(admin), ("admin") . WNAM root :

```
mongo wnam_db

db.webinterfaceusers.update( { _id: "admin"} , { $set : { "password" :
"d2abaa37a7c3db1137d385e1d8c15fd2"} } )
```

-

MongDB , , (**cmdServiceLogs**). Mongodb , . , 14 (14 - 60*60*24*14 = 1209600), :

```
mongo wnam_db

db.cmdServiceLogs.createIndex( { "time": 2 }, { expireAfterSeconds: 1209600 } );
```

( ):

```
rm -rf /backup/wnam_db
mongodump -d wnam_db -o /backup
mv /backup/wnam_db /backup/wnam_db_`date +"%d-%m-%Y"`
```

, **/backup/** .

TCP/IP

WNAM , . .

tcp/80		- , ( )
tcp/443		( ) HTTPS (Mikrotik)
udp/1812		RADIUS- RADIUS-
udp/1813		RADIUS- RADIUS-
udp/1700, udp/3799		PoD CoA Cisco ISG, Cisco WLC, Alcatel-Lucent
udp/2000		(CoA) Huawei, DCN, Ruijie, H3C, Maipu
tcp/8728		DHCP- (Mikrotik API)
tcp/443, tcp/3000		DHCP- (Bluesocket)
tcp/443		WNAM "" (offline-)
tcp/20001		wnam-* (, freeradius) WNAM (localhost)
udp/20001		, Asterisk, DHCP- ISC-DHCPD / Kea, DHCP
udp/20002		Netflow v5 ()
tcp/27017		MongoDB, WNAM

, , , .

tcp/88		Kerberos WNAM Windows
tcp/389, tcp/389		LDAP, LDAPs WNAM Windows
tcp/80		HTTP WNAM Windows PKI CRL
tcp/9080		ADCTool WNAM ADCTool (WNAM localhost)
tcp/49		TACACS+
tcp/9092		Kafka WNAM (>1.6.3638)

( )

MongoDB. "" (3.6 4.4). (3.6-4.0-4.2-4.4), (mongodump -d wnam_db) , **/var/lib/mongodb/**. (mongorestore -d wnam_db dump).

! MongoDB 5, 6, 7 .. AVX. MongoDB 4.4. . *grep avx /proc/cpuinfo*

(1.6 1.6)

WNAM ( ).

(1.6)

1.5, , freeradius , . "" " ", :

```
mongo wnam_db
db.settings.remove({"_id" : "settingsid"})
doc=db.settings.find()
doc._id = "settingsid"
db.settings.insert(doc)
```

WNAM.

(1.5)

, :

```
cd /home/wnam
cp wnam.war wnam.war.prev
```

WNAM "" " " . https://www.netams.com/download/ , .

:

```
wget -O /tmp/wnam.war http://www.netams.com/cgi/download.cgi?
token=zsmehgiuwsprehmbhxjprgvlqgcunjyg ! ,
 WNAM:
systemctl stop wnam
```

, , :

```
ps ax | grep wnam
```

:

```
mv /tmp/wnam.war /home/wnam
chmod +x /home/wnam/wnam.war
chown wnam:wnam /home/wnam/wnam.war
```

:

```
systemctl daemon-reload
```

WNAM:

```
systemctl start wnam
```

, :

```
tail -f /home/wnam/logs/console.log /home/wnam/logs/wnam.log
```

-, - .

(1.2 1.4)

WNAM 1.2 1.3 java7 java8 tomcat7 tomcat8. , .

java 8 Debian Jessie backports. **/etc/apt/sources.list**:

```
deb http://http.debian.net/debian jessie-backports main
```

:

```
apt-get update
apt-get install openjdk-8-jre-headless openjdk-8-jdk
update-java-alternatives -s java-1.8.0-openjdk-amd64
```

java , . ( ).

, (mongodump).

WNAM, -:

```
cp /var/lib/tomcat7/webapps/ROOT.war /root/ROOT.war.`date +"%d-%m-%Y"`
```

(/var/lib/tomcat7/webapps/ROOT/*) , , , .

, , , , : http://www.netams.com/files/wnam/misc/. - WNAM FreeRADIUS: **wnam-freeradius-bridge.pl**. **/etc/freeeradius** :

```
service freeradius restart
```

- tomcat:

```
service tomcat7 stop
```

-:

```
rm -rf /var/lib/tomcat7/webapps/* /var/log/tomcat7/*
```

WNAM **/root/ROOT.war** :

```
cp /root/ROOT.war /var/lib/tomcat8/webapps/ROOT.war
```

-:

```
service tomcat8 start
```

, .

, , - **/var/log/tomcat8/wnam.log**, :

```
23:33:52.370 DEBUG [c.n.w.s.s.UserAuthenticationProvider:56] -
UserAuthenticationProvider init at 26.10.2015 23:33:52
23:33:52.657 DEBUG [com.netams.wnam.services.OuiService:30] - OuiService start
23:33:53.025 DEBUG [com.netams.wnam.services.OuiService:70] - OUI cache load:
368 ms., size=20653
23:33:53.133 DEBUG [com.netams.wnam.services.SmsService:63] - gammu_path=
23:33:53.139 INFO [com.netams.wnam.services.SmsService:124] - SmsService started
23:33:53.141 DEBUG [c.netams.wnam.manager.LicenseManager:98] - LicenseManager
start
23:33:53.146 DEBUG [c.netams.wnam.manager.LicenseManager:117] - License key:
XXXX-XXXX-XXXX-XXXX
23:33:53.148 DEBUG [c.netams.wnam.manager.LicenseManager:177] -
checkLicenseKeyOnServer key='XXXX-XXXX-XXXX-XXXX'
23:33:53.642 DEBUG [c.netams.wnam.manager.LicenseManager:225] -
checkLicenseKeyOnServer returned license with key XXXX-XXXX-XXXX-XXXX
23:33:53.642 DEBUG [c.netams.wnam.manager.LicenseManager:136] -
checkForLicensing: valid license key XXXX-XXXX-XXXX-XXXX
23:33:53.643 DEBUG [c.netams.wnam.manager.LicenseManager:159] -
checkForLicensing: issued='Wed Sep 09 13:07:18 MSK 2015', expires='Tue Oct 01 13:
06:07 MSK 2024', isTrialPeriodEnded=false
23:33:53.749 INFO [c.n.wnam.services.BluesocketService:56] - BluesocketService
started
23:33:53.761 INFO [c.n.wnam.services.LinuxCPService:84] - LinuxCPService started
23:33:53.769 DEBUG [c.n.wnam.services.StatisticService:98] - StatisticService
start
23:33:53.775 INFO [c.netams.wnam.services.UnifiService:69] - UnifiService started
23:33:53.782 DEBUG [c.n.wnam.services.WnamFlowService:62] - WnamFlowService start
23:33:53.800 DEBUG [c.n.wnam.services.WnamCmdService:124] - WnamCmdService start
23:33:53.818 DEBUG [c.n.wnam.services.NetFlowV5Service:66] - NetFlowV5Service
start
```

- Exception. , - WNAM , . .

WNAM, .

WNAM 1.3.1052 :

- .
- "".
- "" "" .