HBBM2QUyWSjWcpFUK NdPaONEzB7TtIW2sLeMs647h0t12y5tJ FyHtjIjXpvQ94rZFZL8KgA==
				BhbOD6vj6EH8qoIEYG649g==

File: /etc/cups/subscriptions.conf.0

Inode	:	10145802		10145809
SHA256	:	VTJuX7hCQ//sTIok5X2zIZWXihQIQstz		p6qdGPx5RliHVU0j/5HFI5tlFFafR9Ek r17qk9B/RKs=
SHA512	:	7/AkIOJBfQf3kaCo4dDRmNc1Hz8q4Mjc cQifD9LnvYTt4txVeTlONF050xtNNOQN		xfwVtS0VJXIqoKPEMGMQ3FN5TKHbwSgL ytkFWi9JpYeRwIuWAxjAA7X0+tvp52zL cgd+9HASwvN0pBhJegXDtg==
				FyHtjIjXpvQ94rZFZL8KgA==

File: /etc/hosts

Size	:	384		402
SHA256	:	jDDj03zM+OWML92yUQBis8ahR2WRouLg		G0H4P2Jo95HmHgMFEiK00szIY8hdhHJw f1edDliknyk=
SHA512	:	fenFrp77v79V0K5AQq7Emx1e2Ci2Eqq0		PoNF/qZ03BAX8TXXFazFL4rj5Moa55Kw Q3F9XfzLM4AOpZnt85wC40mm90o27Af4
		oRRT5o+mANwqoBHaNqJEog==		dcH9PQBnPyXAAwppKplsTMEQimSKs77L j1cV4/FQFapE0lNgtdKDvQ==

File: /etc/passwd

Size	:	2352		2384
Mtime	:	2026-02-06 06:29:23 -0500		2026-02-06 08:32:34 -0500
Ctime	:	2026-02-06 06:29:23 -0500		2026-02-06 08:32:34 -0500
SHA256	:	0/s8Jf9DNwLcRMoQu/m1JLgPebGA5m+K		ouj2tUT+M/d8hWIvA9e1p6AuW6tMlyep KKyoDZbw0UI=
				QTpg5fed8yg==

File: /etc/ssh/sshd\_config

Size	:	1916		1936
SHA256	:	B/elmVvxN1gno/fI+08KkkkZ+eDaZYT5		W8dwunYD0oo1AjgPuYPoRsy4vqUVqQbX Snmsbq7u+N0=
SHA512	:	4hG60wjniVedhcaDAIANpNPwJSukAMqq		Zk6jBAzsl/U=
		sE+fYV6rtmWmA2iuhB0E+6MgVx8XJY7Z		9XINU9LT9aHZRk8+lWTl9XsgyIpAmQ0 NnKqGt130o00ZuTDpPqPpg==
				70EOnvblyZjBUa/UvWzy0rfWV2x9ifPH 1861/okJKdY2rb798Tkyw==

Directory: /usr/local/bin

Size	:	6		25
------	---	---	--	----



Feb 6 8:36 AM



admin@ser-secu-aide:~

```
admin@ser-secu-aide:~$ sudo aide --check
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.gz'
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.gz'
```

```
Start timestamp: 2026-02-06 08:34:08 -0500 (AIDE 0.18.6)
AIDE found differences between database and filesystem!!
```

#### Summary:

```
Total number of entries:      121320
Added entries:                2
Removed entries:              0
Changed entries:              6
```

#### Added entries:

```
-----  
f+++++++: /etc/ssh/ssh_config.bak  
f+++++++: /usr/local/bin/maintenance
```

#### Changed entries:

```
-----  
f = ... i.H... : /etc/cups/subscriptions.conf  
f = ... i.H... : /etc/cups/subscriptions.conf.0  
f > ... ..H... : /etc/hosts  
f > ... mc..H.. : /etc/passwd  
f > ... ..H... : /etc/ssh/ssh_config  
d > ... mc.... : /usr/local/bin
```

#### Detailed information about changes:

```
-----  
File: /etc/cups/subscriptions.conf  
Inode      : 10145809          | 10145798  
SHA256     : p6qdGPx5RliHVU0j/5HFI5t1FFfafR9Ek | YvAx3C6l1tVvn8NE6UJNHZCnX8L8Qej  
          : iPFMTfwAClQ=           | 99lC70KSV+c=  
SHA512     : xfwTSt0VJXIqoKPEMGMQ3FN5TKHbwSgL | EpmXvcKhG+mxTB2HBbM2QUyWSjWcpFUK  
          : ytkFWi9JpYeRwIuWAxjAA7X0+tvP5zL | NdPaONEzB7TtlW2sLeMs647h0t12y5tJ  
          : FyHtjIjXpvQ94rZFZL8KgA==       | BhbOD6vj6EH8qcIEYG649g==
```

```
File: /etc/cups/subscriptions.conf.0  
Inode      : 10145802          | 10145800
```

Feb 6 8:34 AM

admin@ser-secu-aide:~ – sudo aide --check

```
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'  
Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)  
AIDE successfully initialized database.  
New AIDE database written to /var/lib/aide/aide.db.new.gz
```

```
Number of entries: 121318
```

```
-----  
The attributes of the (uncompressed) database(s):  
-----
```

```
/var/lib/aide/aide.db.new.gz  
MD5 : 3PkkXxmQwmuNSsM40DZ0tg==  
SHA1 : iXozIk20zHNnIeEO/7CA8nQhQyk=  
SHA256 : B+wCm8vf1KfFb4di0IWa8XGKSiY3NT8D  
        x1fSSbe0OpM=  
SHA512 : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw  
        3RdFHkpF4DpeIe20qZLaCz05yrPD9Z54  
        6U2kK4DMdhiatP9XL0240g==  
RMD160 : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

```
End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)  
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz  
[sudo] password for admin:  
admin@ser-secu-aide:~$ sudo cp /etc/ssh/ssh_config /etc/ssh/ssh_config.bak  
[sudo] password for admin:  
admin@ser-secu-aide:~$ echo "PermitRootLogin yes" | sudo tee -a /etc/ssh/ssh_config  
PermitRootLogin yes  
admin@ser-secu-aide:~$ echo "# Malicious entry" | sudo tee -a /etc/hosts  
# Malicious entry  
admin@ser-secu-aide:~$ echo "Simulation attack 2"  
Simulation attack 2  
admin@ser-secu-aide:~$ sudo cp /bin/ls /usr/local/bin/maintenance  
admin@ser-secu-aide:~$ sudo chmod +x /usr/local/bin/maintenance  
admin@ser-secu-aide:~$ echo "Simulation attack 3"  
Simulation attack 3  
admin@ser-secu-aide:~$ echo "backdoor:x:0:0::/root:/bin/bash" | sudo tee -a /etc/passwd  
backdoor:x:0:0::/root:/bin/bash  
admin@ser-secu-aide:~$ sudo aide --check  
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.gz'  
WARNING: /var/lib/aide/aide.db.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.gz'
```



Feb 6 8:33 AM



admin@ser-secu-aide:~

```
[sudo] password for admin:  
admin@ser-secu-aide:~$ sudo aide --init  
[sudo] password for admin:  
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'  
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'  
Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)  
AIDE successfully initialized database.  
New AIDE database written to /var/lib/aide/aide.db.new.gz  
  
Number of entries: 121318
```

```
-----  
The attributes of the (uncompressed) database(s):  
-----
```

```
/var/lib/aide/aide.db.new.gz  
MD5 : 3PkkXxmQwmuNSsM40DZ0tg==  
SHA1 : iXozIk20zHNnIeE0/7CA8nQhQyk=  
SHA256 : B+wCm8vflKFFb4di0IWa8XGKSiY3NT8D  
        x1fSSbe0OpM=  
SHA512 : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw  
        3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54  
        6U2kk4DMdhiatP9XL0240g==  
RMD160 : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

```
End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)  
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz  
[sudo] password for admin:  
admin@ser-secu-aide:~$ sudo cp /etc/ssh/ssh_config /etc/ssh/ssh_config.bak  
[sudo] password for admin:  
admin@ser-secu-aide:~$ echo "PermitRootLogin yes" | sudo tee -a /etc/ssh/ssh_config  
PermitRootLogin yes  
admin@ser-secu-aide:~$ echo "# Malicious entry" | sudo tee -a /etc/hosts  
# Malicious entry  
admin@ser-secu-aide:~$ echo "Simulation attack 2"  
Simulation attack 2  
admin@ser-secu-aide:~$ sudo cp /bin/ls /usr/local/bin/maintenance  
admin@ser-secu-aide:~$ sudo chmod +x /usr/local/bin/maintenance  
admin@ser-secu-aide:~$ echo "Simulation attack 3"  
Simulation attack 3  
admin@ser-secu-aide:~$ echo "backdoor:x:0:0::/root:/bin/bash" | sudo tee -a /etc/passwd  
backdoor:x:0:0::/root:/bin/bash  
admin@ser-secu-aide:~$
```



Feb 6 8:30 AM



admin@ser-secu-aide:~



```
crontab          fuse.conf        krb5.conf.d      nftables       rhsm           swid
cron.weekly     fwupd            ld.so.cache     nsswitch.conf  rpc            sysconfig
crypto-policies gcrypt          ld.so.conf      nvme          rpm            sysctl.conf

admin@ser-secu-aide:~$ sudo nano /etc/aide.conf
[sudo] password for admin:
admin@ser-secu-aide:~$ sudo aide --init
[sudo] password for admin:
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'
Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)
AIDE successfully initialized database.
New AIDE database written to /var/lib/aide/aide.db.new.gz
```

```
Number of entries:      121318
```

```
-----  
The attributes of the (uncompressed) database(s):  
-----
```

```
/var/lib/aide/aide.db.new.gz
MD5      : 3PkkXxmQwmUNSSm40DZ0tg==
SHA1     : ixozIk20zHNnIeE0/7CA8nQhQyk=
SHA256   : B+wCm8vflKfB4di0IWa8XGKSiY3NT8D
          x1fSSbe00pM=
SHA512   : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
          3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
          6U2kK4DMdhiaTP9XL0240g==
RMD160   : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

```
End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)
```

```
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz
[sudo] password for admin:
admin@ser-secu-aide:~$ sudo cp /etc/ssh/ssh_config /etc/ssh/ssh_config.bak
[sudo] password for admin:
admin@ser-secu-aide:~$ echo "PermitRootLogin yes" | sudo tee -a /etc/ssh/ssh_config
PermitRootLogin yes
admin@ser-secu-aide:~$ echo "# Malicious entry" | sudo tee -a /etc/hosts
# Malicious entry
admin@ser-secu-aide:~$ echo "Simulation attack 2"
Simulation attack 2
admin@ser-secu-aide:~$ sudo cp /bin/ls /usr/local/bin/maintenance
admin@ser-secu-aide:~$ sudo chmod +x /usr/local/bin/maintenance
admin@ser-secu-aide:~$
```

Feb 6 8:25 AM

admin@ser-secu-aide:~



```
crontab.conf      fonts      kernel      nanorc      redhat-release      sudo.conf      yum.conf
cron.daily        foomatic   keys        netconfig    request-key.conf  sudoers       yum.repos.d
cron.deny         foomatic   keyutils    NetworkManager  request-key.d    sudoers.d
cron.hourly       fprintd.conf  krb5.conf   networks     resolv.conf      sudo-ldap.conf
cron.monthly      fstab      krb5.conf.d  nftables     rhsm          swid
cron.weekly       fuse.conf   ld.so.cache  nsswitch.conf  rpc           sysconfig
crypto-policies   fwupd      ld.so.conf   nvme        rpm           sysctl.conf
```

admin@ser-secu-aide:~\$ sudo nano /etc/aide.conf

[sudo] password for admin:

admin@ser-secu-aide:~\$ sudo aide --init

[sudo] password for admin:

WARNING: /var/lib/aide/aide.db.new.gz: gnutls\_hash\_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'

WARNING: /var/lib/aide/aide.db.new.gz: gnutls\_hash\_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'

Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)

AIDE successfully initialized database.

New AIDE database written to /var/lib/aide/aide.db.new.gz

Number of entries: 121318

-----  
The attributes of the (uncompressed) database(s):  
-----

```
/var/lib/aide/aide.db.new.gz
MD5      : 3PkXxmQwmUNsM40DZ0tg==
SHA1     : iXozIk20zHnIeE0/7CA8nQhQyk=
SHA256   : B+uCm8vflFb4di0IWa8XGKSiY3NT8D
          x1fSSbe0OpM=
SHA512   : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
          3RdFHkpF4DpeIe20qZLaCz05yrPD9Z54
          6U2kK4DMdhiatP9XL0240g==
RMD160   : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)

admin@ser-secu-aide:~\$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz

[sudo] password for admin:

admin@ser-secu-aide:~\$ sudo cp /etc/ssh/ssh\_config /etc/ssh/ssh\_config.bak

[sudo] password for admin:

admin@ser-secu-aide:~\$ echo "PermitRootLogin yes" | sudo tee -a /etc/ssh/ssh\_config

PermitRootLogin yes

admin@ser-secu-aide:~\$ echo "# Malicious entry" | sudo tee -a /etc/hosts

# Malicious entry

admin@ser-secu-aide:~\$

Feb 6 8:24 AM



admin@ser-secu-aide:~



```
credstore.encrypted      firewalld          kdump             mtab              rc.local           subuid            yggdrasil-worker-package-manager
cron.d                  flatpak            kdump.conf        multipath         reader.conf.d    subuid-
cron.daily               fonts              kernel            nanorc            redhat-release   sudo.conf
cron.deny                foomatic           keys              netconfig        request-key.conf sudoers
cron.hourly              fprintd.conf       keyutils          NetworkManager  request-key.d   sudoers.d
cron.monthly              fstab              krb5.conf        networks          resolv.conf     sudo-ldap.conf
crontab                 fuse.conf          krb5.conf.d      nftables         rhsm
cron.weekly               fwupd              ld.so.cache     nsswitch.conf   rpc
crypto-policies          gcrypt             ld.so.conf       nvme              rpm
admin@ser-secu-aide:~$ sudo nano /etc/aide.conf
```

[sudo] password for admin:

```
admin@ser-secu-aide:~$ sudo aide --init
```

[sudo] password for admin:

```
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'
```

```
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'
```

```
Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)
```

```
AIDE successfully initialized database.
```

```
New AIDE database written to /var/lib/aide/aide.db.new.gz
```

```
Number of entries: 121318
```

-----  
The attributes of the (uncompressed) database(s):  
-----

```
/var/lib/aide/aide.db.new.gz
MD5      : 3PkXxmQwmUNSSm40DZ0tg==
SHA1     : ixOzIk20zHNnIeE0/7CA8nQhQyk=
SHA256   : B+wCm8vflKfFb4di0IWa8XGKSiY3NT8D
          x1fSSbe0OpM=
SHA512   : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
          3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
          6U2kK4DMdhiatP9XL0240g==
RMD160   : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

```
End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)
```

```
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz
```

[sudo] password for admin:

```
admin@ser-secu-aide:~$ sudo cp /etc/ssh/ssh_config /etc/ssh/ssh_config.bak
```

[sudo] password for admin:

```
admin@ser-secu-aide:~$ echo "PermitRootLogin yes" | sudo tee -a /etc/ssh/ssh_config
```

```
PermitRootLogin yes
```

```
admin@ser-secu-aide:~$
```

Feb 6 8:20 AM



admin@ser-secu-aide:~



```
containers           filesystems          issue.d            motd               ras                subgid             xml
credstore           firefox              issue.net         motd.d             rc.d               subgid-
credstore.encrypted firewalld          kdump             mtab               rc.local           subuid             yggdrasil
cron.d              flatpak             kdump.conf        multipath          reader.conf.d    subuid-
cron.daily          fonts               kernel            nanorc            redhat-release   subuid-
cron.deny           foomatic            keys              netconfig          request-key.conf sudo.conf
cron.hourly         fprintd.conf       krb5.conf         NetworkManager   request-key.d   sudoers
cron.monthly        fstab               krb5.conf.d      networks           resolv.conf     sudoers.d
crontab             fuse.conf          ld.so.cache      nftables          rhsm               sudo-ldap.conf
cron.weekly         fwupd               ld.so.conf        nsswitch.conf    rpc                swid
crypto-policies     gcrypt              nvme              rpm                sysconfig
admin@ser-secu-aide:~$ sudo nano /etc/aide.conf
```

[sudo] password for admin:

```
admin@ser-secu-aide:~$ sudo aide --init
```

[sudo] password for admin:

```
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'
```

```
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'
```

```
Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)
```

```
AIDE successfully initialized database.
```

```
New AIDE database written to /var/lib/aide/aide.db.new.gz
```

```
Number of entries: 121318
```

```
-----  
The attributes of the (uncompressed) database(s):  
-----
```

```
/var/lib/aide/aide.db.new.gz
MD5      : 3PkkXxmQwmUNNsM40DZ0tg==
SHA1     : iXozIk20zHNnIeE0/7CA8nQhQyk=
SHA256   : B+wCm8vflKfFb4di0IWa8XGKSiY3NT8D
          x1fSSbe0OpM=
SHA512   : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
          3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
          6U2kK4DMdhiatP9XL0240g==
RMD160   : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

```
End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)
```

```
admin@ser-secu-aide:~$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz
```

[sudo] password for admin:

```
admin@ser-secu-aide:~$ sudo cp /etc/ssh/ssh_config /etc/ssh/ssh_config.bak
```

[sudo] password for admin:

```
admin@ser-secu-aide:~$
```

Feb 6 8:00 AM

admin@ser-secu-aide:~

```
cockpit      exports      iscsi      modprobe.d      pulse      sssd      xattr.conf
colord       favicon.png issue      modules-load.d qemu-ga    statetab.d  xdg
containers   filesystems issue.d     motd        ras        subgid    xml
credstore    firefox      issue.net  kdump       mtab      rc.d      subgid-
credstore.encrypted  firewalld  kdump.conf  kernel     multipath  rc.local  subuid
cron.d       flatpak     keys      nanorc     netconfig  reader.conf.d  subuid-
cron.daily   fonts       keyutils   NetworkManager redhat-release sudo.conf
cron.deny    foomatic    krb5.conf  networks   nftables   request-key.conf sudoers
cron.hourly  fprintd.conf  krb5.conf.d  nsswitch.conf  resolv.conf  request-key.d sudoers.d
cron.monthly fstab       ld.so.cache  nvme      rpc        rhsm      swid
crontab     fuse.conf    ld.so.conf   nsswitch.conf  rpm       sysconfig
cron.weekly  fwupd      ld.so.cache  nvme      sysctl.conf
crypto-policies  gcrypt

admin@ser-secu-aide:~$ sudo nano /etc/aide.conf
```

[sudo] password for admin:

admin@ser-secu-aide:~\$ sudo aide --init

[sudo] password for admin:

WARNING: /var/lib/aide/aide.db.new.gz: gnutls\_hash\_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'

WARNING: /var/lib/aide/aide.db.new.gz: gnutls\_hash\_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'

Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)

AIDE successfully initialized database.

New AIDE database written to /var/lib/aide/aide.db.new.gz

Number of entries: 121318

The attributes of the (uncompressed) database(s):

```
/var/lib/aide/aide.db.new.gz
MD5      : 3PkXxmQwmuNSsM40DZ0tg==
SHA1     : iXozIk20zHNnIeEO/7CA8nQhQyk=
SHA256   : B+wCm8vflKfB4di0IWa8XGKSiy3NT8D
           x1fSSbe0OpM=
SHA512   : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
           3RdFHkpFDpeIe20qzLaCz05yrPD9Z54
           6U2kK4DMdhiatP9XL0240g==
RMD160   : gbHsFeCO1mvzYxlTvu6l1IPKtsU=
```

End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)

admin@ser-secu-aide:~\$ sudo mv /var/lib/aide/aide.db.new.gz /var/lib/aide/aide.db.gz

[sudo] password for admin:

admin@ser-secu-aide:~\$



Feb 6 7:52 AM



admin@ser-secu-aide:~



```
chrony.conf      environment      insights-client      mime.types      profile.d       ssh          wpa_supplicant
cifs-utils      ethertypes      ipp-usb           mke2fs.conf    protocols      ssl          X11
cockpit         exports        iscsi             modprobe.d     pulse          sssd         xattr.conf
colord          favicon.png    issue             modules-load.d qemu-ga        statetab.d   xdg
containers      filesystems   issue.d          motd           ras            subgid      xml
credstore       firefox        issue.net        motd.d        rc.d          subgid-
credstore.encrypted  firewalld   kdump           mtab           rc.local      subuid      yggdrasil
cron.d          flatpak        kdump.conf      multipath      reader.conf.d sudo.conf    yggdrasil-worker-package-manager
cron.daily      fonts          kernel           nanorc        redhat-release sudoers      yum
cron.deny       foomatic      keys             netconfig     request-key.conf sudoers.d   yum.conf
cron.hourly     fprintd.conf  keyutils        NetworkManager resolv.conf   sudo-ldap.conf yum.repos.d
cron.monthly    fstab          krb5.conf       networks      rhsm          swid
cron.weekly     fwupd          krb5.conf.d    nftables      rpc           sysconfig
crypto-policies gcrypt         ld.so.cache    nsswitch.conf nvme          sysctl.conf
admin@ser-secu-aide:~$ sudo nano /etc/aide.conf
[sudo] password for admin:
admin@ser-secu-aide:~$ sudo aide --init
[sudo] password for admin:
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog256) failed for '/var/lib/aide/aide.db.new.gz'
WARNING: /var/lib/aide/aide.db.new.gz: gnutls_hash_init (stribog512) failed for '/var/lib/aide/aide.db.new.gz'
Start timestamp: 2026-02-06 07:48:20 -0500 (AIDE 0.18.6)
AIDE successfully initialized database.
New AIDE database written to /var/lib/aide/aide.db.new.gz

Number of entries:      121318

-----
The attributes of the (uncompressed) database(s):
-----

/var/lib/aide/aide.db.new.gz
MD5      : 3PkXxmQwmuNSsM40DZ0tg==
SHA1     : iXozIk20zHNnIeEO/7CA8nQhQyk=
SHA256   : B+wCm8vf1KfFb4di0IWa8XGKSiY3NT8D
          x1fSSbe0OpM=
SHA512   : y/RJRbcmVw2xziTuiFyTSyuBXP/JuMFw
          3RdFHkpF4DpeIe2QqZLaCz05yrPD9Z54
          6U2kk4DMdhiatP9XL0240g==
RMD160   : gbHsFeC01mvzYxlTvu6l1IPKtsU=
```

End timestamp: 2026-02-06 07:49:19 -0500 (run time: 0m 59s)

admin@ser-secu-aide:~\$ █

Feb 6 7:47 AM



admin@ser-secu-aide:~



```
R: l+p+u+g+s+c+m+i+n+md5+acl+selinux+xattr+ftype+e2fsattrs  
L: l+p+u+g+i+n+acl+selinux+xattr+ftype+e2fsattrs  
>: l+p+u+g+s+i+n+acl+selinux+xattr+ftype+e2fsattrs+growing  
H: md5+sha1+rmd160+sha256+sha512+stribog256+stribog512  
X: acl+selinux+xattr+e2fsattrs
```

```
admin@ser-secu-aide:~$ ls /etc
```

adjtime	crypttab	gdm	ld.so.conf.d	openldap	rsyncd.conf	sysctl.d
aide.conf	csh.cshrc	geoclue	libaudit.conf	opt	rsyslog.conf	systemd
aliases	csh.login	glvnd	libblockdev	os-release	rsyslog.d	system-release
alsa	cups	gnome-remote-desktop	libibverbs.d	ostree	rwtab.d	system-release-cpe
alternatives	cupshelpers	gnupg	libnl	PackageKit	samba	terminfo
anacrontab	dbus-1	GREP_COLORS	libssh	pam.d	sane.d	tmpfiles.d
asound.conf	dconf	groff	locale.conf	paperspecs	sasl2	tpm2-tss
at.deny	debuginfod	group	localtime	passwd	security	trusted-key.key
audit	default	group-	login.defs	passwd-	selinux	tuned
authselect	depmod.d	grub2.cfg	logrotate.conf	pbm2ppa.conf	services	udev
avahi	dhcp	grub.d	logrotate.d	pkcs11	sestatus.conf	udisks2
bash_completion.d	DIR_COLORS	gshadow	lsm	pkgconfig	setroubleshoot	updatedb.conf
bashrc	DIR_COLORS.lightbgcolor	gshadow-	lvm	pki	sgml	UPower
bindresvport.blacklist	dnf	gss	machine-id	plymouth	shadow	vconsole.conf
binfmt.d	dnsmasq.conf	host.conf	magic	pm	shadow-	vimrc
bluetooth	dnsmasq.d	hostname	mailcap	pnmp2ppa.conf	shells	virc
brlapi.key	dracut.conf	hosts	makedumpfile.conf.sample	polkit-1	skel	vmware-tools
brltty	dracut.conf.d	hp	man_db.conf	popt.d	smartmontools	vulkan
brltty.conf	egl	inittab	mcelog	printcap	sos	wgetrc
chromium	enscript.cfg	inputrc	microcode_ctl	profile	speech-dispatcher	wireplumber
chrony.conf	environment	insights-client	mime.types	profile.d	ssh	wpa_supplicant
cifs-utils	ethertypes	ipp-usb	mke2fs.conf	protocols	ssl	X11
cockpit	exports	iscsi	modprobe.d	pulse	sssd	xattr.conf
colord	favicon.png	issue	modules-load.d	qemu-ga	statetab.d	xdg
containers	filesystems	issue.d	motd	ras	subgid	xml
credstore	firefox	issue.net	motd.d	rc.d	subgid-	yggdrasil
credstore.encrypted	firewalld	kdump	mtab	rc.local	subuid	yggdrasil-worker-package-manager
cron.d	flatpak	kdump.conf	multipath	reader.conf.d	subuid-	yum
cron.daily	fonts	kernel	nanorc	redhat-release	sudo.conf	yum.conf
cron.deny	foomatic	keys	netconfig	request-key.conf	sudoers	yum.repos.d
cron.hourly	fprintd.conf	keyutils	NetworkManager	request-key.d	sudoers.d	
cron.monthly	fstab	krb5.conf	networks	resolv.conf	sudo-ldap.conf	
crontab	fuse.conf	krb5.conf.d	nftables	rhsm	swid	
cron.weekly	fwupd	ld.so.cache	nsswitch.conf	rpc	sysconfig	
crypto-policies	gcrypt	ld.so.conf	nvme	rpm	sysctl.conf	

```
admin@ser-secu-aide:~$ sudo nano /etc/aide.conf
```

```
[sudo] password for admin:
```

```
admin@ser-secu-aide:~$ sudo aide --init
```



Feb 6 7:43 AM



admin@ser-secu-aide:~ – sudo nano /etc/aide.conf



```
GNU nano 8.1
ALLXTRAHASHES = sha1+rmd160+sha256+sha512+tiger
# Everything but access time (Ie. all changes)
EVERYTHING = R+ALLXTRAHASHES
```

/etc/aide.conf

Modified

```
# Sane, with multiple hashes
# NORMAL = R+rmd160+sha256+whirlpool
#NORMAL = FIPSR+sha512
NORMAL=p+i+n+u+g+s+m+c+acl+xattr+sha256
# For directories, don't bother doing hashes
DIR = p+i+n+u+g+acl+selinux+xattrs
```

```
# Access control only
PERMS = p+i+u+g+acl+selinux
```

```
# Logfile are special, in that they often change
LOG = >
```

```
# Just do sha256 and sha512 hashes
LSPP = FIPSR+sha512
```

```
# Some files get updated automatically, so the inode/ctime/mtime change
# but we want to know when the data inside them changes
DATAONLY = p+n+u+g+s+acl+selinux+xattr+sha256
```

```
# Next decide what directories/files you want in the database.
```

```
/boot NORMAL
/bin NORMAL
/sbin NORMAL
/lib NORMAL
/lib64 NORMAL
/opt NORMAL
/usr NORMAL
/root NORMAL
# These are too volatile
!/usr/src
!/usr/tmp
```

```
# Check only permissions, inode, user and group for /etc, but
# cover some important files closely.
```

```
^G Help      ^O Write Out    ^F Where Is     ^K Cut          ^T Execute      ^C Location     M-U Undo       M-A Set Mark   M-] To Bracket  M-B Previous   ▲ Back
^X Exit      ^R Read File    ^\ Replace      ^U Paste        ^J Justify      ^/] Go To Line  M-E Redo       M-G Copy       M-B Where Was  M-F Next      ▾ Forward
```



Feb 6 7:41 AM



admin@ser-secu-aide:~ – sudo nano /etc/aide.conf



```
GNU nano 8.1                                         /etc/aide.conf                                         Modified 1

#R:          p+i+n+u+g+s+m+c+acl+selinux+xattrs+md5
#L:          p+i+n+u+g+acl+selinux+xattrs
#E:          Empty group
#>:          Growing logfile p+u+g+i+n+S+acl+selinux+xattrs

# You can create custom rules like this.
# With MHASH...
# ALLXTRAHASHERS = sha1+rmd160+sha256+sha512+whirlpool+tiger+haval+gost+crc32
ALLXTRAHASHERS = sha1+rmd160+sha256+sha512+tiger
# Everything but access time (Ie. all changes)
EVERYTHING = R+ALLXTRAHASHERS

# Sane, with multiple hashes
# NORMAL = R+rmd160+sha256+whirlpool
#NORMAL = FIPSR+sha512
NORMAL=p+i+n+u+g+s+m+c+acl+xattrs+sha256
# For directories, don't bother doing hashes
DIR = p+i+n+u+g+acl+selinux+xattrs

# Access control only
PERMS = p+i+u+g+acl+selinux

# Logfile are special, in that they often change
LOG = >

# Just do sha256 and sha512 hashes
LSPP = FIPSR+sha512

# Some files get updated automatically, so the inode/ctime/mtime change
# but we want to know when the data inside them changes
DATAONLY = p+n+u+g+s+acl+selinux+xattrs+sha256

# Next decide what directories/files you want in the database.

/boot    NORMAL
/bin     NORMAL
/sbin    NORMAL
/lib     NORMAL
/lib64   NORMAL
/opt     NORMAL
```

```
^G Help      ^O Write Out   ^F Where Is    ^K Cut        ^T Execute    ^C Location    M-U Undo     M-A Set Mark  M-] To Bracket M-B Previous  ▲ Back
^X Exit      ^R Read File   ^\ Replace     ^U Paste      ^J Justify    ^/] Go To Line M-E Redo     M-G Copy      M-B Where Was M-F Next    ▾ Forward
```



Feb 6 7:40 AM



admin@ser-secu-aide:~ – sudo nano /etc/aide.conf



```
GNU nano 8.1                                         /etc/aide.conf                                         Modified 1

#R:          p+i+n+u+g+s+m+c+acl+selinux+xattrs+md5
#L:          p+i+n+u+g+acl+selinux+xattrs
#E:          Empty group
#>:          Growing logfile p+u+g+i+n+S+acl+selinux+xattrs

# You can create custom rules like this.
# With MHASH...
# ALLXTRAHASHES = sha1+rmd160+sha256+sha512+whirlpool+tiger+haval+gost+crc32
ALLXTRAHASHES = sha1+rmd160+sha256+sha512+tiger
# Everything but access time (Ie. all changes)
EVERYTHING = R+ALLXTRAHASHES

# Sane, with multiple hashes
# NORMAL = R+rmd160+sha256+whirlpool
NORMAL = FIPSR+sha512

# For directories, don't bother doing hashes
DIR = p+i+n+u+g+acl+selinux+xattrs

# Access control only
PERMS = p+i+u+g+acl+selinux

# Logfile are special, in that they often change
LOG = >

# Just do sha256 and sha512 hashes
LSPP = FIPSR+sha512

# Some files get updated automatically, so the inode/ctime/mtime change
# but we want to know when the data inside them changes
DATAONLY = p+n+u+g+s+acl+selinux+xattrs+sha256

# Next decide what directories/files you want in the database.

/boot    NORMAL
/bin     NORMAL
/sbin    NORMAL
/lib     NORMAL
/lib64   NORMAL
/opt     NORMAL
```

```
^G Help      ^O Write Out   ^F Where Is    ^K Cut        ^T Execute    ^C Location    M-U Undo    M-A Set Mark  M-] To Bracket  M-B Previous  ▲ Back
^X Exit      ^R Read File   ^\ Replace     ^U Paste      ^J Justify    ^/] Go To Line  M-E Redo    M-G Copy      ^B Where Was   M-F Next     ▾ Forward
```



Feb 6 7:36 AM



admin@ser-secu-aide:~

```
use Mhash: no
use GNU crypto library: no
use GnuTLS: yes
use Linux Auditing Framework: yes
use locale: no
syslog ident: aide
syslog logopt: LOG_CONS
syslog priority: LOG_NOTICE
default syslog facility: LOG_LOCAL0
```

```
Default config values:
config file: /etc/aide.conf
database_in: file:/etc/aide.db
database_out: file:/etc/aide.db.new
```

```
Available compiled-in attributes:
```

```
acl: yes
xattrs: yes
selinux: yes
e2fsattrs: yes
caps: no
```

```
Available hashsum attributes:
```

```
md5: yes
sha1: yes
sha256: yes
sha512: yes
rmd160: yes
tiger: no
crc32: no
crc32b: no
haval: no
whirlpool: no
gost: no
stribog256: yes
stribog512: yes
```

```
Default compound groups:
```

```
R: l+p+u+g+s+c+m+i+n+md5+acl+selinux+xattrs+ftype+e2fsattrs
L: l+p+u+g+i+n+acl+selinux+xattrs+ftype+e2fsattrs
>: l+p+u+g+s+i+n+acl+selinux+xattrs+ftype+e2fsattrs+growing
H: md5+sha1+rmd160+sha256+sha512+stribog256+stribog512
X: acl+selinux+xattrs+e2fsattrs
```

```
admin@ser-secu-aide:~$
```



Feb 6 7:36 AM



admin@ser-secu-aide:~

```
Compile-time options:  
use pcre2: mandatory  
use pthread: yes  
use zlib compression: yes  
use POSIX ACLs: yes  
use SELinux: yes  
use xattr: yes  
use POSIX 1003.1e capabilities: no  
use e2fsattrs: yes  
use cURL: yes  
use Mhash: no  
use GNU crypto library: no  
use GnuTLS: yes  
use Linux Auditing Framework: yes  
use locale: no  
syslog ident: aide  
syslog logopt: LOG_CONS  
syslog priority: LOG_NOTICE  
default syslog facility: LOG_LOCAL0
```

```
Default config values:  
config file: /etc/aide.conf  
database_in: file:/etc/aide.db  
database_out: file:/etc/aide.db.new
```

```
Available compiled-in attributes:  
acl: yes  
xattrs: yes  
selinux: yes  
e2fsattrs: yes  
caps: no
```

```
Available hashsum attributes:  
md5: yes  
sha1: yes  
sha256: yes  
sha512: yes  
rmd160: yes  
tiger: no  
crc32: no  
crc32b: no  
haval: no  
whirlpool: no  
gost: no  
strihash256: yes
```



Feb 6 7:36 AM



admin@ser-secu-aide:~

```
Complete!  
admin@ser-secu-aide:~$ aide --version  
AIDE 0.18.6
```

```
Compile-time options:  
use pcre2: mandatory  
use pthread: yes  
use zlib compression: yes  
use POSIX ACLs: yes  
use SELinux: yes  
use xattr: yes  
use POSIX 1003.1e capabilities: no  
use e2fsattrs: yes  
use CURL: yes  
use Mhash: no  
use GNU crypto library: no  
use GnuTLS: yes  
use Linux Auditing Framework: yes  
use locale: no  
syslog ident: aide  
syslog logopt: LOG_CONS  
syslog priority: LOG_NOTICE  
default syslog facility: LOG_LOCAL0
```

```
Default config values:  
config file: /etc/aide.conf  
database_in: file:/etc/aide.db  
database_out: file:/etc/aide.db.new
```

```
Available compiled-in attributes:  
acl: yes  
xattrs: yes  
selinux: yes  
e2fsattrs: yes  
caps: no
```

```
Available hashsum attributes:  
md5: yes  
sha1: yes  
sha256: yes  
sha512: yes  
rmd160: yes  
tiger: no  
crc32: no
```



Feb 6 7:33 AM



admin@ser-secu-aide:~



Last metadata expiration check: 0:00:13 ago on Fri 06 Feb 2026 07:04:41 AM EST.

Dependencies resolved.

Package	Architecture	Version	Repository	Size
<b>Installing:</b>				
<b>aide</b>	x86_64	0.18.6-8.el10_1.2	rhel-10-for-x86_64-appstream-rpms	148 k

Transaction Summary

Install 1 Package

Total download size: 148 k

Installed size: 352 k

Downloading Packages:

aide-0.18.6-8.el10_1.2.x86_64.rpm	287 kB/s   148 kB	00:00
-----------------------------------	-------------------	-------

<b>Total</b>	286 kB/s   148 kB	00:00
Red Hat Enterprise Linux 10 for x86_64 - AppStream (RPMS)	3.6 MB/s   3.7 kB	00:00

Importing GPG key 0xFD431D51:

Userid : "Red Hat, Inc. (release key 2) <security@redhat.com>"

Fingerprint: 567E 347A D004 4ADE 55BA 8A5F 199E 2F91 FD43 1D51

From : /etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release

Key imported successfully

Importing GPG key 0x5A6340B3:

Userid : "Red Hat, Inc. (auxiliary key 3) <security@redhat.com>"

Fingerprint: 7E46 2425 8C40 6535 D56D 6F13 5054 E4A4 5A63 40B3

From : /etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release

Key imported successfully

Running transaction check

Transaction check succeeded.

Running transaction test

Transaction test succeeded.

Running transaction

Preparing :	1/1
Installing : aide-0.18.6-8.el10_1.2.x86_64	1/1
Running scriptlet: aide-0.18.6-8.el10_1.2.x86_64	1/1

Installed products updated.

Installed:

aide-0.18.6-8.el10\_1.2.x86\_64

Complete!

admin@ser-secu-aide:~\$



Feb 6 7:06 AM



admin@ser-secu-aide:~



admin@ser-secu-aide:~\$ sudo dnf install aide -y

Updating Subscription Management repositories.

Last metadata expiration check: 0:00:13 ago on Fri 06 Feb 2026 07:04:41 AM EST.

Dependencies resolved.

Package	Architecture	Version	Repository	Size
aide	x86_64	0.18.6-8.el10_1.2	rhel-10-for-x86_64-appstream-rpms	148 k

Transaction Summary

Install 1 Package

Total download size: 148 k

Installed size: 352 k

Downloading Packages:

aide-0.18.6-8.el10_1.2.x86_64.rpm	287 kB/s   148 kB	00:00
-----------------------------------	-------------------	-------

Total

286 kB/s | 148 kB 00:00

Red Hat Enterprise Linux 10 for x86\_64 - AppStream (RPMs)

3.6 MB/s | 3.7 kB 00:00

Importing GPG key 0xFD431D51:

Userid : "Red Hat, Inc. (release key 2) &lt;security@redhat.com&gt;"

Fingerprint: 567E 347A D004 4ADE 55BA 8ASF 199E 2F91 FD43 1D51

From : /etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release

Key imported successfully

Importing GPG key 0x5A6340B3:

Userid : "Red Hat, Inc. (auxiliary key 3) &lt;security@redhat.com&gt;"

Fingerprint: 7E46 2425 8C40 6535 D56D 6F13 5054 E4A4 5A63 40B3

From : /etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release

Key imported successfully

Running transaction check

Transaction check succeeded.

Running transaction test

Transaction test succeeded.

Running transaction

Preparing :	1/1
Installing : aide-0.18.6-8.el10_1.2.x86_64	1/1
Running scriptlet: aide-0.18.6-8.el10_1.2.x86_64	1/1

Installed products updated.

Installed:

aide-0.18.6-8.el10\_1.2.x86\_64

Complete!

Feb 6 6:58 AM

admin@ser-secu-aide:~



```
The downloaded packages were saved in cache until the next successful transaction.  
You can remove cached packages by executing 'dnf clean packages'.  
Traceback (most recent call last):  
  File "/bin/dnf", line 62, in <module>  
    main.user_main(sys.argv[1:], exit_code=True)  
  File "/usr/lib/python3.12/site-packages/dnf/cli/main.py", line 208, in user_main  
    errcode = main(args)  
          ^^^^^^  
  File "/usr/lib/python3.12/site-packages/dnf/cli/main.py", line 67, in main  
    return _main(base, args, cli_class, option_parser_class)  
          ^^^^^^  
  File "/usr/lib/python3.12/site-packages/dnf/cli/main.py", line 106, in _main  
    return cli_run(cli, base)  
          ^^^^^^  
  File "/usr/lib/python3.12/site-packages/dnf/cli/main.py", line 130, in cli_run  
    ret = resolving(cli, base)  
          ^^^^^^  
  File "/usr/lib/python3.12/site-packages/dnf/cli/main.py", line 183, in resolving  
    base.do_transaction(display=displays)  
  File "/usr/lib/python3.12/site-packages/dnf/cli/cli.py", line 276, in do_transaction  
    self.gpgsigcheck(install_pkgs)  
  File "/usr/lib/python3.12/site-packages/dnf/cli/cli.py", line 332, in gpgsigcheck  
    self._get_key_for_package(po, fn)  
  File "/usr/lib/python3.12/site-packages/dnf/base.py", line 2555, in _get_key_for_package  
    keys = dnf.crypto.retrieve(keyurl, repo)  
          ^^^^^^  
  File "/usr/lib/python3.12/site-packages/dnf/crypto.py", line 137, in retrieve  
    keyinfos = rawkey2infos(handle)  
          ^^^^^^  
  File "/usr/lib/python3.12/site-packages/dnf/crypto.py", line 127, in rawkey2infos  
    keys = libdnf.repo.Key.keysFromFd(key_fo.fileno())  
          ^^^^^^  
  File "/usr/lib64/python3.12/site-packages/libdnf/repo.py", line 341, in keysFromFd  
    return _repo.Key_keysFromFd(fileDescriptor)  
          ^^^^^^  
RuntimeError: Parsing armored OpenPGP packet(s) failed  
admin@ser-secu-aide:~$
```



Feb 6 6:58 AM



admin@ser-secu-aide:~

```
+ syspurpose    Convenient module for managing all system purpose settings
version       Print version information
```

```
admin@ser-secu-aide:~$ sudo dnf repo-list
```

Updating Subscription Management repositories.

No such command: repo-list. Please use /bin/dnf --help

It could be a DNF plugin command, try: "dnf install 'dnf-command(repo-list)'"

```
admin@ser-secu-aide:~$ sudo dnf install aide -y
```

[sudo] password for admin:

Updating Subscription Management repositories.

```
Red Hat Enterprise Linux 10 for x86_64 - BaseOS (RPMs)
```

14 MB/s | 44 MB 00:03

```
Red Hat Enterprise Linux 10 for x86_64 - AppStream (RPMs)
```

3.9 MB/s | 4.3 MB 00:01

Dependencies resolved.

```
=====
Package          Architecture      Version            Repository        Size
=====
Installing:
aide            x86_64           0.18.6-8.el10_1.2  rhel-10-for-x86_64-appstream-rpms 148 k
```

Transaction Summary

```
=====
Install 1 Package
```

Total download size: 148 k

Installed size: 352 k

Downloading Packages:

```
aide-0.18.6-8.el10_1.2.x86_64.rpm                                320 kB/s | 148 kB 00:00
```

```
=====
Total
```

319 kB/s | 148 kB 00:00

```
Red Hat Enterprise Linux 10 for x86_64 - AppStream (RPMs)
```

3.6 MB/s | 3.7 kB 00:00

The downloaded packages were saved in cache until the next successful transaction.

You can remove cached packages by executing 'dnf clean packages'.

Traceback (most recent call last):

```
  File "/bin/dnf", line 62, in <module>
    main.user_main(sys.argv[1:], exit_code=True)
  File "/usr/lib/python3.12/site-packages/dnf/cli/main.py", line 208, in user_main
    errcode = main(args)
      ^^^^^^
```



Feb 6 6:39 AM



admin@ser-secu-aide:~

```
admin@ser-secu-aide:~$ sudo subscription-manager register
```

We trust you have received the usual lecture from the local System Administrator. It usually boils down to these three things:

- #1) Respect the privacy of others.
- #2) Think before you type.
- #3) With great power comes great responsibility.

For security reasons, the password you type will not be visible.

```
[sudo] password for admin:  
This system is already registered. Use --force to override  
admin@ser-secu-aide:~$ sudo subscription-manager attach --auto  
Usage: subscription-manager MODULE-NAME [MODULE-OPTIONS] [--help]
```

Primary Modules:

list	List subscription and product information for this system
refresh	Pull the latest subscription data from the server
register	Register this system to the Customer Portal or another subscription management service
release	Configure which operating system release to use
status	Show status information for this system
unregister	Unregister this system from the Customer Portal or another subscription management service

Other Modules:

clean	Remove all local system and subscription data without affecting the server
config	List, set, or remove the configuration parameters in use by this system
environments	Display the environments available for a user
facts	View or update the detected system information
identity	Display the identity certificate for this system or request a new one
org	Display the organization against which a user was registered

## NETWORK & HOST NAME

Done

### Ethernet (enp0s3)

Intel Corporation 82540EM Gigabit Ethernet Controller (PRO/1000 MT Desktop Adapter)



Host Name:

Apply

Configure...

## RED HAT ENTERPRISE LINUX 10.0 INSTALLATION

us

### Ethernet (enp0s3)

Connected



Hardware Address 08:00:27:24:C9:E8

Speed 1000 Mb/s

IPv4 Address 10.0.2.15/24

IPv6 Address fd17:625c:f037:2:a00:27ff:fe24:c9e8/64

Default Route 10.0.2.2

DNS 100.127.255.72

100.127.255.73

Current host name: localhost

## CREATE USER

RED HAT ENTERPRISE LINUX 10.0 INSTALLATION

Done

us

Full name

Admin

User name

admin

 Add administrative privileges to this user account (wheel group membership) Require a password to use this account

Password

●●●●●●●●●●●●●●|



Strong

Confirm password

●●●●●●●●●●●●●●



Advanced...

## CREATE USER

## RED HAT ENTERPRISE LINUX 10.0 INSTALLATION

Done

us

Full name

Admin

User name

admin

 Add administrative privileges to this user account (wheel group membership) Require a password to use this account

Password

MonSTER@912;~|



Strong

Confirm password

MonSTER@912;~,



Advanced...

The root account is used for administering the system.

The root user (also known as super user) has complete access to the entire system. For this reason, logging into this system as the root user is best done only to perform system maintenance or administration.

**Disable root account**

Disabling the root account will lock the account and disable remote access with root account. This will prevent unintended administrative access to the system.

**Enable root account**

Enabling the root account will allow you to set a root password and optionally enable remote access to root account on this system.

Root Password:  

Strong

Confirm:  

Allow root SSH login with password

The root account is used for administering the system.

The root user (also known as super user) has complete access to the entire system. For this reason, logging into this system as the root user is best done only to perform system maintenance or administration.

**Disable root account**

Disabling the root account will lock the account and disable remote access with root account. This will prevent unintended administrative access to the system.

**Enable root account**

Enabling the root account will allow you to set a root password and optionally enable remote access to root account on this system.

Root Password:  

Strong

Confirm:  

Allow root SSH login with password



## INSTALLATION SUMMARY

RED HAT ENTERPRISE LINUX 10.0 INSTALLATION

us

### LOCALIZATION



**Keyboard**  
English (US)



**Language Support**  
English (United States)



**Time & Date**  
Americas/New York timezone

### SOFTWARE



**Connect to Red Hat**  
Registered.



**Installation Source**  
Auto-detected source



**Software Selection**  
Server with GUI

### SYSTEM



**Installation Destination**  
Custom partitioning selected



**KDUMP**  
Kdump is enabled



**Network & Host Name**  
Connected: enp0s3

### USER SETTINGS



**Root Account**  
Root account is disabled



**User Creation**  
No user will be created

Quit

Begin Installation

We won't touch your disks until you click 'Begin Installation'.

Please complete items marked with this icon before continuing to the next step.

## ▼ New Red Hat Enterprise Linux 10.0 Installation

## DATA

/home  
rhel-home

/var/log  
rhel-var\_log

## SYSTEM

/  
rhel-root

/var  
rhel-var

/boot  
sda1

swap  
rhel-swap

9.8 GiB

5 GiB

1024 MiB &gt;

4 GiB

+ - C

AVAILABLE SPACE  
195.97 MiBTOTAL SPACE  
40 GiB

1 storage device selected

Failed to add new device. [Click for details.](#)

sda1

Mount Point:

/boot

Desired Capacity:

1024 MiB

Device(s):

ATA VBOX HARDDISK (sda)

Modify...

Close

 Encrypt

File System:

xfs

 Reformat

Label:

Name:

 sda1

Update Settings

Note: The settings you make on this screen will not be applied until you click on the main menu's 'Begin Installation' button.

Discard All Changes

## ▼ New Red Hat Enterprise Linux 10.0 Installation

## DATA

/home  
rhel-home

10 GiB

/var/log  
rhel-var\_log

5 GiB

## SYSTEM

/  
rhel-root

15 GiB &gt;

/var  
rhel-var

5 GiB

/boot  
sda1

1024 MiB

swap  
rhel-swap

4 GiB

+ - C

AVAILABLE SPACE  
1.97 MiB

TOTAL SPACE  
40 GiB

1 storage device selected

## rhel-root

Mount Point:

/

Desired Capacity:

15 GiB

Device(s):

ATA VBOX HARDDISK (sda)

Modify...

Device Type:

LVM

 Encrypt

Volume Group:

rhel (0 B free) ▾

File System:

xfs

 Reformat

Modify...

Label:

Name:

root

Update Settings

Note: The settings you make on this screen will not be applied until you click on the main menu's 'Begin Installation' button.

Discard All Changes