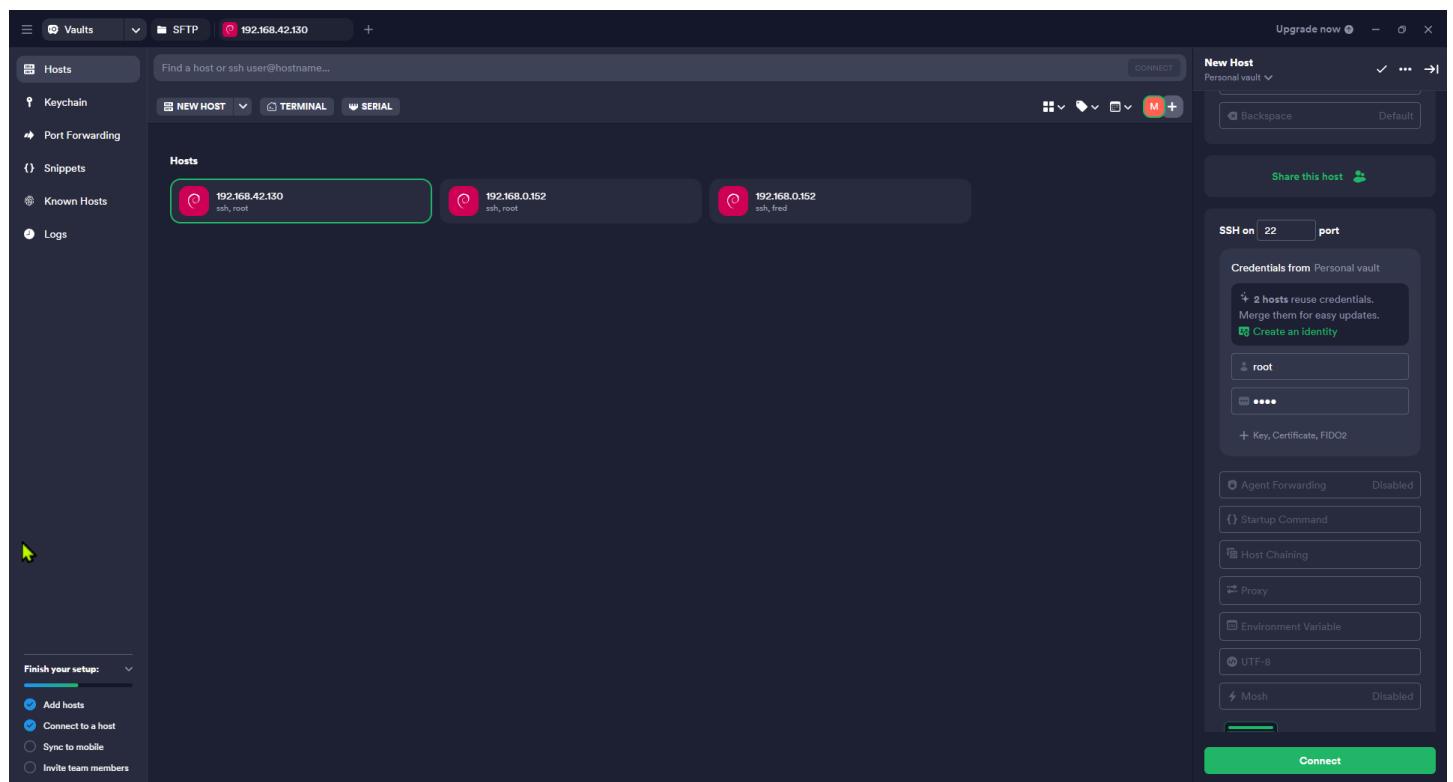


```
Debian GNU/Linux 12 debian tty1
debian login: root
Password:
Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jun  9 00:54:49 EDT 2025 from 192.168.42.1 on pts/0
root@debian:~# cat /proc/1/fdinfo/0
0: [LOOPBACK,UP,LOWER_UP] mtu:65536 qdisc noqueue state UNKNOWN group default qlen:1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 brd 127.0.0.1 scope host lo
        valid_lft forever preferred_lft forever
2: ens3: [BROADCAST,MULTICAST,UP,LOWER_UP] mtu:1500 qdisc fq_codel state UP group default qlen:1000
    link/ether 00:0c:29:39:91:7a brd ffffff:ffff:ffff:ffff
    inet 192.168.42.1/24 brd 192.168.42.255 scope global dynamic ens3
        valid_lft 1796sec preferred_lft 1736sec
root@debian:~#
```



```
Upgrading now + - o X

root@debian:~# cat > /etc/default/grub <<EOF
GRUB_DEFAULT=0
GRUB_TIMEOUT=0
GRUB_DISTRIBUTOR='lsb_release -i -s 2> /dev/null || echo Debian'
GRUB_CMDLINE_LINUX_DEFAULT="quiet text mitigations=off nowatchdog processor.ignore_ppc=1 cpufreq.default_governor=performance ipvs.disable=1 apparmor=0 selinux=0 debug=-1"
GRUB_CMDLINE_LINUX="""
GRUB_DISABLE_LINUX_RECOVERY=true
GRUB_DISABLE_OS_PROBER=true
GRUB_TERMINAL=console
EOF
root@debian:~# update-grub && \
reboot
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-6.1.0-37-amd64
Found initrd image: /boot/initrd.img-6.1.0-37-amd64
Found linux image: /boot/vmlinuz-6.1.0-35-amd64
Found initrd image: /boot/initrd.img-6.1.0-35-amd64
Warning: os-prober will not be executed to detect other bootable partitions.
Systems on them will not be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_PROBER documentation entry.
done
root@debian:~# Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.

Last login: Mon Jun  9 00:22:15 2025 from 192.168.42.1
root@debian:~# echo "net.ipv4.ip_forward=1" >> /etc/sysctl.conf && \
echo "net.ipv4.conf.all.forwarding=1" >> /etc/sysctl.conf && \
sysctl -p /etc/sysctl.conf && \
systemctl stop cron && \
systemctl stop apparmor && \
systemctl stop console-setup && \
systemctl stop keyboard-setup && \
systemctl disable cron && \
systemctl disable apparmor && \
systemctl disable console-setup && \
systemctl disable keyboard-setup && \
systemctl set-default multi-user.target && \
apt install -y sudo curl wget gnupg2 systemd-timesyncd htop && \
sed -i 's/#NTP=NTP=1.ru.pool.ntp.org/ /etc/systemd/timesyncd.conf && \
systemctl restart systemd-timesyncd && \
> update-grub && \
reboot
net.ipv4.ip_forward = 1
net.ipv4.conf.all.forwarding = 1
Synchronizing state of cron.service with SysV service script with /lib/systemd/systemctl-sysv-install.
Executing: /lib/systemd/systemctl-sysv-install disable cron
Removed "/etc/systemd/system/multi-user.target.wants/cron.service".
root@debian:~#
```

```
Upgrading now + - o X

net.ipv4.conf.all.forwarding = 1
Synchronizing state of cron.service with SysV service script with /lib/systemd/systemctl-sysv-install.
Executing: /lib/systemd/systemctl-sysv-install disable cron
Removed "/etc/systemd/system/multi-user.target.wants/cron.service".
Synchronizing state of apparmor.service with SysV service script with /lib/systemd/systemctl-sysv-install.
Executing: /lib/systemd/systemctl-sysv-install disable apparmor
Removed "/etc/systemd/system/sysinit.target.wants/apparmor.service".
Removed "/etc/systemd/system/multi-user.target.wants/console-setup.service".
Removed "/etc/systemd/system/sysinit.target.wants/keyboard-setup.service".
Created symlink /etc/systemd/system/default.target → /lib/systemd/system/multi-user.target.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  ca-certificates dimngr gnupg-l10n gnupg-utils gpg gpg-agent gpg-wks-client gpg-wks-server gpgconf gpgsm libassuan0 libcurl4 libksba8 libldap-2.5-0 libldap-common libnghttp2-14 libnl-3-200
  libnl-genl-3-200 libpth0 librmp1 libssasl2-2 libssasl2-modules libssasl2-modules-db libsqlite3-0 libssh2-1 openssl pinentry-curses publicsuffix
Suggested packages:
  pinentry-gnome3 porcimmon xloadimage scdaemon lm-sensors lsof strace libssasl2-modules-gssapi-mit libssasl2-modules-gssapi-hedmd libssasl2-modules-ldap libssasl2-modules-otp
  libssasl2-modules-sql pinentry-doc
The following NEW packages will be installed:
  ca-certificates dimngr gnupg-l10n gnupg-utils gpg gpg-agent gpg-wks-client gpg-wks-server gpgconf gpgsm htop libassuan0 libcurl4 libksba8 libldap-2.5-0 libldap-common
  libnghttp2-14 libnl-3-200 libnl-genl-3-200 libpth0 librmp1 libssasl2-2 libssasl2-modules libssasl2-modules-db libsqlite3-0 libssh2-1 openssl pinentry-curses publicsuffix sudo
systemd-timesyncd wget
0 upgraded, 36 newly installed, 0 to remove and 0 not upgraded.
Need to get 15.4 MB of archives.
After this operation, 35.3 MB of additional disk space will be used.
Get:1 http://deb.debian.org/debian bookworm/main amd64 sudo amd64 1.9.13p3-1+deb12u1 [1,889 kB]
Get:2 http://deb.debian.org/debian bookworm/main amd64 systemd-timesyncd amd64 252.38-1+deb12u1 [63.6 kB]
Get:3 http://deb.debian.org/debian bookworm/main amd64 sysstat amd64 1.427-1+deb12u1 [1,427 kB]
Get:4 http://deb.debian.org/debian bookworm/main amd64 openssl all 2.0.31-1+deb12u1 [153 kB]
Get:5 http://deb.debian.org/debian bookworm/main amd64 libcurl5 amd64 0.21.2-1 [58.7 kB]
Get:6 http://deb.debian.org/debian bookworm/main amd64 wget amd64 1.21.3-1+deb12u1 [937 kB]
Get:7 http://deb.debian.org/debian bookworm/main amd64 libssasl2-modules-db amd64 2.1.28+dfsg-10 [20.3 kB]
Get:8 http://deb.debian.org/debian bookworm/main amd64 libssasl2-2 amd64 2.1.28+dfsg-10 [59.7 kB]
Get:9 http://deb.debian.org/debian bookworm/main amd64 libidn11-2.5-0 amd64 2.5.13+dfsg-5 [183 kB]
Get:10 http://deb.debian.org/debian bookworm/main amd64 libnghttp2-14 amd64 1.52.0-1+deb12u2 [73.6 kB]
Get:11 http://deb.debian.org/debian bookworm/main amd64 librmp1 amd64 2.4+20151223.gitfa8a646d.1-2+b2 [60.8 kB]
Get:12 http://deb.debian.org/debian bookworm/main amd64 libsshz1-1 amd64 1.10.0-3+b1 [179 kB]
Get:13 http://deb.debian.org/debian bookworm/main amd64 libcurl4 amd64 7.88.1-10+deb12u1 [391 kB]
Get:14 http://deb.debian.org/debian bookworm/main amd64 curl amd64 7.88.1-10+deb12u1 [315 kB]
Get:15 http://deb.debian.org/debian bookworm/main amd64 libassuan0 amd64 2.5.5-5 [48.5 kB]
Get:16 http://deb.debian.org/debian bookworm/main amd64 gpgconf amd64 2.2.40-1.1 [564 kB]
Get:17 http://deb.debian.org/debian bookworm/main amd64 libksba8 amd64 1.6.3-2 [128 kB]
Get:18 http://deb.debian.org/debian bookworm/main amd64 libpth0 amd64 1.6-3 [19.6 kB]
Get:19 http://deb.debian.org/debian bookworm/main amd64 dimngr amd64 2.2.40-1.1 [792 kB]
Get:20 http://deb.debian.org/debian bookworm/main amd64 gnupg-l10n all 2.2.40-1.1 [1,093 kB]
Get:21 http://deb.debian.org/debian bookworm/main amd64 gnupg-utils amd64 2.2.40-1.1 [927 kB]
Get:22 http://deb.debian.org/debian bookworm/main amd64 libsqlite3-0 amd64 3.40.1-2+deb12u1 [839 kB]
Get:23 http://deb.debian.org/debian bookworm/main amd64 gpg amd64 2.2.40-1.1 [949 kB]
Get:24 http://deb.debian.org/debian bookworm/main amd64 pinentry-curses amd64 1.2.1-1 [77.4 kB]
Get:25 http://deb.debian.org/debian bookworm/main amd64 gpg-agent amd64 2.2.40-1.1 [695 kB]
Get:26 http://deb.debian.org/debian bookworm/main amd64 gpg-wks-client amd64 2.2.40-1.1 [541 kB]
Get:27 http://deb.debian.org/debian bookworm/main amd64 gpg-wks-server amd64 2.2.40-1.1 [531 kB]
Get:28 http://deb.debian.org/debian bookworm/main amd64 gpgsm amd64 2.2.40-1.1 [671 kB]
```

```
Upgrading now + - o X
Created symlink /etc/systemd/user/sockets.target.wants/gpg-agent-browser.socket → /usr/lib/systemd/user/gpg-agent-browser.socket.
Created symlink /etc/systemd/user/sockets.target.wants/gpg-agent-extra.socket → /usr/lib/systemd/user/gpg-agent-extra.socket.
Created symlink /etc/systemd/user/sockets.target.wants/gpg-agent-ssh.socket → /usr/lib/systemd/user/gpg-agent-ssh.socket.
Created symlink /etc/systemd/user/sockets.target.wants/gpg-agent.socket → /usr/lib/systemd/user/gpg-agent.socket.
Setting up gpgsm (2.2.40-1.1) ...
Setting up libldap-2.5-0:amd64 (2.5.13+dfsg-5) ...
Setting up dirmngr (2.2.40-1.1) ...
Created symlink /etc/systemd/user/sockets.target.wants/dirmngr.socket → /usr/lib/systemd/user/dirmngr.socket.
Setting up ca-certificates (20230311) ...
Updating certificates in /etc/ssl/certs...
140 added, 0 removed; done.
Setting up gpg-wks-server (2.2.40-1.1) ...
Setting up libnl-genl-3-200:amd64 (3.7.0-0.2+b1) ...
Setting up libcurl4:amd64 (7.88.1-10+deb12u12) ...
Setting up curl (7.88.1-10+deb12u12) ...
Setting up gpg-wks-client (2.2.40-1.1) ...
Setting up http (3.2.2-2) ...
Setting up gnupg (2.2.40-1.1) ...
Setting up gnupg2 (2.2.40-1.1) ...
Processing triggers for dbus (1.14.10-1+deb12u1) ...
Processing triggers for libc-bin (2.36-9+deb12u10) ...
Processing triggers for ca-certificates (20230311) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...
done.
Generating grub configuration file ...
Found linux image: /boot/vmlinuz-6.1.0-37-amd64
Found initrd image: /boot/initrd.img-6.1.0-37-amd64
Found linux image: /boot/vmlinuz-6.1.0-35-amd64
Found initrd image: /boot/initrd.img-6.1.0-35-amd64
Warning: os-prober will not be executed to detect other bootable partitions.
Systems on them will not be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_PROBER documentation entry.
done
root@debian:~# Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jun  9 09:46:38 2025 from 192.168.42.1
root@debian:~# df -h
Filesystem      Size  Used Avail Mounted on
udev            2.1G   6  2.1G  0% /dev
tmpfs           417M  716K 416M  1% /run
/dev/sda1        19G  1.6G  17G  9% /
tmpfs           2.3G   0  2.3G  0% /dev/shm
tmpfs           5.9M   0  5.9M  0% /run/lock
tmpfs           417M   0  417M  0% /run/user/0
root@debian:~# htop
root@debian:~#
```

```
Upgrading now + - o X
root@debian:~# sudo wget -qO- https://repo.mosquitto.org/debian/mosquitto-repo.gpg.key | gpg --armor -o /etc/apt/keyrings/mosquitto-repo.gpg && \
sudo wget -O /etc/apt/sources.list.d/mosquitto-bookworm.list https://repo.mosquitto.org/debian/mosquitto-bookworm.list && \
sudo apt update && \
sudo apt cache show mosquitto | grep Version && \
sudo apt install -y mosquitto=2.0.18-0mosquitto1-bookworm mosquitto-clients=2.0.18-0mosquitto1-bookworm1 && \
sudo mosquitto_passwd -c /etc/mosquitto/passwd IoT && \
sudo chmod 777 /etc/mosquitto/passwd
--2025-06-09 01:31:07-- https://repo.mosquitto.org/debian/mosquitto-bookworm.list
Resolving repo.mosquitto.org (repo.mosquitto.org)... 85.119.83.194, 2801:bb8:1f1:f271::2
Connecting to repo.mosquitto.org (repo.mosquitto.org)[85.119.83.194]:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 101 [application/octet-stream]
Saving to: '/etc/apt/sources.list.d/mosquitto-bookworm.list'

/etc/apt/sources.list.d/mosquitto-bookworm.list          100%[=====] 101  --.-KB/s    in 0s

2025-06-09 01:31:08 (268 MB/s) - '/etc/apt/sources.list.d/mosquitto-bookworm.list' saved [101/101]

Hit:1 http://deb.debian.org/debian bookworm InRelease
Hit:2 http://security.debian.org/debian-security bookworm-security InRelease
Hit:3 http://deb.debian.org/debian bookworm-updates InRelease
Get:4 https://repo.mosquitto.org/debian bookworm InRelease [18.7 kB]
Get:5 https://repo.mosquitto.org/debian bookworm/main amd64 Packages [12.8 kB]
Get:6 https://repo.mosquitto.org/debian bookworm/main all Packages [1,656 B]
Fetched 33.1 kB in 1s (23.8 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
Version: 2.0.20-0mosquitto1-bookworm1
Version: 2.0.19-0mosquitto1-bookworm1
Version: 2.0.18-0mosquitto1-bookworm1
Version: 2.0.17-0mosquitto1-bookworm1
Version: 2.0.16-0mosquitto1-bookworm1
Version: 2.0.11-12+deb12u1
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Some packages could not be installed. This may mean that you have
requested an impossible situation or if you are using the unstable
distribution that some required packages have not yet been created
or been moved out of Incoming.
The following information may help to resolve the situation:

The following packages have unmet dependencies:
  mosquitto-clients : Depends: libmosquitto (= 2.0.18-0mosquitto1-bookworm1) but 2.0.20-0mosquitto1-bookworm1 is to be installed
E: Unable to correct problems, you have held broken packages.
root@debian:~#
root@debian:~# ^C
root@debian:~#
sudo apt install -y mosquitto mosquitto-clients
sudo mosquitto_passwd -c /etc/mosquitto/passwd IoT && \
sudo chmod 777 /etc/mosquitto/passwd
```

```
 3 | Vaults SFTP X 192.168.42.130 + Upgrade now
 4 | Reading package lists... Done
 5 | Building dependency tree... Done
 6 | Reading state information... Done
 7 | The following additional packages will be installed:
 8 |   libcjson1 libmosquitto1 libwebsockets18
 9 | The following NEW packages will be installed:
10 |   libcjson1 libmosquitto1 libwebsockets18 mosquito mosquitto-clients
11 | 0 upgraded, 5 newly installed, 0 to remove and 0 not upgraded.
12 | Need to get 658 kB of archives.
13 | After this operation, 1,617 kB of additional disk space will be used.
14 | Get:1 http://deb.debian.org/debian bookworm/main amd64 libcjson1 amd64 1.7.15-1+deb12u2 [22.9 kB]
15 | Get:2 https://repo.mosquitto.org/debian bookworm/main amd64 libmosquitto1 amd64 2.0.20-0mosquitto1-bookworm1 [91.8 kB]
16 | Get:3 https://repo.mosquitto.org/debian bookworm/main amd64 libwebsockets18 amd64 4.2.1-0mosquitto2-bookworm1 [166 kB]
17 | Get:4 https://repo.mosquitto.org/debian bookworm/main amd64 mosquito amd64 2.0.20-0mosquitto1-bookworm1 [266 kB]
18 | Get:5 https://repo.mosquitto.org/debian bookworm/main amd64 mosquitto-clients amd64 2.0.20-0mosquitto1-bookworm1 [111 kB]
19 | Fetched 658 kB in 613 kB/s
20 | Selecting previously unselected package libcjson1:amd64.
21 | (Reading database ... 1 file and 0 directories currently installed.)
22 | Preparing to unpack .../libmosquitto1_1.7.15-1+deb12u2_amd64.deb ...
23 | Unpacking libmosquitto1:amd64 (1.7.15-1+deb12u2) ...
24 | Selecting previously unselected package libmosquitto1:amd64.
25 | Preparing to unpack .../libmosquitto1_2.0.20-0mosquitto1-bookworm1_amd64.deb ...
26 | Unpacking libmosquitto1:amd64 (2.0.20-0mosquitto1-bookworm1) ...
27 | Selecting previously unselected package libwebsockets18:amd64.
28 | Preparing to unpack .../libwebsockets18_4.2.1-0mosquitto2-bookworm1_amd64.deb ...
29 | Unpacking libwebsockets18:amd64 (4.2.1-0mosquitto2-bookworm1) ...
30 | Selecting previously unselected package mosquito.
31 | Preparing to unpack .../mosquito_2.0.20-0mosquitto1-bookworm1_amd64.deb ...
32 | Unpacking mosquito (2.0.20-0mosquitto1-bookworm1) ...
33 | Selecting previously unselected package mosquito-clients.
34 | Preparing to unpack .../mosquitto-clients_2.0.20-0mosquitto1-bookworm1_amd64.deb ...
35 | Unpacking mosquito-clients (2.0.20-0mosquitto1-bookworm1) ...
36 | Setting up libmosquitto1:amd64 (2.0.20-0mosquitto1-bookworm1) ...
37 | Setting up libcjson1:amd64 (1.7.15-1+deb12u2) ...
38 | Setting up mosquito-clients (2.0.20-0mosquitto1-bookworm1) ...
39 | Setting up libwebsockets18:amd64 (4.2.1-0mosquitto2-bookworm1) ...
40 | Setting up mosquito (2.0.20-0mosquitto1-bookworm1) ...
41 | Created symlink /etc/systemd/system/multi-user.target.wants/mosquitto.service → /lib/systemd/system/mosquitto.service.
42 | Processing triggers for libc-bin (2.36-9+deb12u10) ...
43 | Password:
44 | Reenter password:
45 | root@debian:~#
46 | root@debian:~# sudo cat > /etc/mosquitto/conf.d/default.conf <<EOF
47 | allow_anonymous false
48 | password_file /etc/mosquitto/passwd
49 | listener 1883
50 | EOF
51 | root@debian:~# sudo systemctl restart mosquitto
52 | root@debian:~#
```

```
 3 | Vaults SFTP X Workspace + Broadcast X 192.168.42.130 () Upgrade now
 4 | 
 5 | 
 6 | 
 7 | 
 8 | 
 9 | 
10 | 
11 | 
12 | 
13 | 
14 | 
15 | 
16 | 
17 | 
18 | 
19 | 
20 | 
21 | 
22 | 
23 | 
24 | 
25 | 
26 | 
27 | 
28 | 
29 | 
30 | 
31 | 
32 | 
33 | 
34 | 
35 | 
36 | 
37 | 
38 | 
39 | 
40 | 
41 | 
42 | 
43 | 
44 | 
45 | 
46 | 
47 | 
48 | 
49 | 
50 | 
51 | 
52 | 
53 | 
54 | 
55 | 
56 | 
57 | 
58 | 
59 | 
60 | 
61 | 
62 | 
63 | 
64 | 
65 | 
66 | 
67 | 
68 | 
69 | 
70 | 
71 | 
72 | 
73 | 
74 | 
75 | 
76 | 
77 | 
78 | 
79 | 
80 | 
81 | 
82 | 
83 | 
84 | 
85 | 
86 | 
87 | 
88 | 
89 | 
90 | 
91 | 
92 | 
93 | 
94 | 
95 | 
96 | 
97 | 
98 | 
99 | 
100 | 
101 | 
102 | 
103 | 
104 | 
105 | 
106 | 
107 | 
108 | 
109 | 
110 | 
111 | 
112 | 
113 | 
114 | 
115 | 
116 | 
117 | 
118 | 
119 | 
120 | 
121 | 
122 | 
123 | 
124 | 
125 | 
126 | 
127 | 
128 | 
129 | 
130 | 
131 | 
132 | 
133 | 
134 | 
135 | 
136 | 
137 | 
138 | 
139 | 
140 | 
141 | 
142 | 
143 | 
144 | 
145 | 
146 | 
147 | 
148 | 
149 | 
150 | 
151 | 
152 | 
153 | 
154 | 
155 | 
156 | 
157 | 
158 | 
159 | 
160 | 
161 | 
162 | 
163 | 
164 | 
165 | 
166 | 
167 | 
168 | 
169 | 
170 | 
171 | 
172 | 
173 | 
174 | 
175 | 
176 | 
177 | 
178 | 
179 | 
180 | 
181 | 
182 | 
183 | 
184 | 
185 | 
186 | 
187 | 
188 | 
189 | 
190 | 
191 | 
192 | 
193 | 
194 | 
195 | 
196 | 
197 | 
198 | 
199 | 
200 | 
201 | 
202 | 
203 | 
204 | 
205 | 
206 | 
207 | 
208 | 
209 | 
210 | 
211 | 
212 | 
213 | 
214 | 
215 | 
216 | 
217 | 
218 | 
219 | 
220 | 
221 | 
222 | 
223 | 
224 | 
225 | 
226 | 
227 | 
228 | 
229 | 
230 | 
231 | 
232 | 
233 | 
234 | 
235 | 
236 | 
237 | 
238 | 
239 | 
240 | 
241 | 
242 | 
243 | 
244 | 
245 | 
246 | 
247 | 
248 | 
249 | 
250 | 
251 | 
252 | 
253 | 
254 | 
255 | 
256 | 
257 | 
258 | 
259 | 
260 | 
261 | 
262 | 
263 | 
264 | 
265 | 
266 | 
267 | 
268 | 
269 | 
270 | 
271 | 
272 | 
273 | 
274 | 
275 | 
276 | 
277 | 
278 | 
279 | 
280 | 
281 | 
282 | 
283 | 
284 | 
285 | 
286 | 
287 | 
288 | 
289 | 
290 | 
291 | 
292 | 
293 | 
294 | 
295 | 
296 | 
297 | 
298 | 
299 | 
300 | 
301 | 
302 | 
303 | 
304 | 
305 | 
306 | 
307 | 
308 | 
309 | 
310 | 
311 | 
312 | 
313 | 
314 | 
315 | 
316 | 
317 | 
318 | 
319 | 
320 | 
321 | 
322 | 
323 | 
324 | 
325 | 
326 | 
327 | 
328 | 
329 | 
330 | 
331 | 
332 | 
333 | 
334 | 
335 | 
336 | 
337 | 
338 | 
339 | 
340 | 
341 | 
342 | 
343 | 
344 | 
345 | 
346 | 
347 | 
348 | 
349 | 
350 | 
351 | 
352 | 
353 | 
354 | 
355 | 
356 | 
357 | 
358 | 
359 | 
360 | 
361 | 
362 | 
363 | 
364 | 
365 | 
366 | 
367 | 
368 | 
369 | 
370 | 
371 | 
372 | 
373 | 
374 | 
375 | 
376 | 
377 | 
378 | 
379 | 
380 | 
381 | 
382 | 
383 | 
384 | 
385 | 
386 | 
387 | 
388 | 
389 | 
390 | 
391 | 
392 | 
393 | 
394 | 
395 | 
396 | 
397 | 
398 | 
399 | 
400 | 
401 | 
402 | 
403 | 
404 | 
405 | 
406 | 
407 | 
408 | 
409 | 
410 | 
411 | 
412 | 
413 | 
414 | 
415 | 
416 | 
417 | 
418 | 
419 | 
420 | 
421 | 
422 | 
423 | 
424 | 
425 | 
426 | 
427 | 
428 | 
429 | 
430 | 
431 | 
432 | 
433 | 
434 | 
435 | 
436 | 
437 | 
438 | 
439 | 
440 | 
441 | 
442 | 
443 | 
444 | 
445 | 
446 | 
447 | 
448 | 
449 | 
450 | 
451 | 
452 | 
453 | 
454 | 
455 | 
456 | 
457 | 
458 | 
459 | 
460 | 
461 | 
462 | 
463 | 
464 | 
465 | 
466 | 
467 | 
468 | 
469 | 
470 | 
471 | 
472 | 
473 | 
474 | 
475 | 
476 | 
477 | 
478 | 
479 | 
480 | 
481 | 
482 | 
483 | 
484 | 
485 | 
486 | 
487 | 
488 | 
489 | 
490 | 
491 | 
492 | 
493 | 
494 | 
495 | 
496 | 
497 | 
498 | 
499 | 
500 | 
501 | 
502 | 
503 | 
504 | 
505 | 
506 | 
507 | 
508 | 
509 | 
510 | 
511 | 
512 | 
513 | 
514 | 
515 | 
516 | 
517 | 
518 | 
519 | 
520 | 
521 | 
522 | 
523 | 
524 | 
525 | 
526 | 
527 | 
528 | 
529 | 
530 | 
531 | 
532 | 
533 | 
534 | 
535 | 
536 | 
537 | 
538 | 
539 | 
540 | 
541 | 
542 | 
543 | 
544 | 
545 | 
546 | 
547 | 
548 | 
549 | 
550 | 
551 | 
552 | 
553 | 
554 | 
555 | 
556 | 
557 | 
558 | 
559 | 
560 | 
561 | 
562 | 
563 | 
564 | 
565 | 
566 | 
567 | 
568 | 
569 | 
570 | 
571 | 
572 | 
573 | 
574 | 
575 | 
576 | 
577 | 
578 | 
579 | 
580 | 
581 | 
582 | 
583 | 
584 | 
585 | 
586 | 
587 | 
588 | 
589 | 
590 | 
591 | 
592 | 
593 | 
594 | 
595 | 
596 | 
597 | 
598 | 
599 | 
600 | 
601 | 
602 | 
603 | 
604 | 
605 | 
606 | 
607 | 
608 | 
609 | 
610 | 
611 | 
612 | 
613 | 
614 | 
615 | 
616 | 
617 | 
618 | 
619 | 
620 | 
621 | 
622 | 
623 | 
624 | 
625 | 
626 | 
627 | 
628 | 
629 | 
630 | 
631 | 
632 | 
633 | 
634 | 
635 | 
636 | 
637 | 
638 | 
639 | 
640 | 
641 | 
642 | 
643 | 
644 | 
645 | 
646 | 
647 | 
648 | 
649 | 
650 | 
651 | 
652 | 
653 | 
654 | 
655 | 
656 | 
657 | 
658 | 
659 | 
660 | 
661 | 
662 | 
663 | 
664 | 
665 | 
666 | 
667 | 
668 | 
669 | 
670 | 
671 | 
672 | 
673 | 
674 | 
675 | 
676 | 
677 | 
678 | 
679 | 
680 | 
681 | 
682 | 
683 | 
684 | 
685 | 
686 | 
687 | 
688 | 
689 | 
690 | 
691 | 
692 | 
693 | 
694 | 
695 | 
696 | 
697 | 
698 | 
699 | 
700 | 
701 | 
702 | 
703 | 
704 | 
705 | 
706 | 
707 | 
708 | 
709 | 
710 | 
711 | 
712 | 
713 | 
714 | 
715 | 
716 | 
717 | 
718 | 
719 | 
720 | 
721 | 
722 | 
723 | 
724 | 
725 | 
726 | 
727 | 
728 | 
729 | 
730 | 
731 | 
732 | 
733 | 
734 | 
735 | 
736 | 
737 | 
738 | 
739 | 
740 | 
741 | 
742 | 
743 | 
744 | 
745 | 
746 | 
747 | 
748 | 
749 | 
750 | 
751 | 
752 | 
753 | 
754 | 
755 | 
756 | 
757 | 
758 | 
759 | 
760 | 
761 | 
762 | 
763 | 
764 | 
765 | 
766 | 
767 | 
768 | 
769 | 
770 | 
771 | 
772 | 
773 | 
774 | 
775 | 
776 | 
777 | 
778 | 
779 | 
779 | 
780 | 
781 | 
782 | 
783 | 
784 | 
785 | 
786 | 
787 | 
788 | 
789 | 
789 | 
790 | 
791 | 
792 | 
793 | 
794 | 
795 | 
796 | 
797 | 
798 | 
799 | 
800 | 
801 | 
802 | 
803 | 
804 | 
805 | 
806 | 
807 | 
808 | 
809 | 
809 | 
810 | 
811 | 
812 | 
813 | 
814 | 
815 | 
816 | 
817 | 
818 | 
819 | 
819 | 
820 | 
821 | 
822 | 
823 | 
824 | 
825 | 
826 | 
827 | 
828 | 
829 | 
829 | 
830 | 
831 | 
832 | 
833 | 
834 | 
835 | 
836 | 
837 | 
838 | 
839 | 
839 | 
840 | 
841 | 
842 | 
843 | 
844 | 
845 | 
846 | 
847 | 
848 | 
849 | 
849 | 
850 | 
851 | 
852 | 
853 | 
854 | 
855 | 
856 | 
857 | 
858 | 
859 | 
859 | 
860 | 
861 | 
862 | 
863 | 
864 | 
865 | 
866 | 
867 | 
868 | 
869 | 
869 | 
870 | 
871 | 
872 | 
873 | 
874 | 
875 | 
876 | 
877 | 
878 | 
879 | 
879 | 
880 | 
881 | 
882 | 
883 | 
884 | 
885 | 
886 | 
887 | 
888 | 
889 | 
889 | 
890 | 
891 | 
892 | 
893 | 
894 | 
895 | 
896 | 
897 | 
898 | 
899 | 
899 | 
900 | 
901 | 
902 | 
903 | 
904 | 
905 | 
906 | 
907 | 
908 | 
909 | 
909 | 
910 | 
911 | 
912 | 
913 | 
914 | 
915 | 
916 | 
917 | 
918 | 
919 | 
919 | 
920 | 
921 | 
922 | 
923 | 
924 | 
925 | 
926 | 
927 | 
928 | 
929 | 
929 | 
930 | 
931 | 
932 | 
933 | 
934 | 
935 | 
936 | 
937 | 
938 | 
939 | 
939 | 
940 | 
941 | 
942 | 
943 | 
944 | 
945 | 
946 | 
947 | 
948 | 
949 | 
949 | 
950 | 
951 | 
952 | 
953 | 
954 | 
955 | 
956 | 
957 | 
958 | 
959 | 
959 | 
960 | 
961 | 
962 | 
963 | 
964 | 
965 | 
966 | 
967 | 
968 | 
969 | 
969 | 
970 | 
971 | 
972 | 
973 | 
974 | 
975 | 
976 | 
977 | 
978 | 
979 | 
979 | 
980 | 
981 | 
982 | 
983 | 
984 | 
985 | 
986 | 
987 | 
988 | 
989 | 
989 | 
990 | 
991 | 
992 | 
993 | 
994 | 
995 | 
996 | 
997 | 
998 | 
999 | 
999 | 
1000 | 
1001 | 
1002 | 
1003 | 
1004 | 
1005 | 
1006 | 
1007 | 
1008 | 
1009 | 
1009 | 
1010 | 
1011 | 
1012 | 
1013 | 
1014 | 
1015 | 
1016 | 
1017 | 
1018 | 
1019 | 
1019 | 
1020 | 
1021 | 
1022 | 
1023 | 
1024 | 
1025 | 
1026 | 
1027 | 
1028 | 
1029 | 
1029 | 
1030 | 
1031 | 
1032 | 
1033 | 
1034 | 
1035 | 
1036 | 
1037 | 
1038 | 
1039 | 
1039 | 
1040 | 
1041 | 
1042 | 
1043 | 
1044 | 
1045 | 
1046 | 
1047 | 
1048 | 
1049 | 
1049 | 
1050 | 
1051 | 
1052 | 
1053 | 
1054 | 
1055 | 
1056 | 
1057 | 
1058 | 
1058 | 
1059 | 
1060 | 
1061 | 
1062 | 
1063 | 
1064 | 
1065 | 
1066 | 
1067 | 
1068 | 
1069 | 
1069 | 
1070 | 
1071 | 
1072 | 
1073 | 
1074 | 
1075 | 
1076 | 
1077 | 
1078 | 
1078 | 
1079 | 
1080 | 
1081 | 
1082 | 
1083 | 
1084 | 
1085 | 
1086 | 
1086 | 
1087 | 
1088 | 
1089 | 
1090 | 
1091 | 
1092 | 
1093 | 
1094 | 
1095 | 
1095 | 
1096 | 
1097 | 
1098 | 
1099 | 
1100 | 
1101 | 
1102 | 
1103 | 
1104 | 
1105 | 
1106 | 
1107 | 
1108 | 
1109 | 
1109 | 
1110 | 
1111 | 
1112 | 
1113 | 
1114 | 
1115 | 
1116 | 
1117 | 
1118 | 
1119 | 
1119 | 
1120 | 
1121 | 
1122 | 
1123 | 
1124 | 
1125 | 
1126 | 
1127 | 
1128 | 
1129 | 
1129 | 
1130 | 
1131 | 
1132 | 
1133 | 
1134 | 
1135 | 
1136 | 
1137 | 
1138 | 
1139 | 
1139 | 
1140 | 
1141 | 
1142 | 
1143 | 
1144 | 
1145 | 
1146 | 
1147 | 
1148 | 
1148 | 
1149 | 
1150 | 
1151 | 
1152 | 
1153 | 
1154 | 
1155 | 
1156 | 
1157 | 
1158 | 
1159 | 
1159 | 
1160 | 
1161 | 
1162 | 
1163 | 
1164 | 
1165 | 
1166 | 
1167 | 
1168 | 
1169 | 
1169 | 
1170 | 
1171 | 
1172 | 
1173 | 
1174 | 
1175 | 
1176 | 
1177 | 
1178 | 
1178 | 
1179 | 
1180 | 
1181 | 
1182 | 
1183 | 
1184 | 
1185 | 
1186 | 
1187 | 
1188 | 
1188 | 
1189 | 
1190 | 
1191 | 
1192 | 
1193 | 
1194 | 
1195 | 
1195 | 
1196 | 
1197 | 
1198 | 
1199 | 
1200 | 
1201 | 
1202 | 
1203 | 
1204 | 
1205 | 
1206 | 
1207 | 
1208 | 
1209 | 
1209 | 
1210 | 
1211 | 
1212 | 
1213 | 
1214 | 
1215 | 
1216 | 
1217 | 
1218 | 
1219 | 
1219 | 
1220 | 
1221 | 
1222 | 
1223 | 
1224 | 
1225 | 
1226 | 
1227 | 
1228 | 
1229 | 
1229 | 
1230 | 
1231 | 
1232 | 
1233 | 
1234 | 
1235 | 
1236 | 
1237 | 
1238 | 
1239 | 
1239 | 
1240 | 
1241 | 
1242 | 
1243 | 
1244 | 
1245 | 
1246 | 
1247 | 
1248 | 
1248 | 
1249 | 
1250 | 
1251 | 
1252 | 
1253 | 
1254 | 
1255 | 
1256 | 
1257 | 
1258 | 
1259 | 
1259 | 
1260 | 
1261 | 
1262 | 
1263 | 
1264 | 
1265 | 
1266 | 
1267 | 
1268 | 
1269 | 
1269 | 
1270 | 
1271 | 
1272 | 
1273 | 
1274 | 
1275 | 
1276 | 
1277 | 
1278 | 
1278 | 
1279 | 
1280 | 
1281 | 
1282 | 
1283 | 
1284 | 
1285 | 
1286 | 
1287 | 
1287 | 
1288 | 
1289 | 
1290 | 
1291 | 
1292 | 
1293 | 
1294 | 
1295 | 
1295 | 
1296 | 
1297 | 
1298 | 
1299 | 
1300 | 
1301 | 
1302 | 
1303 | 
1304 | 
1305 | 
1306 | 
1307 | 
1308 | 
1309 | 
1309 | 
1310 | 
1311 | 
1312 | 
1313 | 
1314 | 
1315 | 
1316 | 
1317 | 
1318 | 
1318 | 
1319 | 
1320 | 
1321 | 
1322 | 
1323 | 
1324 | 
1325 | 
1326 | 
1327 | 
1328 | 
1329 | 
1329 | 
1330 | 
1331 | 
1332 | 
1333 | 
1334 | 
1335 | 
1336 | 
1337 | 
1338 | 
1339 | 
1339 | 
1340 | 
1341 | 
1342 | 
1343 | 
1344 | 
1345 | 
1346 | 
1347 | 
1348 | 
1348 | 
1349 | 
1350 | 
1351 | 
1352 | 
1353 | 
1354 | 
1355 | 
1356 | 
1357 | 
1358 | 
1359 | 
1359 | 
1360 | 
1361 | 
1362 | 
1363 | 
1364 | 
1365 | 
1366 | 
1367 | 
1368 | 
1369 | 
1369 | 
1370 | 
1371 | 
1372 | 
1373 | 
1374 | 
1375 | 
1376 | 
1377 | 
1378 | 
1378 | 
1379 | 
1380 | 
1381 | 
1382 | 
1383 | 
1384 | 
1385 | 
1386 | 
1387 | 
1388 | 
1388 | 
1389 | 
1390 | 
1391 | 
1392 | 
1393 | 
1394 | 
1395 | 
1395 | 
1396 | 
1397 | 
1398 | 
1399 | 
1400 | 
1401 | 
1402 | 
1403 | 
1404 | 
1405 | 
1406 | 
1407 | 
1408 | 
1409 | 
1409 | 
1410 | 
1411 | 
1412 | 
1413 | 
1414 | 
1415 | 
1416 | 
1417 | 
1418 | 
1418 | 
1419 | 
1420 | 
1421 | 
1422 | 
1423 | 
1424 | 
1425 | 
1426 | 
1427 | 
1428 | 
1428 | 
1429 | 
1430 | 
1431 | 
1432 | 
1433 | 
1434 | 
1435 | 
1436 | 
1437 | 
1438 | 
1439 | 
1439 | 
1440 | 
1441 | 
1442 | 
1443 | 
1444 | 
1445 | 
1446 | 
1447 | 
1448 | 
1448 | 
1449 | 
1450 | 
1451 | 
1452 | 
1453 | 
1454 | 
1455 | 
1456 | 
1457 | 
1458 | 
1459 | 
1459 | 
1460 | 
1461 | 
1462 | 
1463 | 
1464 | 
1465 | 
1466 | 
1467 | 
1468 | 
1469 | 
1469 | 
1470 | 
1471 | 
1472 | 
1473 | 
1474 | 
1475 | 
1476 | 
1477 | 
1478 | 
1478 | 
1479 | 
1480 | 
1481 | 
1482 | 
1483 | 
1484 | 
1485 | 
1486 | 
1487 | 
1488 | 
1488 | 
1489 | 
1490 | 
1491 | 
1492 | 
1493 | 
1494 | 
1495 | 
1495 | 
1496 | 
1497 | 
1498 | 
1499 | 
1500 | 
1501 | 
1502 | 
1503 | 
1504 | 
1505 | 
1506 | 
1507 | 
1508 | 
1509 | 
1509 | 
1510 | 
1511 | 
1512 | 
1513 | 
1514 | 
1515 | 
1516 | 
1517 | 
1518 | 
1518 | 
1519 | 
1520 | 
1521 | 
1522 | 
1523 | 
1524 | 
1525 | 
1526 | 
1527 | 
1528 | 
1529 | 
1529 | 
1530 | 
1531 | 
1532 | 
1533 | 
1534 | 
1535 | 
1536 | 
1537 | 
1538 | 
1539 | 
1539 | 
1540 | 
1541 | 
1542 | 
1543 | 
1544 | 
1545 | 
1546 | 
1547 | 
1548 | 
1548 | 
1549 | 
1550 | 
1551 | 
1552 | 
1553 | 
1554 | 
1555 | 
1556 | 
1557 | 
1558 | 
1559 | 
1559 | 
1560 | 
1561 | 
1562 | 
1563 | 
1564 | 
1565 | 
1566 | 
1567 | 
1568 | 
1569 | 
1569 | 
1570 | 
1571 | 
1572 | 
1573 | 
1574 | 
1575 | 
1576 | 
1577 | 
1578 | 
1578 | 
1579 | 
1580 | 
1581 | 
1582 | 
1583 | 
1584 | 
1585 | 
1586 | 
1587 | 
1588 | 
1588 | 
1589 | 
1590 | 
1591 | 
1592 | 
1593 | 
1594 | 
1595 | 
1595 | 
1596 | 
1597 | 
1598 | 
1599 | 
1600 | 
1601 | 
1602 | 
1603 | 
1604 | 
1605 | 
1606 | 
1607 | 
1608 | 
1609 | 
1609 | 
1610 | 
1611 | 
1612 | 
1613 | 
1614 | 
1615 | 
1616 | 
1617 | 
1618 | 
1618 | 
1619 | 
1620 | 
1621 | 
1622 | 
1623 | 
1624 | 
1625 | 
1626 | 
1627 | 
1628 | 
1629 | 
1629 | 
1630 | 
1631 | 
1632 | 
1633 | 
1634 | 
1635 | 
1636 | 
1637 | 
1638 | 
1639 | 
1639 | 
1640 | 
1641 | 
1642 | 
1643 | 
1644 | 
1645 | 
1646 | 
1647 | 
1648 | 
1648 | 
1649 | 
1650 | 
1651 | 
1652 | 
1653 | 
1654 | 
1655 | 
1656 | 
1657 | 
1658 | 
1659 | 
1659 | 
1660 | 
1661 | 
1662 | 
1663 | 
1664 | 
1665 | 
1666 | 
1667 | 
1668 | 
1669 | 
1669 | 
1670 | 
1671 | 
1672 | 
1673 | 
1674 | 
1675 | 
1676 | 
1677 | 
1678 | 
1678 | 
1679 | 
1680 | 
1681 | 
1682 | 
1683 | 
1684 | 
1685 | 
1686 | 
1687 | 
1688 | 
1688 | 
1689 | 
1690 | 
1691 | 
1692 | 
1693 | 
1694 | 
1695 | 
1695 | 
1696 | 
1697 | 
1698 | 
1699 | 
1700 | 
1701 | 
1702 | 
1703 | 
1704 | 
1705 | 
1706 | 
1707 | 
1708 | 
1709 | 
1709 | 
1710 | 
1711 | 
1712 | 
1713 | 
1714 | 
1715 | 
1716 | 
1717 | 
1718 | 
1718 | 
1719 | 
1720 | 
1721 | 
1722 | 
1723 | 
1724 | 
1725 | 
1726 | 
1727 | 
1728 | 
1729 | 
1729 | 
1730 | 
1731 | 
1732 | 
1733 | 
1734 | 
1735 | 
1736 | 
1737 | 
1738 | 
1739 | 
1739 | 
1740 | 
1741 | 
1742 | 
1743 | 
1744 | 
1745 | 
1746
```

```

Vaults SFTP Workspace + 192.168.42.130 Broadcast X Upgrade now ⓘ - ⌂ ⌃ ⌁

root@debian:~#
sudo apt install -y mosquitto mosquitto-clients
sudo mosquitto_passwd -c /etc/mosquitto/passwd IoT && \
sudo chmod 777 /etc/mosquitto/passwd
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  lib cJSON1 libmosquitto1 libwebsockets18
The following NEW packages will be installed:
  lib cJSON1 libmosquitto1 libwebsockets18 mosquitto mosquitto-clients
0 upgraded, 5 newly installed, 0 to remove and 0 not upgraded.
Need to get 658 kB of archives.
After this operation, 1,617 kB of additional disk space will be used.
Get:1 https://deb.debian.org/debian bookworm/main amd64 lib cJSON1 amd64 1.7.15-1+deb12u2 [22.9 kB]
Get:2 https://repo.mosquitto.org/debian bookworm/main amd64 libmosquitto1 amd64 2.0.20-0mosquitto1-bookworm1 [91.0 kB]
Get:3 https://repo.mosquitto.org/debian bookworm/main amd64 libwebsockets18 amd64 4.2.1-0mosquitto2-bookworm1 [166 kB]
Get:4 https://repo.mosquitto.org/debian bookworm/main amd64 mosquitto amd64 2.0.20-0mosquitto1-bookworm1 [266 kB]
Get:5 https://repo.mosquitto.org/debian bookworm/main amd64 mosquitto-clients amd64 2.0.20-0mosquitto1-bookworm1 [Fetched 658 kB in 1s (613 kB/s)]
Selecting previously unselected package lib cJSON1:amd64.
(Reading database ... 26991 files and directories currently installed.)
Preparing to unpack .../lib cJSON1_1.7.15-1+deb12u2_amd64.deb ...
Unpacking lib cJSON1:amd64 (1.7.15-1+deb12u2) ...
Selecting previously unselected package libmosquitto1:amd64.
Preparing to unpack .../libmosquitto1_2.0.20-0mosquitto1-bookworm1_amd64.deb ...
Unpacking libmosquitto1:amd64 (2.0.20-0mosquitto1-bookworm1) ...
Selecting previously unselected package libwebsockets18:amd64 ...
Preparing to unpack .../libwebsockets18_4.2.1-0mosquitto2-bookworm1_amd64.deb ...
Unpacking libwebsockets18:amd64 (4.2.1-0mosquitto2-bookworm1) ...
Selecting previously unselected package mosquitto.
Preparing to unpack .../mosquitto_2.0.20-0mosquitto1-bookworm1_amd64.deb ...
Unpacking mosquitto (2.0.20-0mosquitto1-bookworm1) ...
Selecting previously unselected package mosquitto-clients.
Preparing to unpack .../mosquitto-clients_2.0.20-0mosquitto1-bookworm1_amd64.deb ...
Unpacking mosquitto-clients (2.0.20-0mosquitto1-bookworm1) ...
Setting up libmosquitto1:amd64 (2.0.20-0mosquitto1-bookworm1) ...
Setting up lib cJSON1:amd64 (1.7.15-1+deb12u2) ...
Setting up libmosquitto-clients (2.0.20-0mosquitto1-bookworm1) ...
Setting up libwebsockets18:amd64 (4.2.1-0mosquitto2-bookworm1) ...
Setting up mosquitto (2.0.20-0mosquitto1-bookworm1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/mosquitto.service → /lib/systemd/system/mosquitto.service
Processing triggers for libc-bin (2.36-9+deb12u10) ...
Password:
Reenter password:
root@debian:~#
root@debian:~#
root@debian:~# sudo cat > /etc/mosquitto/conf.d/default.conf <<EOF
allow_anonymous false
password_file /etc/mosquitto/passwd
EOF

```

```

Vaults SFTP 192.168.42.130 + 192.168.42.130 Broadcast X Upgrade now ⓘ - ⌂ ⌃ ⌁

root@debian:~#
Running Node-RED update for user root at /root on debian

This can take 20-30 minutes on the slower Pi versions - please wait.

Stop Node-RED ✓
Remove old version of Node-RED ✓
Node option not specified : --node18 or --node20
Leave existing Node.js : v22.16.0 Npm 10.9.2
Clean npm cache -
Install Node-RED core ✓ 4.0.9
Move global nodes to local -
Leave existing nodes -
Install extra Pi nodes -
Add shortcut commands
Update system script

Any errors will be logged to /var/log/nodered-install.log

```

```
☰ Vaults SFTP X 192.168.42.130 + Upgrade now ⓘ - ⌂ ×

🕒 192.168.42.130

Running Node-RED update for user root at /root on debian

This can take 20-30 minutes on the slower Pi versions - please wait.

Stop Node-RED ✓
Remove old version of Node-RED ✓
Node option not specified : --node18 or --node20
Leave existing Node.js : v22.16.0 Npm 10.9.2
Clean npm cache -
Install Node-RED core ✓ 4.0.9
Move global nodes to local -
Leave existing nodes -
Install extra Pi nodes -
Add shortcut commands ✓
Update systemd script ✓

Any errors will be logged to /var/log/nodered-install.log
All done.
You can now start Node-RED with the command node-red-start
or using the icon under Menu / Programming / Node-RED
Then point your browser to localhost:1880 or http://[your_pi_ip-address]:1880

Started : Mon Jun 9 02:12:37 AM EDT 2025
Finished: Mon Jun 9 02:13:04 AM EDT 2025

*****  
### WARNING ###
DO NOT EXPOSE NODE-RED TO THE OPEN INTERNET WITHOUT SECURING IT FIRST

Even if your Node-RED doesn't have anything valuable, (automated) attacks will
happen and could provide a foothold in your local network

Follow the guide at https://nodered.org/docs/user-guide/runtime/securing-node-red
to setup security.

### ADDITIONAL RECOMMENDATIONS ###
- You can customise the initial settings by running:
  node-red admin init
- Do not run Node-RED as root or an administrative account

*****  
Node-RED Settings File Initialisation
=====
This tool will help you create a Node-RED settings file.
```

```
☰ Vaults SFTP X 192.168.42.130 + Upgrade now ⓘ - ⌂ ×

🕒 192.168.42.130

Add shortcut commands ✓
Update systemd script ✓

Any errors will be logged to /var/log/nodered-install.log
All done.
You can now start Node-RED with the command node-red-start
or using the icon under Menu / Programming / Node-RED
Then point your browser to localhost:1880 or http://[your_pi_ip-address]:1880

Started : Mon Jun 9 02:12:37 AM EDT 2025
Finished: Mon Jun 9 02:13:04 AM EDT 2025

*****  
### WARNING ###
DO NOT EXPOSE NODE-RED TO THE OPEN INTERNET WITHOUT SECURING IT FIRST

Even if your Node-RED doesn't have anything valuable, (automated) attacks will
happen and could provide a foothold in your local network

Follow the guide at https://nodered.org/docs/user-guide/runtime/securing-node-red
to setup security.

### ADDITIONAL RECOMMENDATIONS ###
- You can customise the initial settings by running:
  node-red admin init
- Do not run Node-RED as root or an administrative account

*****  
Node-RED Settings File Initialisation
=====
This tool will help you create a Node-RED settings file.

✓ Settings file : /root/.node-red/settings.js  
User Security =====
✓ Do you want to setup user security? : Yes
✓ Username : admin
✓ Password : *****
✓ User permissions : full access
✓ Add another user? : Yes
✓ Username : user
✓ Password : *****
? User permissions :
+ full_access
read-only access
```

```
  ⌂ Vaults   ⌂ SFTP   ✘ 192.168.42.130   +   Upgrade now ⓘ  -  ⌂  ⌂ 192.168.42.130   x

Node-RED Settings File initialisation
=====
This tool will help you create a Node-RED settings file.

✓ Settings file : /root/.node-red/settings.js

User Security
=====
✓ Do you want to setup user security? · Yes
✓ Username · admin
✓ Password · *****
✓ User permissions · full access
✓ Add another user? · Yes
✓ Username · user
✓ Password · *****
✓ User permissions · read-only access
✓ Add another user? · No

Projects
=====
The Projects feature allows you to version control your flow using a local git repository.

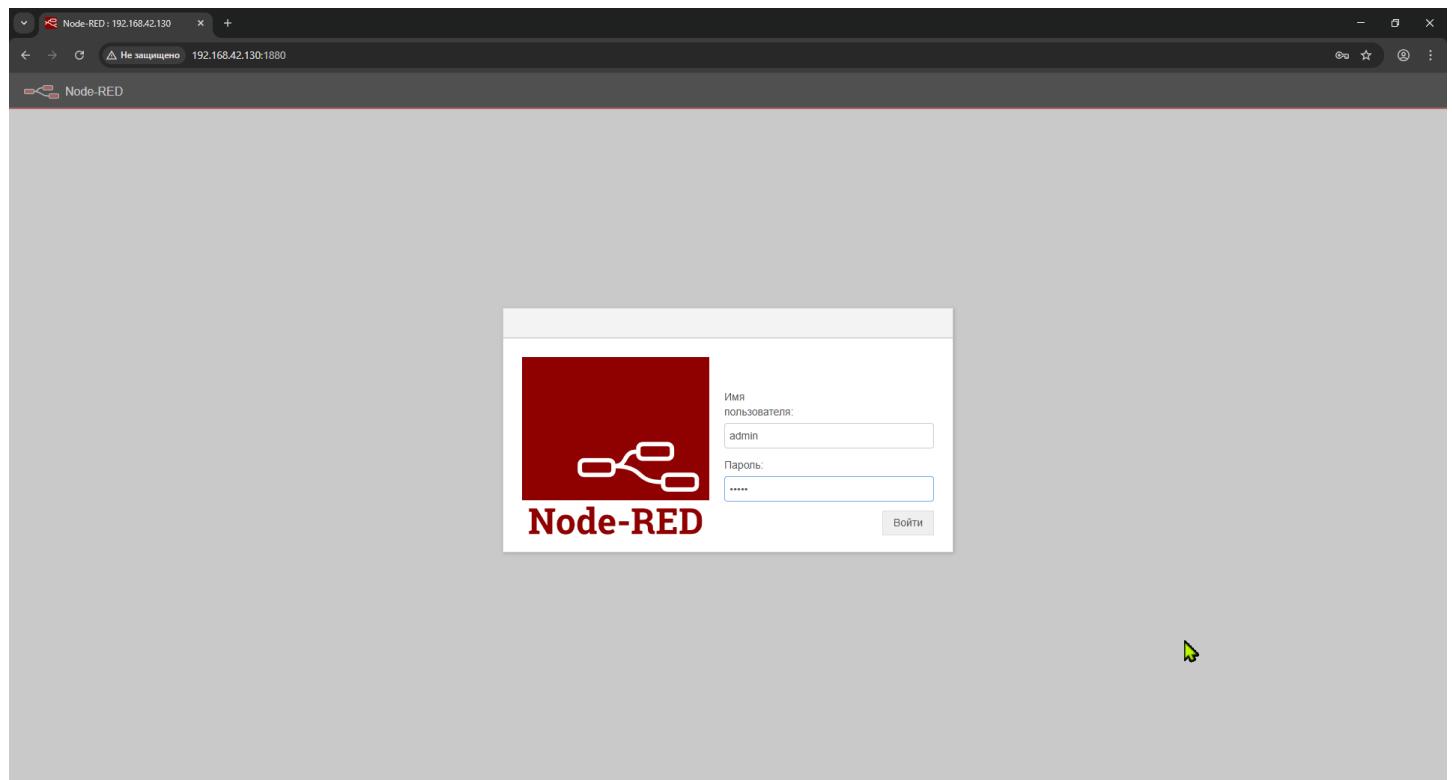
✓ Do you want to enable the Projects feature? · No

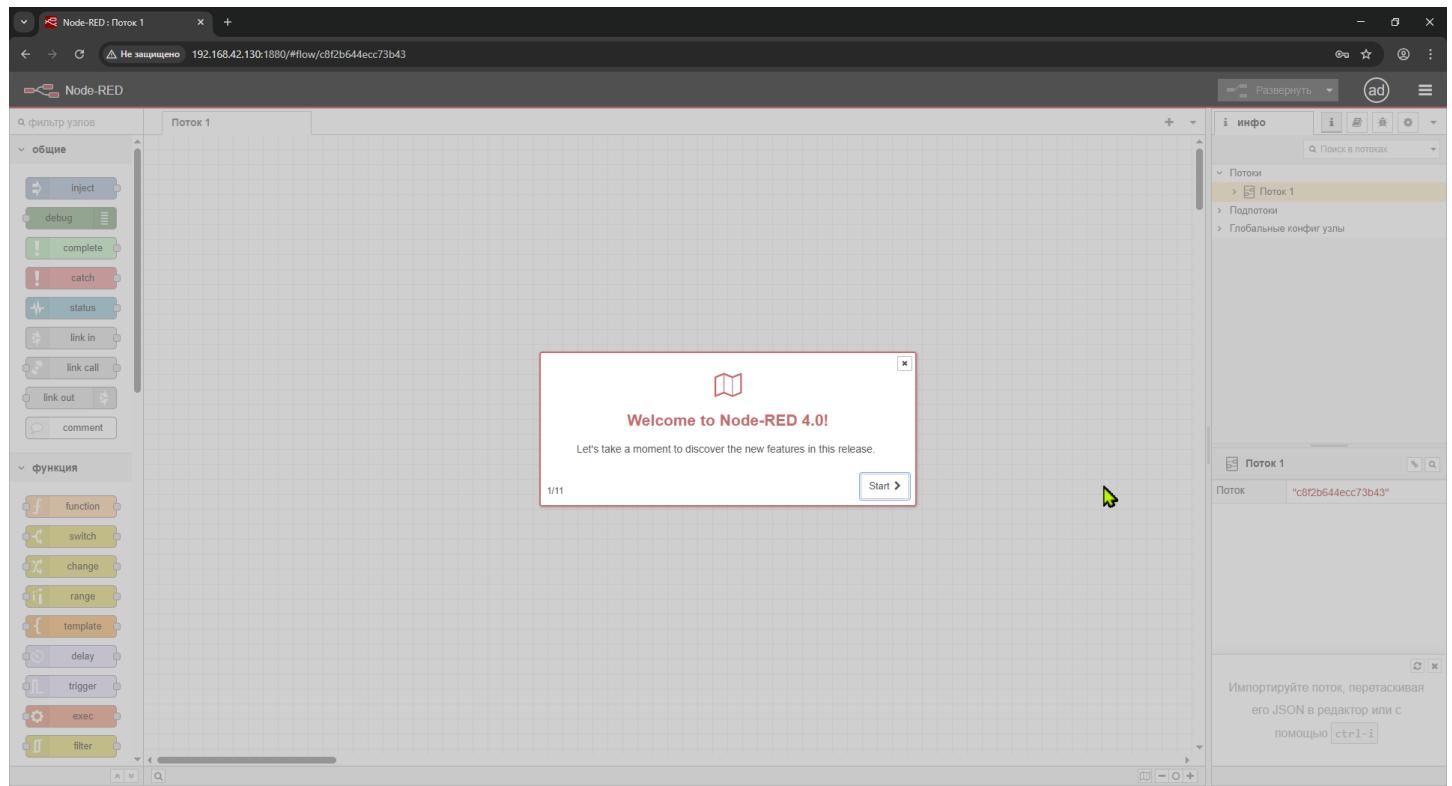
Flow File settings
=====
✓ Enter a name for your flows file · flows.json
✓ Provide a passphrase to encrypt your credentials file · *****

Editor settings
=====
✓ Select a theme for the editor. To use any theme other than "default", you will need to install @node-red-contrib-themes/theme-collection in your Node-RED user directory. · default
✓ Select the text editor component to use in the Node-RED Editor · monaco (default)

Node settings
=====
✓ Allow Function nodes to load external modules? (functionExternalModules) · Yes

Settings file written to /root/.node-red/settings.js
Created symlink /etc/systemd/system/multi-user.target.wants/nodered.service → /lib/systemd/system/nodered.service.
root@debian:~#
```





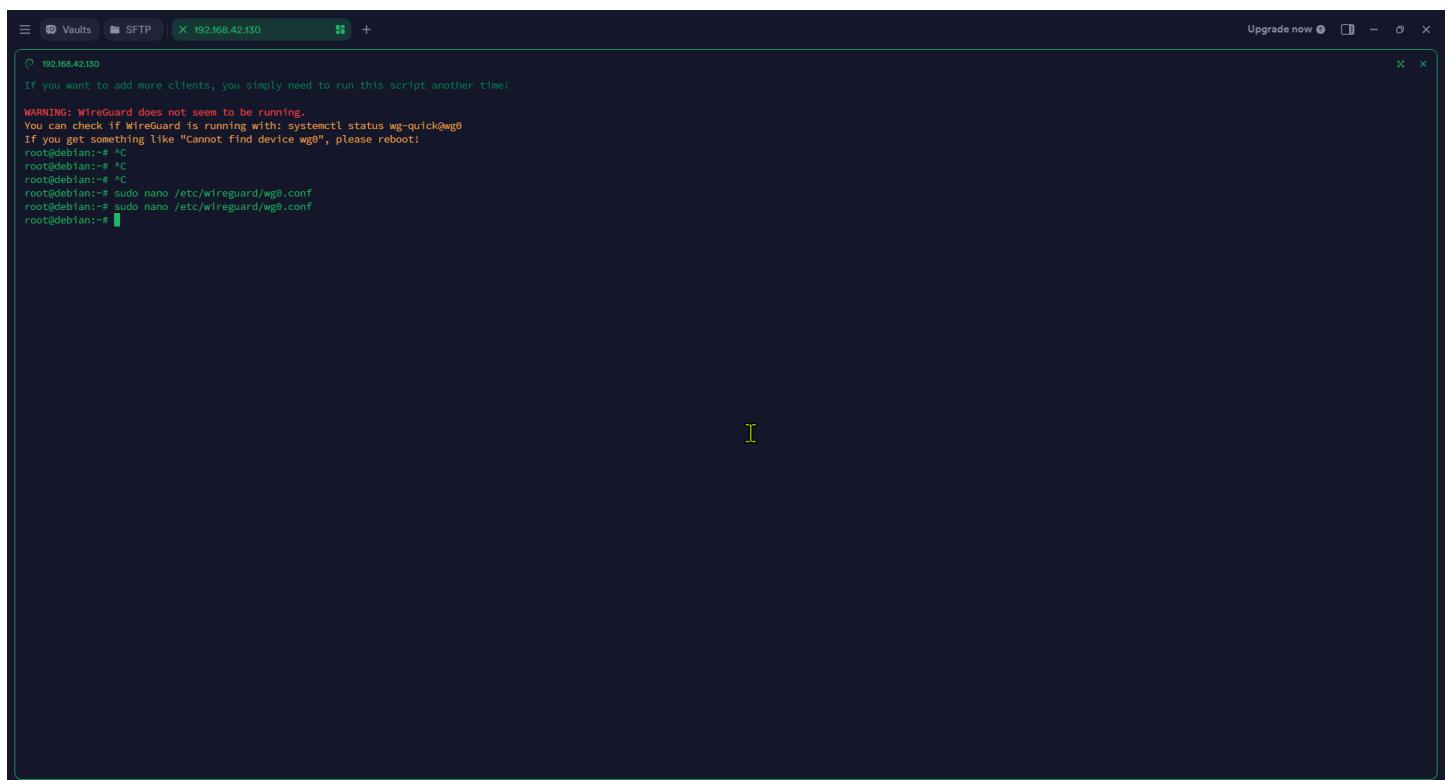
```
root@debian:~# sudo curl -O https://raw.githubusercontent.com/angristan/wireguard-install/master/wireguard-install.sh && \
sudo chmod +x wireguard-install.sh && \
sudo ./wireguard-install.sh
% Total    % Received % Xferd  Average Speed   Time   Time  Current
          Dload  Upload Total Spent   Left Speed
100 20274  100 20274    0     0  41956  --:--:--:--:--:--:--:-- 42249
Welcome to the WireGuard installer!
The git repository is available at: https://github.com/angristan/wireguard-install

I need to ask you a few questions before starting the setup.
You can keep the default options and just press enter if you are ok with them.

IPv4 or IPv6 public address: 192.168.42.130
Public interface: ens33
WireGuard interface name: wg0
Server WireGuard IPv4: 10.66.66.1
Server WireGuard IPv6: fd42:42:42::1
Server WireGuard port [1-65535]: 52588
First DNS resolver to use for the clients: 1.1.1.1
Second DNS resolver to use for the clients (optional): 1.0.0.1

WireGuard uses a parameter called AllowedIPs to determine what is routed over the VPN.
Allowed IPs list for generated clients (leave default to route everything): 0.0.0.0/0,::/0

Okay, that was all I needed. We are ready to setup your WireGuard server now.
You will be able to generate a client at the end of the installation.
Press any key to continue...|
```

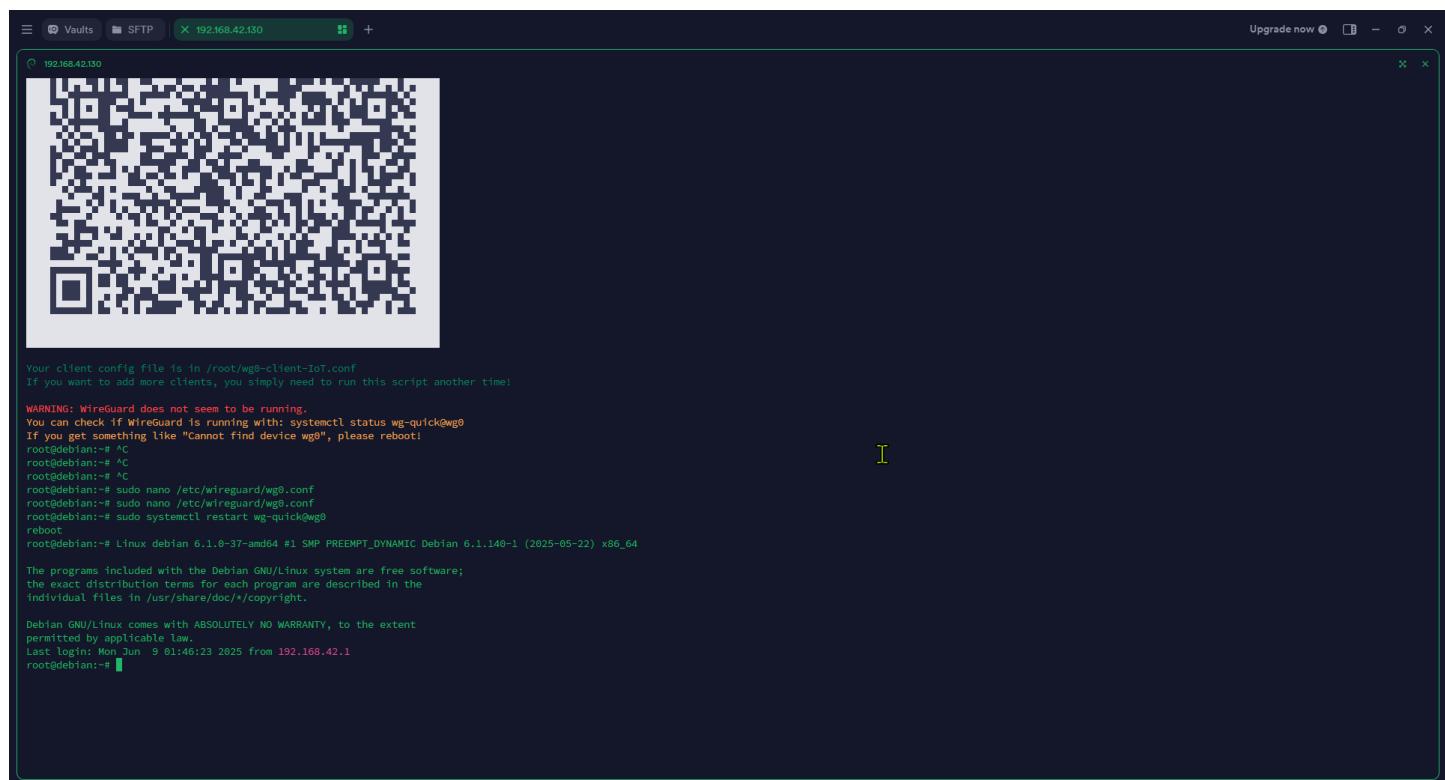


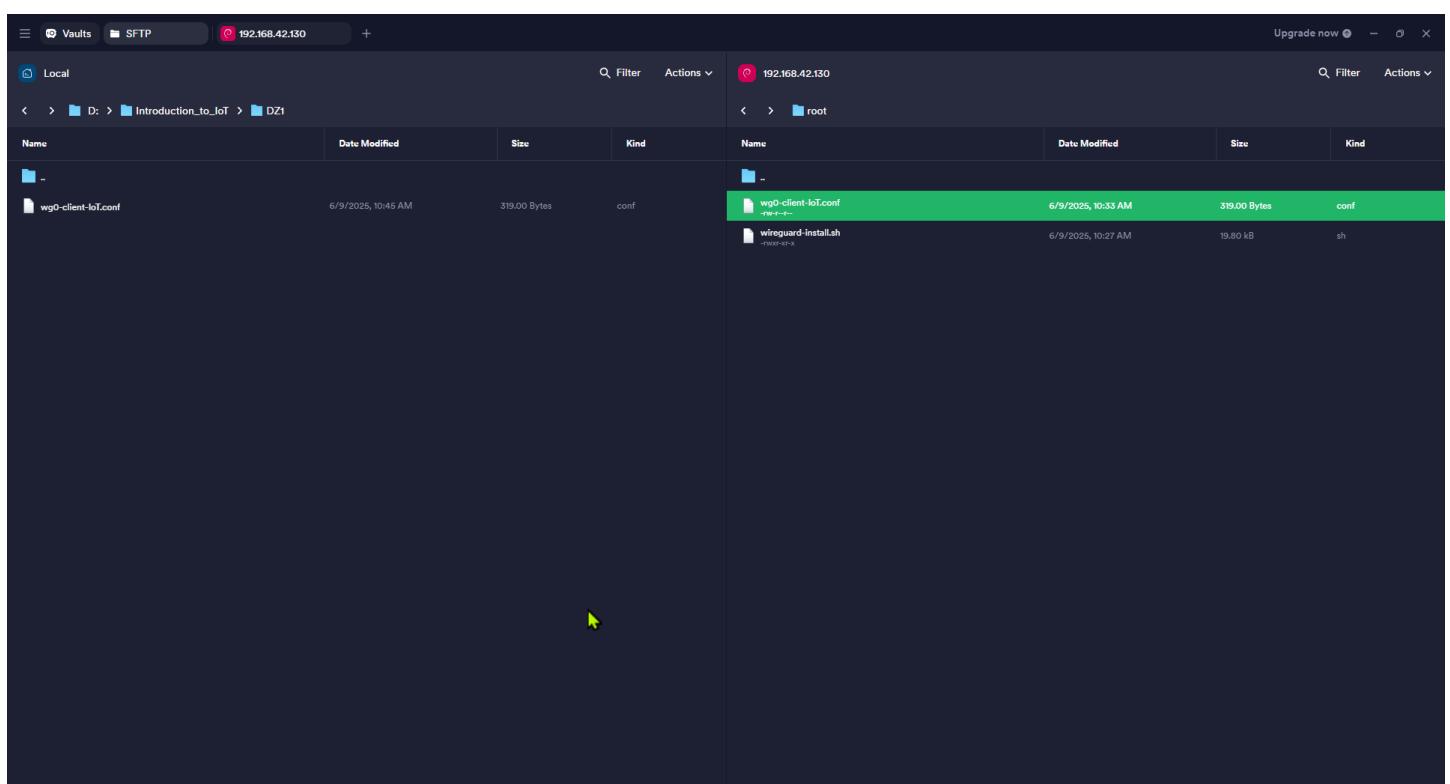
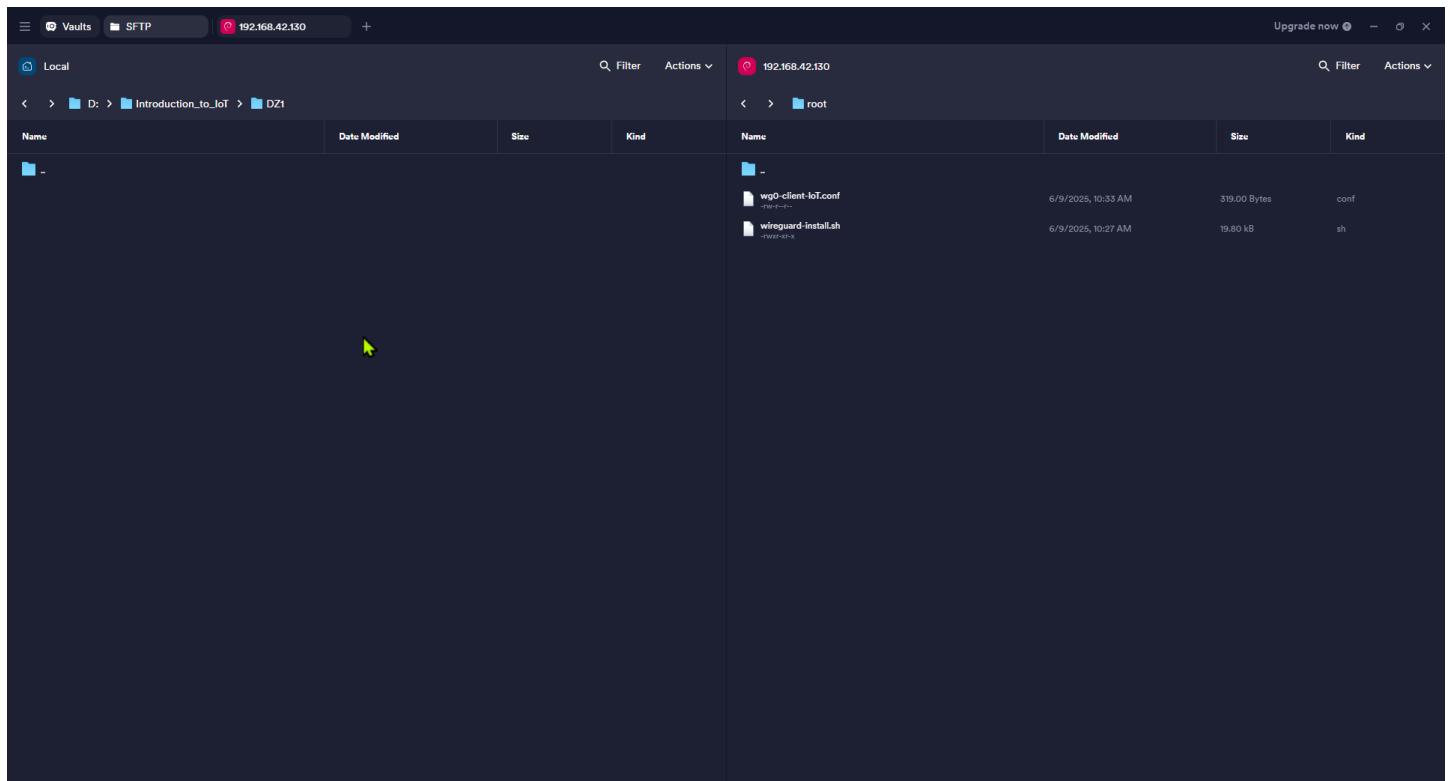
```
GNU nano 7.2                                     /etc/wireguard/wg0.conf +

[Interface]
Address = 10.66.66.1/24
ListenPort = 52588
PrivateKey = uBEzQ2TQyp/wJfti94tdc5WnLoxAvpF0okb+ZRPwD3c=
Postup = iptables -I INPUT -p udp --dport 52588 -j ACCEPT
Postup = iptables -I FORWARD -i ens33 -o wg0 -j ACCEPT
Postup = iptables -I FORWARD -i wg0 -o ens33 -j ACCEPT
Postup = iptables -t nat -A POSTROUTING -o ens33 -j MASQUERADE

PostDown = iptables -D INPUT -p udp --dport 52588 -j ACCEPT
PostDown = iptables -D FORWARD -i ens33 -o wg0 -j ACCEPT
PostDown = iptables -D FORWARD -i wg0 -o ens33 -j ACCEPT
PostDown = iptables -t nat -D POSTROUTING -o ens33 -j MASQUERADE

### Client IoT
[Peer]
PublicKey = BtwyS3dwdnzFbB337K3Ve=Ltk0ixmd26tC0tsfXYLRU=
PresharedKey = 5zhkq8/P353kcplon2MKppgRxjrPscmOryOBkGAPgcw=
AllowedIPs = 10.66.66.2/32
```





The screenshot shows the 'Installation' section of the WireGuard website. On the left, a sidebar lists supported platforms: Windows (7, 8.1, 10, 11, 2008R2, 2012R2, 2016, 2019, 2022), macOS (app store), Ubuntu (module & tools), Android (play store & direct apk file), iOS (app store), Debian (module & tools), Fedora (tools), Mageia (tools), Arch (module & tools), OpenSUSE/SLE (tools), Slackware (tools), Alpine (tools), Gentoo (module & tools), Exherbo (module & tools), NixOS (module & tools), Nix on Darwin (userspace go & tools), OpenWRT (tools), Oracle Linux 8 (UEK6 & tools), Red Hat Enterprise Linux 8 (module-kmod, module-dkms, & tools). The main content area shows installation instructions for Windows, macOS, Ubuntu, Android, iOS, Debian, Fedora, Mageia, and Arch. Each section includes a download link or command-line install instruction.

The screenshot shows the WinSCP interface. The top navigation bar includes 'Vaults', 'SFTP', and the IP address '192.168.42.130'. The main window displays a file tree under 'Local' and '192.168.42.130'. A modal dialog titled 'Импорт туннелей из файла' (Import tunnels from file) is open, showing a file selection interface. The file 'wg0-client-IoT.conf' is selected. The bottom right of the dialog has buttons for 'Открыть' (Open) and 'Отмена' (Cancel).

Screenshot of a file manager interface showing two locations: 'Local' and '192.168.42.130'. The 'Local' location contains a file 'wg0-client-IoT.conf'. The '192.168.42.130' location shows a directory 'root' containing files 'wg0-client-IoT.conf' and 'wireguard-install.sh'.

A WireGuard configuration window is open, displaying the configuration for the 'wg0-client-IoT' interface. Key details include:

- Интерфейс:** wg0-client-IoT
- Статус:** Подключен
- Публичный ключ:** BtWY53dwmdnfBb8337K3Ve+L7kOixmd26tCuTsfxYLRLs
- Порт:** 69387
- IP-адрес:** 10.66.66.2/32, fd42:42:42:2/128
- DNS-серверы:** 1.1.1.1, 1.0.0.1

The 'Journal' tab is also visible, showing logs related to the tunnel's status.

A system tray icon for WireGuard is shown with the message "WireGuard Включен" (WireGuard Enabled) and "Туннель wg0-client-IoT подключен." (Tunnel wg0-client-IoT connected).

```

WARNING: WireGuard does not seem to be running.
You can check if WireGuard is running with: systemctl status wg-quick@wg0
If you get something like "Cannot find device wg0", please reboot!
root@debian:~# 
root@debian:~# 
root@debian:~# 
root@debian:~# sudo nano /etc/wireguard/wg0.conf
root@debian:~# sudo nano /etc/wireguard/wg3.conf
root@debian:~# sudo systemctl restart wg-quick@wg0
reboot
root@debian:~# Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jun  9 01:46:23 2025 from 192.168.42.1
root@debian:~# Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

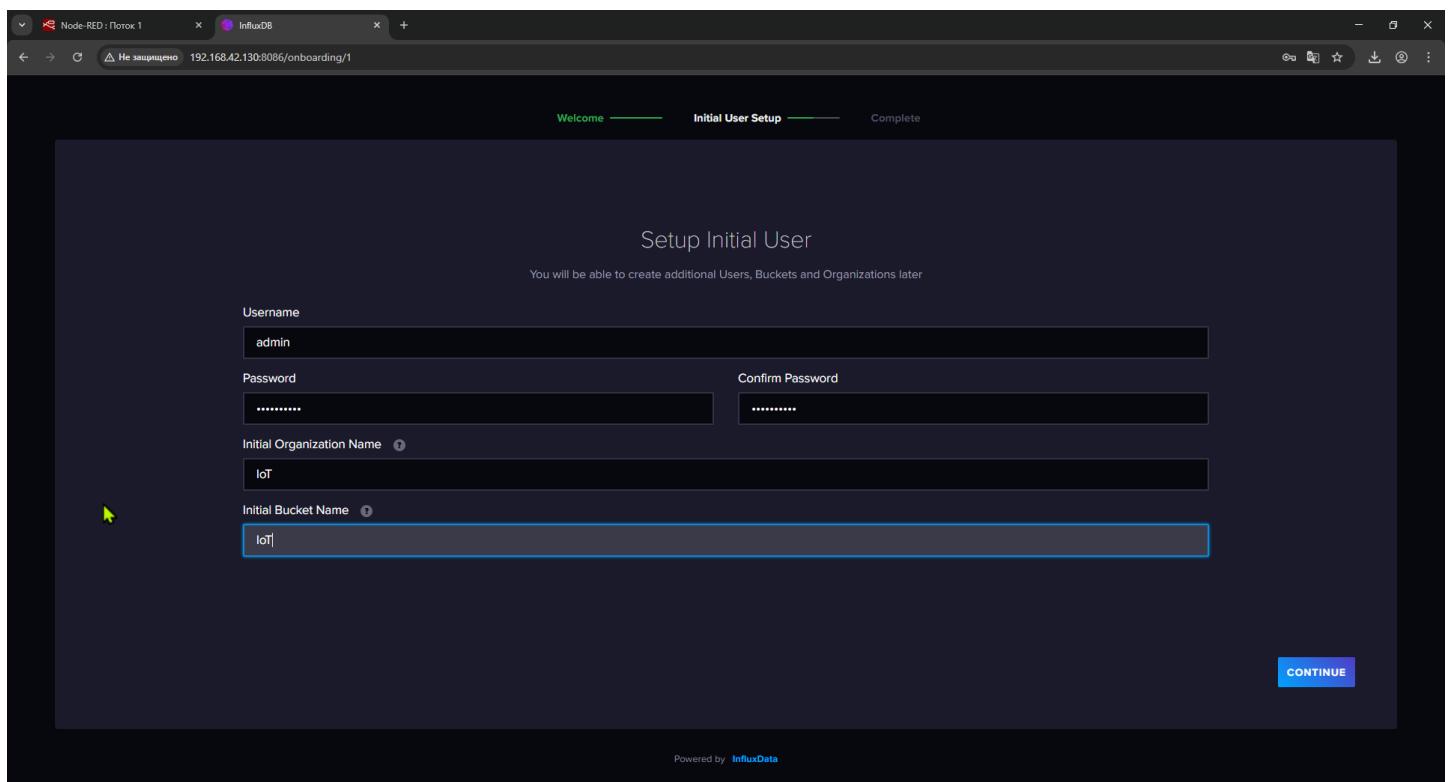
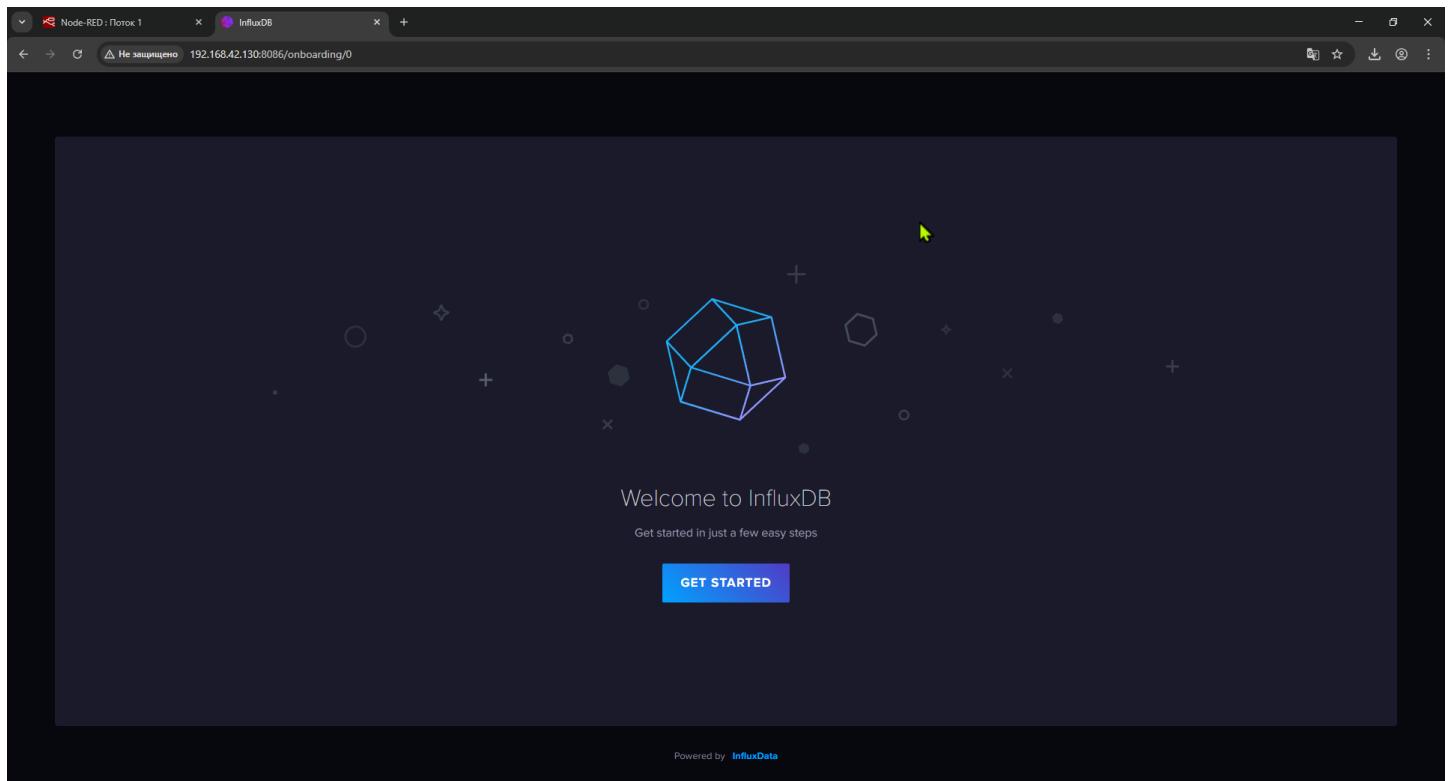
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jun  9 02:42:36 2025 from 192.168.42.1
root@debian:~# 
root@debian:~# wg show
interface: wg0
  public key: fke//IPZLH06+ajlgBjOW0ZfkZKoyQ993XrdY0eFT8=
  private key: (hidden)
  listening port: 52588

peer: BtWY53dwmdnfBb8337K3Ve+L7kOixmd26tCuTsfxYLRLs
  preshared key: (hidden)
  endpoint: 192.168.42.1:64379
  allowed ips: 10.66.66.2/32
  latest handshake: 1 minute, 41 seconds ago
  transfer: 4.68 MiB received, 334.81 KiB sent
root@debian:~# 
root@debian:~# 

```

```
root@debian:~# sudo wget -q https://repos.influxdata.com/influxdata-archive_compat.key && \
sudo echo '393e879c89ac8d55f81f942f9ad7fb82a25e133faddaf9e15b16e6ac9ce4c influxdata-archive_compat.key' | sha256sum -c && cat influxdata-archive_compat.key | gpg --dearmor | sudo tee /etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg > /dev/null && \
sudo echo 'deb [signed-by=/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg] https://repos.influxdata.com/debian stable main' | sudo tee /etc/apt/sources.list.d/influxdata.list && \
sudo apt-get install -y adduser libfontconfig1 musl && \
sudo wget https://dl.grafana.com/oss/release/grafana_11.1.0_amd64.deb && \
sudo dpkg -i grafana_11.1.0_amd64.deb && \
sudo rm /root/grafana_11.1.0_amd64.deb && \
sudo systemctl enable grafana-server && \
sudo systemctl start grafana-server && \
sudo apt-get update && sudo apt-get install -y influxdb2 telegraf && \
sudo systemctl start influxd && \
sudo systemctl enable telegraf \
influxdata-archive_compat.key: OK
deb [signed-by=/etc/apt/trusted.gpg.d/influxdata-archive_compat.gpg] https://repos.influxdata.com/debian stable main
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
adduser is already the newest version (3.134).
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libfontconfig1 musl
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 2,174 kB of archives.
After this operation, 4,941 kB of additional disk space will be used.
Get:1 http://deb.debian.org/debian bookworm/main amd64 fonts-dejavu-core all 2.37-6 [1,068 kB]
Get:2 http://deb.debian.org/debian bookworm/main amd64 fontconfig-config amd64 2.14.1-4 [315 kB]
Get:3 http://deb.debian.org/debian bookworm/main amd64 libfontconfig1 amd64 2.14.1-4 [386 kB]
Get:4 http://deb.debian.org/debian bookworm/main amd64 musl amd64 1.2.3-1 [406 kB]
Fetches: 2,174 kB in 1s (2,348 kB/s)
Preconfiguring packages ...
Selecting previously unselected package fonts-dejavu-core.
(Reading database ... 34840 files and directories currently installed.)
Preparing to unpack .../fonts-dejavu-core_2.37-6_all.deb ...
Unpacking fonts-dejavu-core (2.37-6) ...
Selecting previously unselected package fontconfig-config.
Preparing to unpack .../fontconfig-config_2.14.1-4_amd64.deb ...
Unpacking fontconfig-config (2.14.1-4) ...
Selecting previously unselected package libfontconfig1:amd64.
Preparing to unpack .../libfontconfig1_2.14.1-4_amd64.deb ...
Unpacking libfontconfig1:amd64 (2.14.1-4) ...
Selecting previously unselected package musl:amd64.
Preparing to unpack .../musl_1.2.3-1_amd64.deb ...
Unpacking musl:amd64 (1.2.3-1) ...
Setting up fonts-dejavu-core (2.37-6) ...
Setting up fontconfig-config (2.14.1-4) ...
Setting up libfontconfig1:amd64 (2.14.1-4) ...
Processing triggers for libc-bin (2.36-9+deb12u10) ...
--2025-06-09 03:03:45-- https://dl.grafana.com/oss/release/grafana_11.1.0_amd64.deb
```

```
root@debian:~# Adding system user 'grafana' (UID 103) ...
Adding new user 'grafana' (UID 103) with group 'grafana' ...
Not creating home directory '/usr/share/grafana'.
### NOT starting on installation, please execute the following statements to configure grafana to start automatically using systemd
sudo /bin/systemctl daemon-reload
sudo /bin/systemctl enable grafana-server
### You can start grafana server by executing
sudo /bin/systemctl start grafana-server
Synchronizing state of grafana-server.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable grafana-server
Created symlink /etc/systemd/system/multi-user.target.wants/grafana-server.service → /lib/systemd/system/grafana-server.service.
Hit:1 http://deb.debian.org/debian bookworm InRelease
Hit:2 http://deb.debian.org/debian security InRelease
Hit:3 http://deb.debian.org/debian-security bookworm-security InRelease
Get:4 https://repos.influxdata.com/debian stable InRelease [6,907 B]
Hit:5 https://deb.nodesource.com/nodistro 22.x nodistro InRelease
Hit:6 https://repo.mosquitto.org/debian bookworm InRelease
Get:7 https://repos.influxdata.com/debian stable/main amd64 Packages [16.4 kB]
Fetched 23.3 kB in 7s (24.3 kB/s)
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  influxdb2-cl1
The following NEW packages will be installed:
  influxdb2 influxdb2-cl1 telegraf
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 136 MB of archives.
After this operation, 136 MB of additional disk space will be used.
Get:1 https://repos.influxdata.com/debian stable/main amd64 influxdb2 amd64 2.7.11-1 [49.6 kB]
Get:2 https://repos.influxdata.com/debian stable/main amd64 influxdb2-cl1 amd64 2.7.5-1 [11.7 MB]
Get:3 https://repos.influxdata.com/debian stable/main amd64 telegraf amd64 1.34.4-1 [75.0 kB]
Fetched 135 MB in 7s (19.9 MB/s)
Selecting previously unselected package influxdb2.
(Reading database ... 43749 files and directories currently installed.)
Preparing to unpack .../influxdb2_2.7.11-1_amd64.deb ...
Unpacking influxdb2 (2.7.11-1) ...
Selecting previously unselected package influxdb2-cl1.
Preparing to unpack .../influxdb2-cl1_2.7.5-1_amd64.deb ...
Unpacking influxdb2-cl1 (2.7.5-1) ...
Selecting previously unselected package telegraf.
Preparing to unpack .../telegraf_1.34.4-1_amd64.deb ...
Unpacking telegraf (1.34.4-1) ...
Setting up influxdb2 (2.7.11-1) ...
Created symlink /etc/systemd/system/influxd.service → /lib/systemd/system/influxdb.service.
Created symlink /etc/systemd/system/multi-user.target.wants/influxdb.service → /lib/systemd/system/influxdb.service.
Setting up telegraf (1.34.4-1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/telegraf.service → /lib/systemd/system/telegraf.service.
Setting up influxdb2-cl1 (2.7.5-1) ...
root@debian:~#
```



Node-RED : Поток 1

InfluxDB

Не защищено 192.168.42.130:8086/onboarding/2

Welcome — Initial User Setup — Complete

You are ready to go!

Make sure to copy your operator API token now.
This token enables superuser privileges like creating users, orgs, etc. You won't be able to see it again!

ZAM7zNEf3HKezSrCxAbM04t3pW8-u7KcC1fb1TqP32NYeVZMIfKVjudrI8HZLWP38udoZBOKFNdDS3Co9U_Q==

COPY TO CLIPBOARD

Your InfluxDB has 1 organization, 1 user, and 1 bucket.

Let's start collecting data!

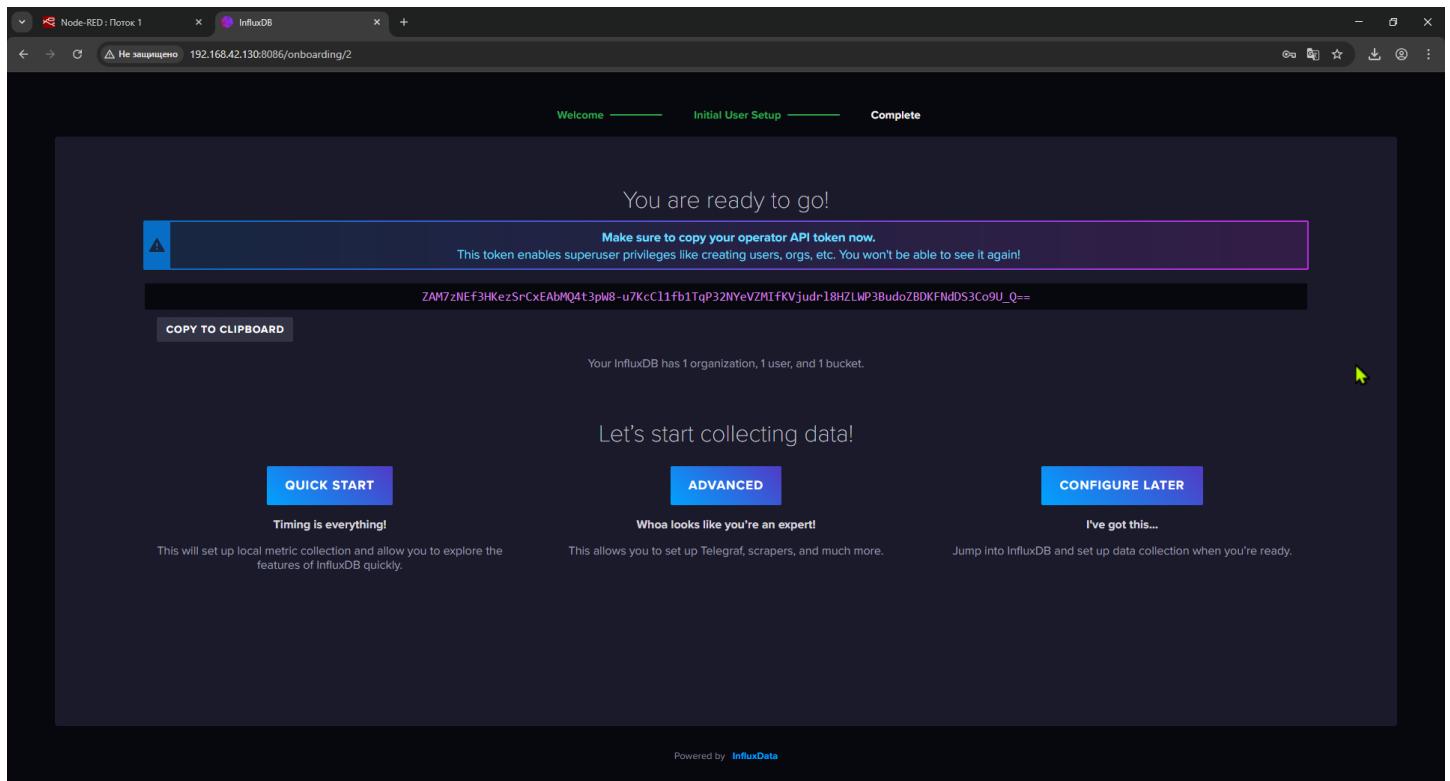
QUICK START **ADVANCED** **CONFIGURE LATER**

Timing is everything!
This will set up local metric collection and allow you to explore the features of InfluxDB quickly.

Whoa looks like you're an expert!
This allows you to set up Telegraf, scrapers, and much more.

I've got this...
Jump into InfluxDB and set up data collection when you're ready.

Powered by [InfluxData](#)



Node-RED : Поток 1

Get Started | IoT | InfluxDB

Не защищено 192.168.42.130:8086/orgs/63f75b38814f86f

Get Started

Write and query data using the programming language of your choice

Python Node.js Go Arduino

View more

InfluxDB CLI

Write and query data using the InfluxDB Command Line Interface. Supports CSV and Line Protocol.

Server Agent (Telegraf)

Easily collect and write data using custom stand-alone agent plugins

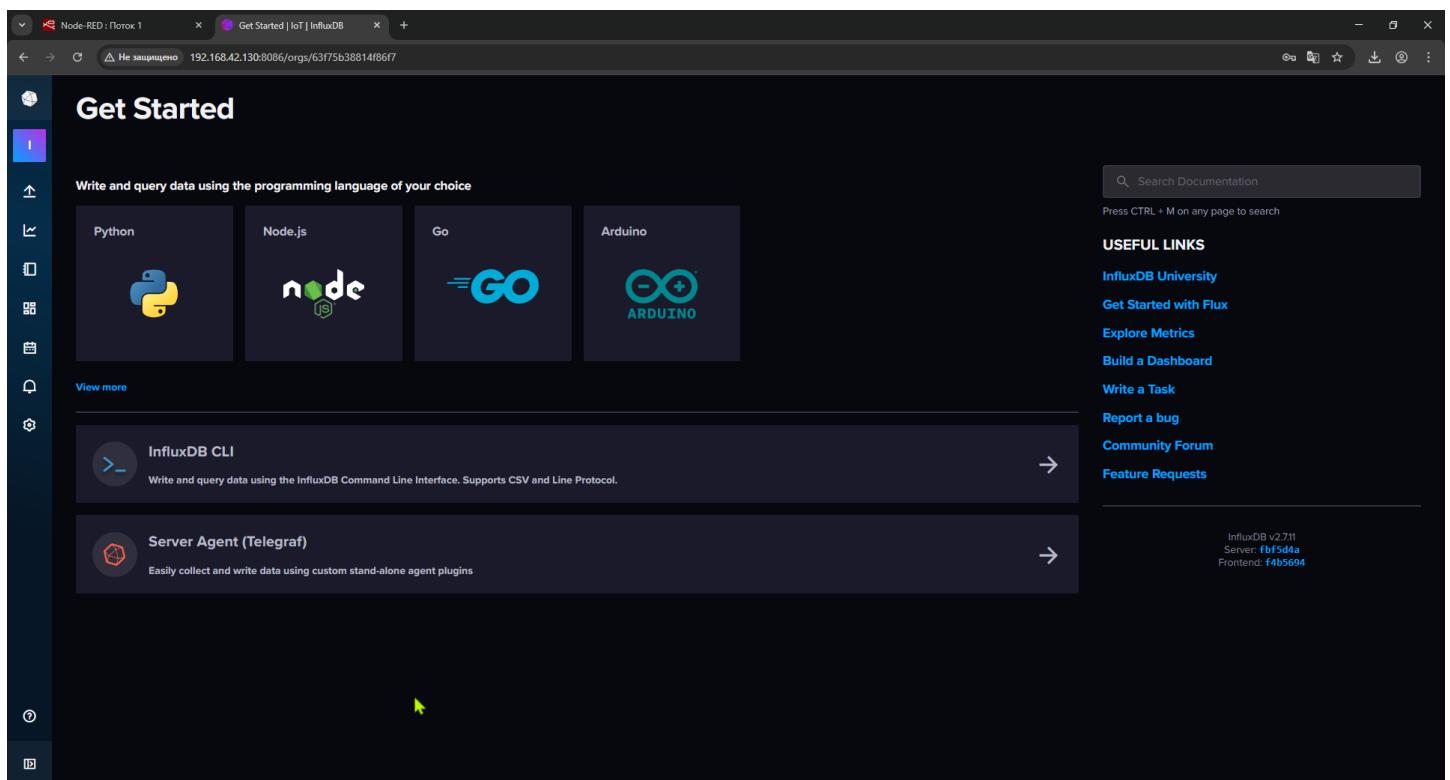
Search Documentation

Press CTRL + M on any page to search

USEFUL LINKS

- [InfluxDB University](#)
- [Get Started with Flux](#)
- [Explore Metrics](#)
- [Build a Dashboard](#)
- [Write a Task](#)
- [Report a bug](#)
- [Community Forum](#)
- [Feature Requests](#)

InfluxDB v2.7.11
Server: fbf5d4a
Frontend: f4b5694



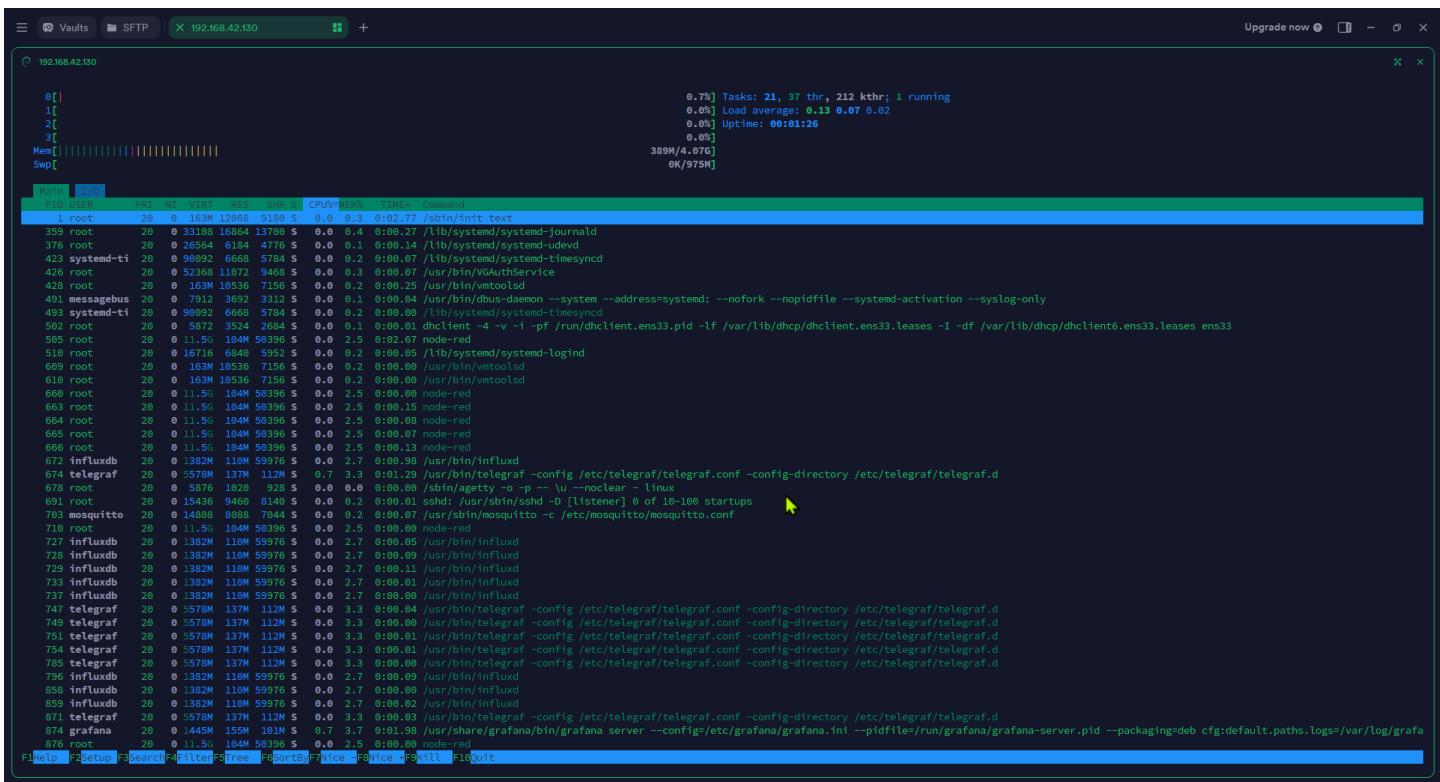
```
root@192.168.42.130:~# sudo cat > /etc/telegraf/telegraf.conf <<EOF
# Configuration for telegraf agent
[agent]
interval = "10s"
round_interval = true
metric_batch_size = 250
metric_buffer_limit = 2580
collection_jitter = "0s"
flush_interval = "15s"
flush_jitter = "0s"
precision = ""
hostname = ""
omit_hostname = false

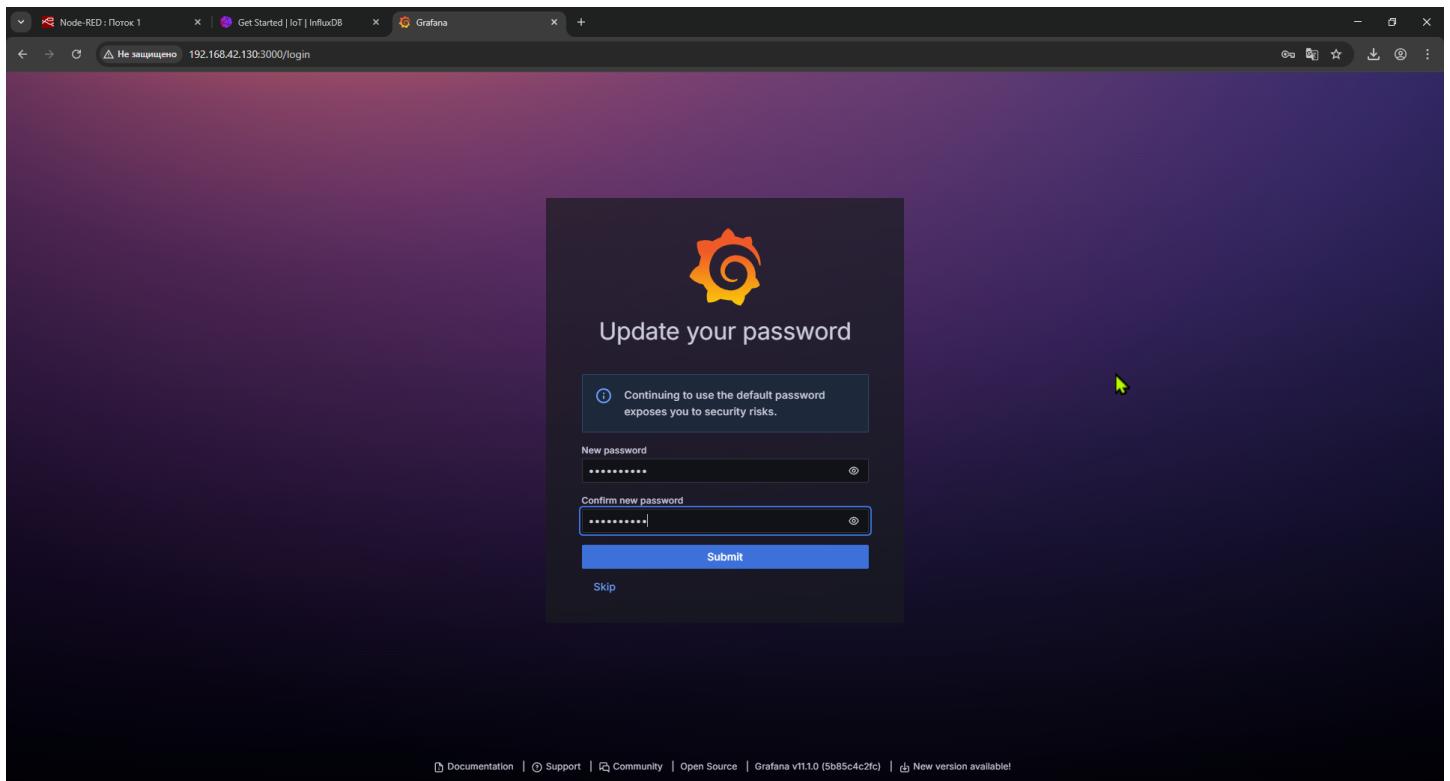
[[outputs.influxdb_v2]]
urls = ["http://192.168.42.138:8886"]
token = "ZAM7zNf3hKezSrCxEAbMQ4t3pW6-u7KcClfb1TqP32NVeVZMifKVjudrl8HZLWP3BudoZBDKFNdDS3Co9U_0=="
organization = "IoT"
bucket = "IoT"

[[inputs.mqtt_consumer]]
servers = ["tcp://192.168.42.130:1883"]
topics = ["#"]
username = "IoT"
password = "123"
data_format = "value"
data_type = "float"
EOF
root@192.168.42.130:~# sudo sed -i 14i 'RestartSec=2s' /lib/systemd/system/telegraf.service && \
sudo systemctl daemon-reload
root@192.168.42.130:~# reboot
root@192.168.42.130:~# Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jun  9 02:55:38 2025 from 192.168.42.1
root@192.168.42.130:~#
```





The screenshot shows the Grafana interface with the URL `http://192.168.42.130:3000/connections/datasources/add`. The left sidebar is visible with options like Home, Starred, Dashboards, Explore, Alerting, Connections, Data sources (which is selected), and Administration. The main area is titled 'Add data source' and 'Choose a data source type'. It lists several categories: 'Time series databases' containing Prometheus, Graphite, InfluxDB (highlighted with a yellow arrow), and OpenTSDB; and 'Logging & document databases' containing Loki and Elasticsearch. A search bar at the top right says 'Search or jump to...' and has a keyboard shortcut 'ctrl+k'.

The screenshot shows the Grafana interface with the URL `http://192.168.42.130:3000/connections/datasources/edit/be0f1hb8wzko0c`. The left sidebar is visible with the same navigation as the previous screen. The main area shows the 'influxdb' data source configuration. At the top, it says 'Type: InfluxDB' and 'Supported' (highlighted with a yellow arrow). Below this are sections for 'Settings' (Name: influxdb, Default: checked), 'Query language' (Flux), and a note about Flux support being beta. The 'HTTP' section includes fields for URL (http://192.168.42.130:8086/), Allowed cookies (New tag (enter key to add)), and Timeout (Timeout in seconds). The 'Auth' section includes options for Basic auth, TLS Client Auth, Skip TLS Verify, and Forward OAuth Identity. A small yellow arrow points to the 'influxdb' icon in the title bar.

The screenshot shows the Grafana interface with the URL `192.168.42.130:3000/connections/datasources/edit/be0f1hb8wzk0c`. The left sidebar is open, showing the 'Data sources' section is selected. The main area is titled 'influxdb' and contains the following configuration:

- Timeout:** Set to "Timeout in seconds".
- Auth:** Basic auth is enabled, while TLS Client Auth, Skip TLS Verify, and Forward OAuth Identity are disabled.
- Custom HTTP Headers:** A button to "+ Add header".
- InfluxDB Details:**
 - Organization: IoT
 - Token: configured
 - Default Bucket: IoT
 - Min time interval: 10s
 - Max series: 1000
- A green success message: "✓ datasource is working. 3 buckets found".
- Buttons at the bottom: "Delete" and "Save & test".

The screenshot shows the Grafana interface with the URL `192.168.42.130:3000/connections/datasources/edit/be0f1hb8wzk0c`. The left sidebar is open, showing the 'Data sources' section is selected. The main area is titled 'https://github.com/grafana/grafana/issues' and contains the following configuration:

- HTTP:**
 - URL: `http://192.168.42.130:8086/`
 - Allowed cookies: New tag (enter key to add) with an 'Add' button.
 - Timeout: Set to "Timeout in seconds".
- Auth:** Basic auth is enabled, while TLS Client Auth, Skip TLS Verify, and Forward OAuth Identity are disabled.
- Custom HTTP Headers:** A button to "+ Add header".
- InfluxDB Details:**
 - Organization: IoT
 - Token: masked with dots
 - Default Bucket: IoT
 - Min time interval: 10s
 - Max series: 1000
- Buttons at the bottom: "Delete" and "Save & test".

```

root@debian:~# sudo cat > /etc/telegraf/telegraf.conf <<EOF
# Configuration for telegraf agent
[agent]
interval = "15s"
round_interval = true
metric_batch_size = 250
metric_buffer_limit = 2500
collection_jitter = "0s"
flush.interval = "15s"
flush.jitter = "0s"
precision = ""
hostname = ""
omit_hostname = false

[[outputs.influxdb_v2]]
urls = ["http://192.168.42.130:8086"]
token = "ZAM7NEf3HKezSrCxEAbMQ4t3pW8-u7KcClfb1TqP32NyeZMifKVjudrl8HZLWP3BudoZBDKFNdDS3Co9U_Q=="
organization = "IoT"
bucket = "IoT"

[[inputs.mqtt_consumer]]
servers = ["tcp://192.168.42.130:1883"]
topics = ["$iot/#"]
username = "IoT"
password = "123"
data_format = "value"
data_type = "float"
EOF
root@debian:~# sudo sed -i 1ai \'RestartSec=2s\' /lib/systemd/system/telegraf.service && \
sudo systemctl daemon-reload
root@debian:~# reboot
root@debian:~# Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jun  9 02:55:38 2025 from 192.168.42.1
root@debian:~# mqttc pub -h 192.168.42.130 -p 1883 -t GB -m "22.5" -u "IoT" -P "123"
root@debian:~#

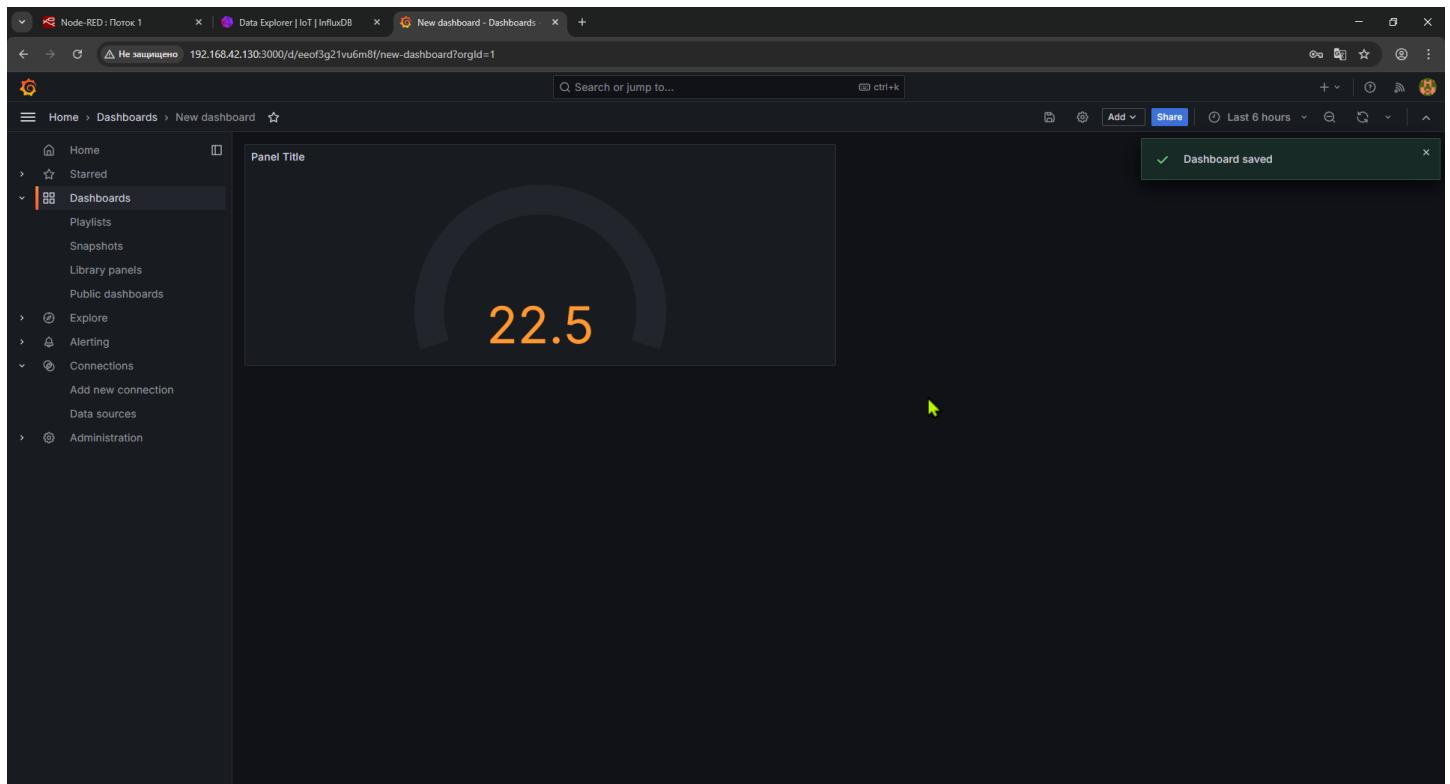
```

The screenshot shows the InfluxDB Data Explorer interface. On the left, a sidebar menu includes 'influxdb', 'admin', 'IoT', 'Load Data', 'Data Explorer' (which is currently selected), 'Notebooks', 'Dashboards', 'Tasks', 'Alerts', 'Settings', and 'Help & Support'. The main content area features a 'Get Started' heading and a section titled 'Write and query data using the programming language of your choice' with four cards: Python (Python logo), Node.js (Node.js logo), Go (Go logo), and Arduino (Arduino logo). Below this is a 'View more' button. Further down are sections for 'InfluxDB CLI' (with a description and an arrow pointing right) and 'Server Agent (Telegraf)' (with a description and an arrow pointing right). A search bar at the top right says 'Search Documentation' with the note 'Press CTRL + M on any page to search'. A 'USEFUL LINKS' section on the right lists links to InfluxDB University, Get Started with Flux, Explore Metrics, Build a Dashboard, Write a Task, Report a bug, Community Forum, and Feature Requests. At the bottom right, it says 'InfluxDB v2.7.1', 'Server: fbf5d4a', and 'Frontend: f4b5694'.

The screenshot shows the InfluxDB Data Explorer interface. On the left, a sidebar menu includes 'influxdb' (selected), 'admin IoT', 'Load Data', 'Data Explorer' (selected), 'Notebooks', 'Dashboards', 'Tasks', 'Alerts', 'Settings', and 'Help & Support'. The main area is titled 'Data Explorer' and features a gauge visualization with a value of 22,50. Below the visualization are several filter panels and a query configuration section. The filters include 'FROM' (Search buckets: IoT, _monitoring, _tasks, + Create Bucket), 'Measurement' (topic: mqtt_consumer, _field: GB, value: last), 'host' (host: debian), and 'WINDOW PERIOD' (auto (10s), Fill missing values). The 'SCRIPT EDITOR' tab is selected, showing the following InfluxQL query:

```
from(bucket: "IoT")  
|> range(start: v.timeRangeStart, stop: v.timeRangeStop)  
|> filter(fn: (r) => r["measurement"] == "mqtt_consumer")  
|> filter(fn: (r) => r["topic"] == "GB")  
|> filter(fn: (r) => r["_field"] == "value")  
|> aggregateWindow(every: v.windowPeriod, fn: last, createEmpty: false)  
|> yield(name: "last")
```

The screenshot shows the Grafana dashboard editor. On the left, a sidebar menu includes 'Home', 'Starred', 'Dashboards' (selected), 'Playlists', 'Snapshots', 'Library panels', 'Public dashboards', 'Explore', 'Alerting', 'Connections' (Add new connection, Data sources), and 'Administration'. The main area shows a gauge panel titled 'Panel Title' with a value of 22.5. The panel has 'Gauge' selected in the top right. The 'Query options' section shows 'Data source: influxdb', 'MD = auto = 1187', and 'Interval = 20s'. The 'Query' section displays the same InfluxQL query as the previous screenshot. The 'Value options' section includes 'Calculation: Last *' and 'Fields: Select the fields that should be included in the panel'. The 'Gauge' section includes 'Orientation: Layout orientation'.



```

root@debian:~# sudo cat > /etc/telegraf/telegraf.conf <<EOF
# Configuration for telegraf agent
[agent]
interval = "1s"
round_trips_batch_size = 250
metric_buffer_limit = 2500
collection_jitter = "0s"
flush_interval = "1s"
flush_jitter = "0s"
precision = ""
hostname = ""
omit_hostname = false

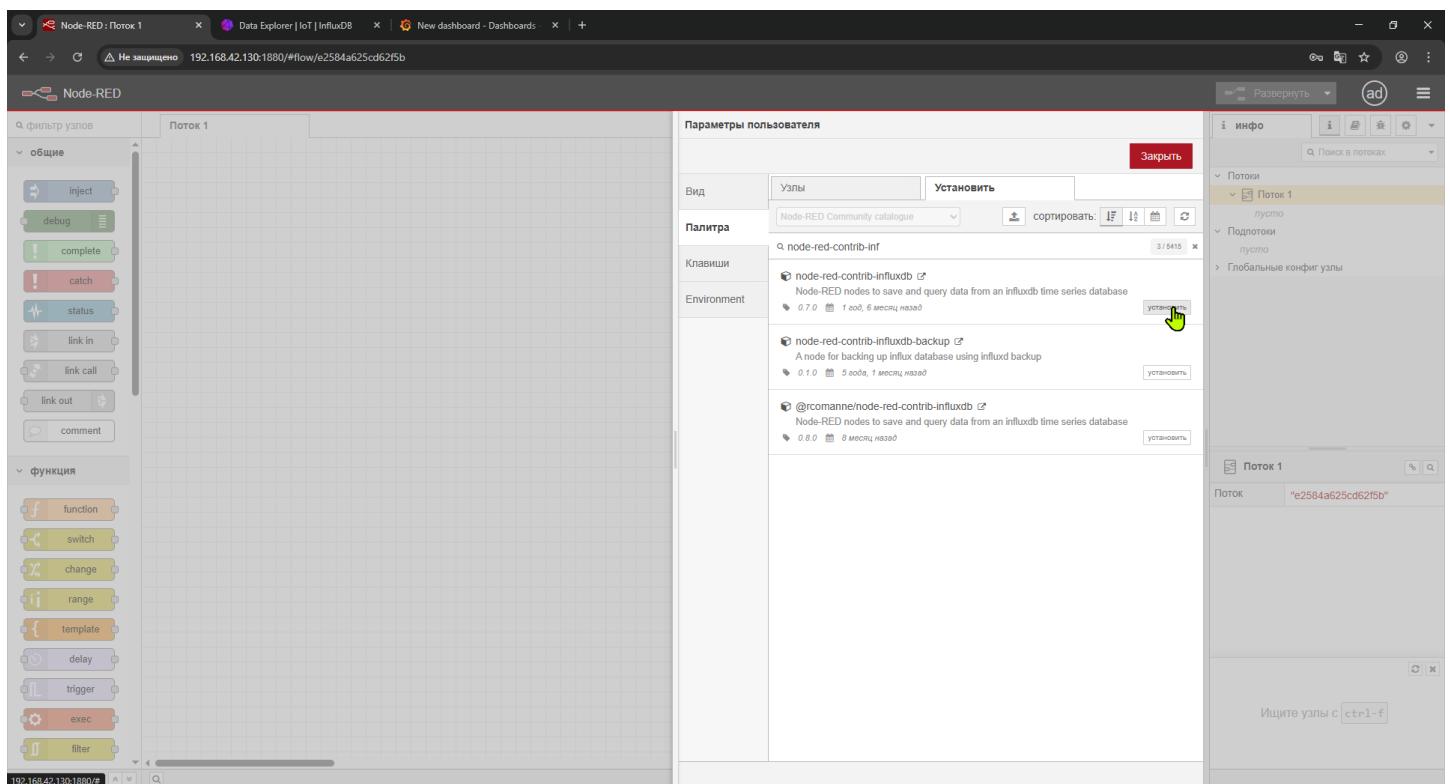
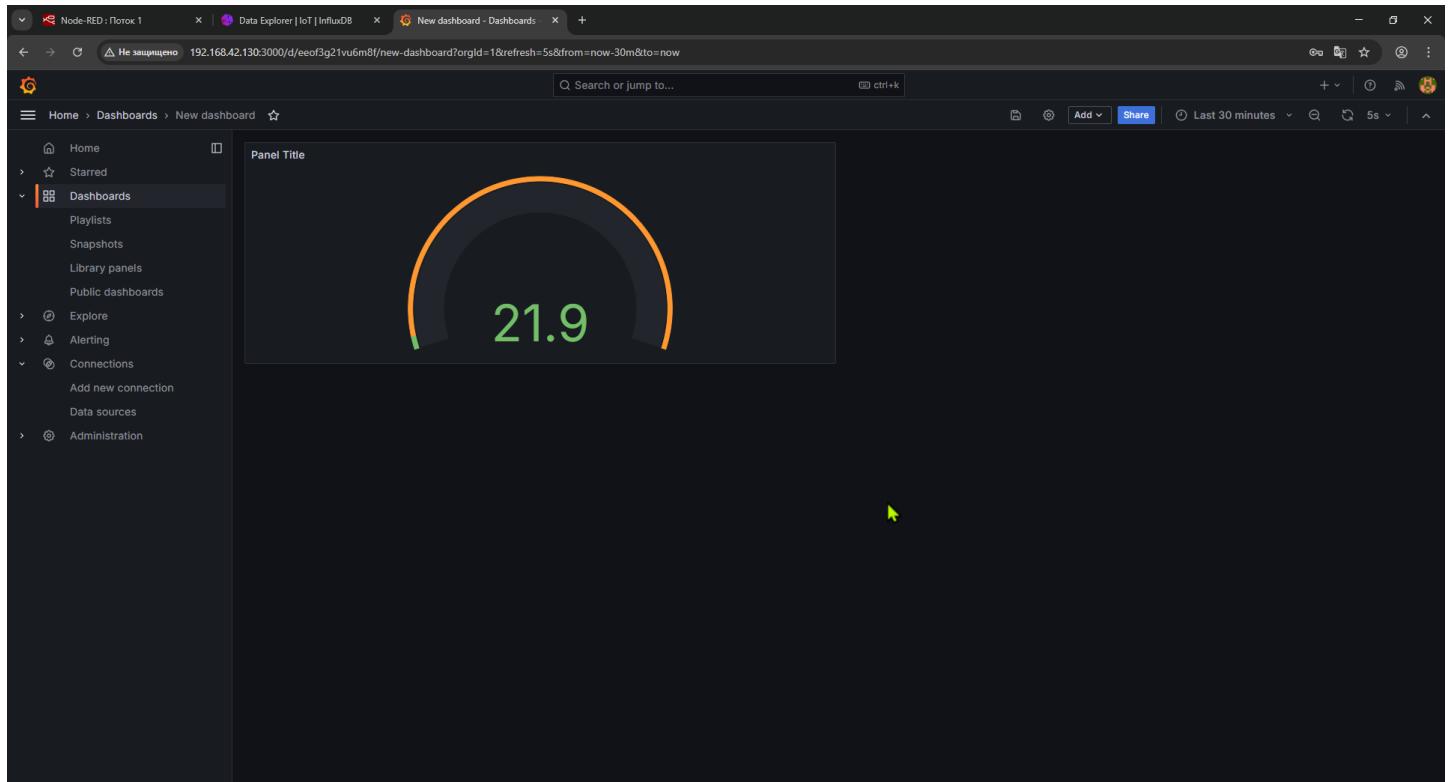
[[outputs.influxdb_v2]]
urls = ["http://192.168.42.130:8886"]
token = "2AMzNfSHkezSrCxAbMQ4t3pw8-u7KcClfb1TqP32NYeVZMifKVjudrl8HZLWP3BudoZBDkFNcDS3Co9U_0=="
organization = "IoT"
bucket = "IoT"

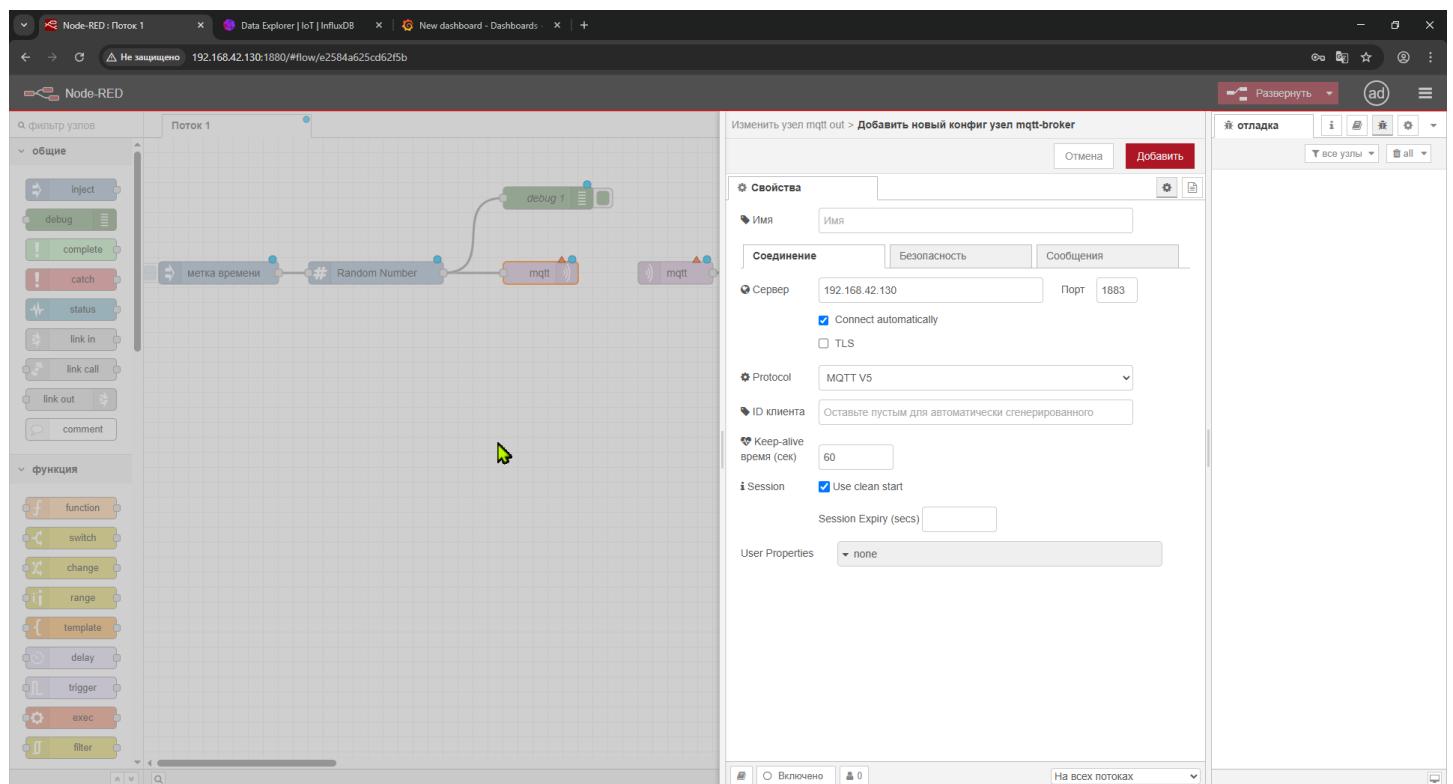
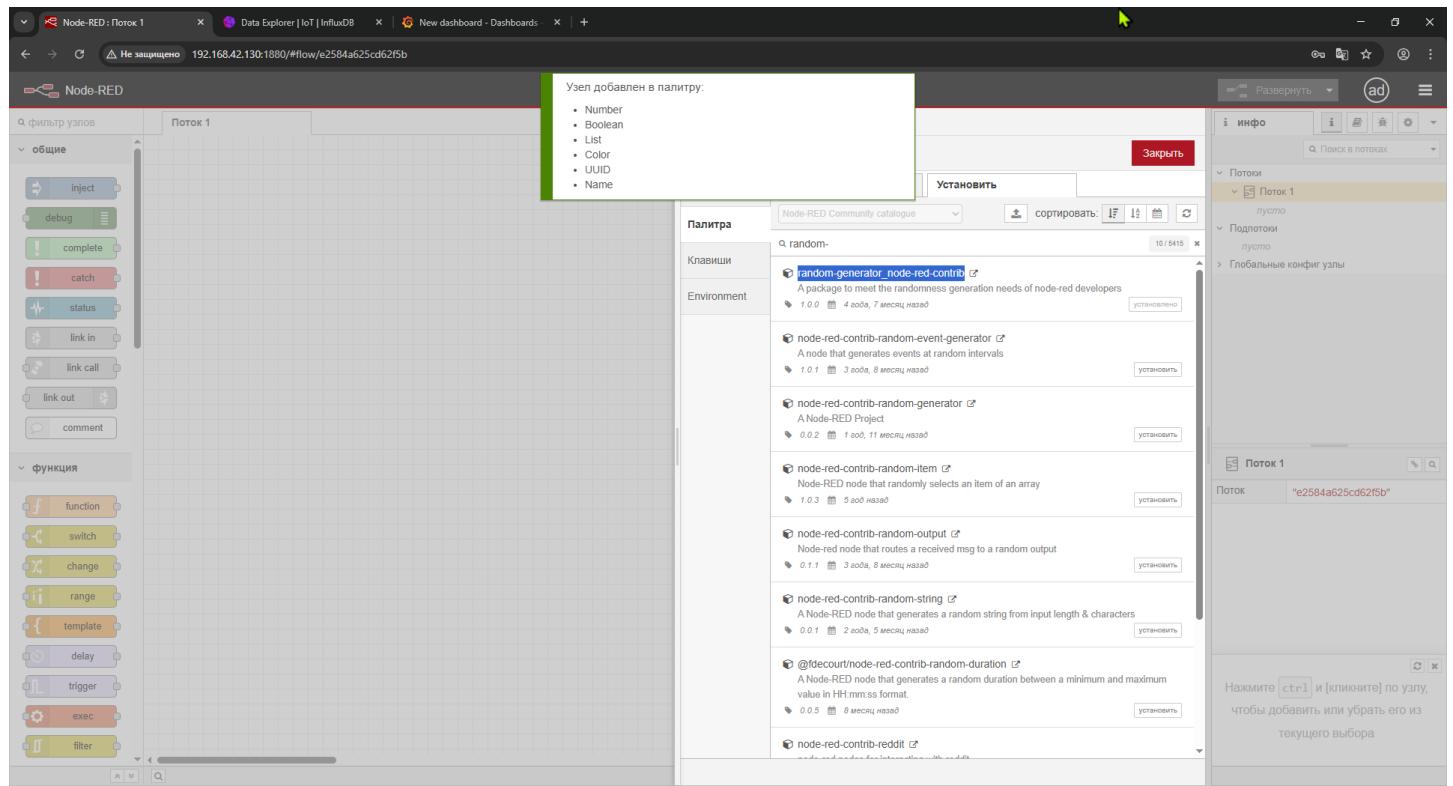
[[inputs.mqtt_consumer]]
servers = ["tcp://192.168.42.130:1883"]
topics = ["#"]
username = "IoT"
password = "123"
data_format = "value"
data_type = "float"
EOF
root@debian:~# sudo sed -i 1i\ 'RestartSec=2s' /lib/systemd/system/telegraf.service && \
sudo systemctl daemon-reload
root@debian:~# reboot
root@debian:~# Linux debian 6.1.0-37-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.140-1 (2025-05-22) x86_64

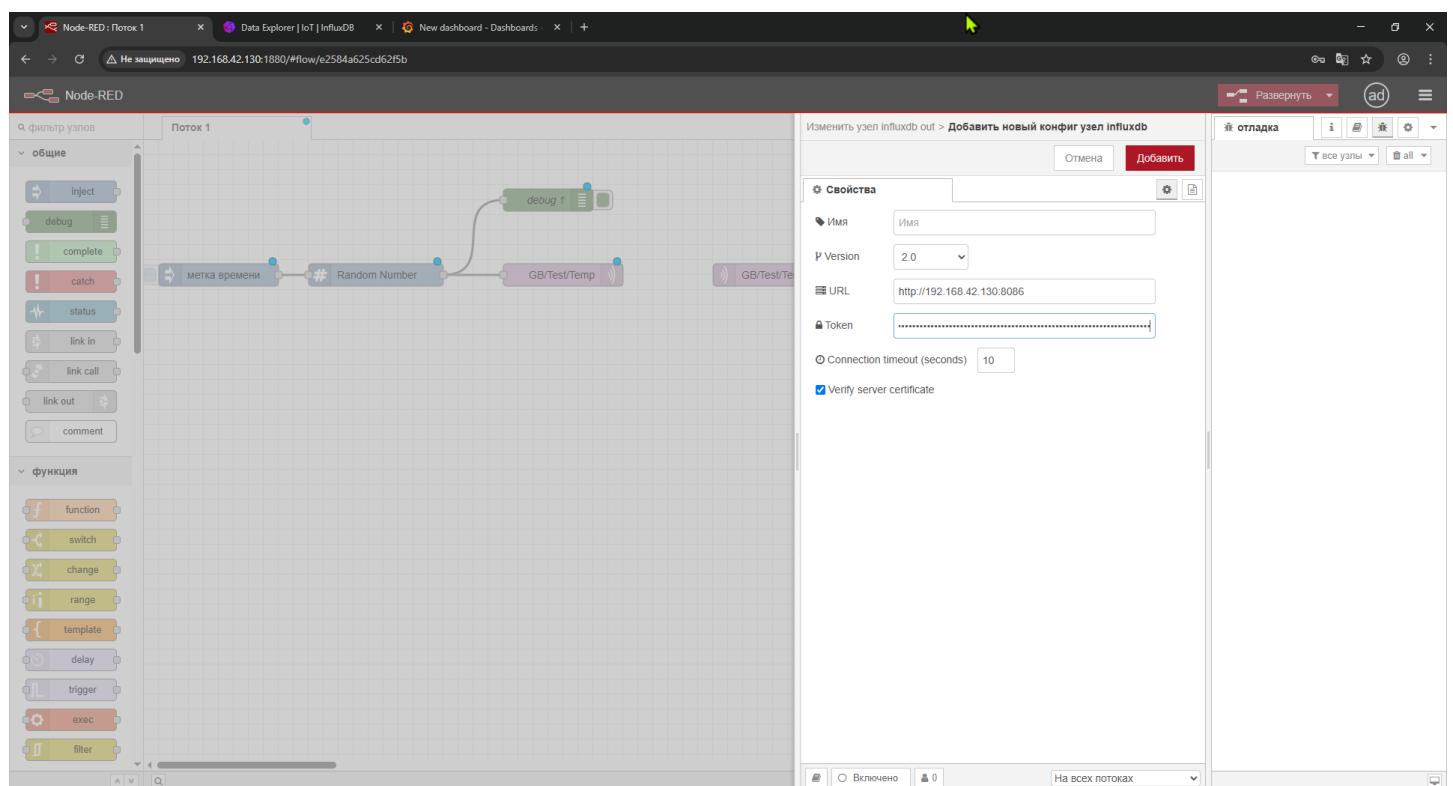
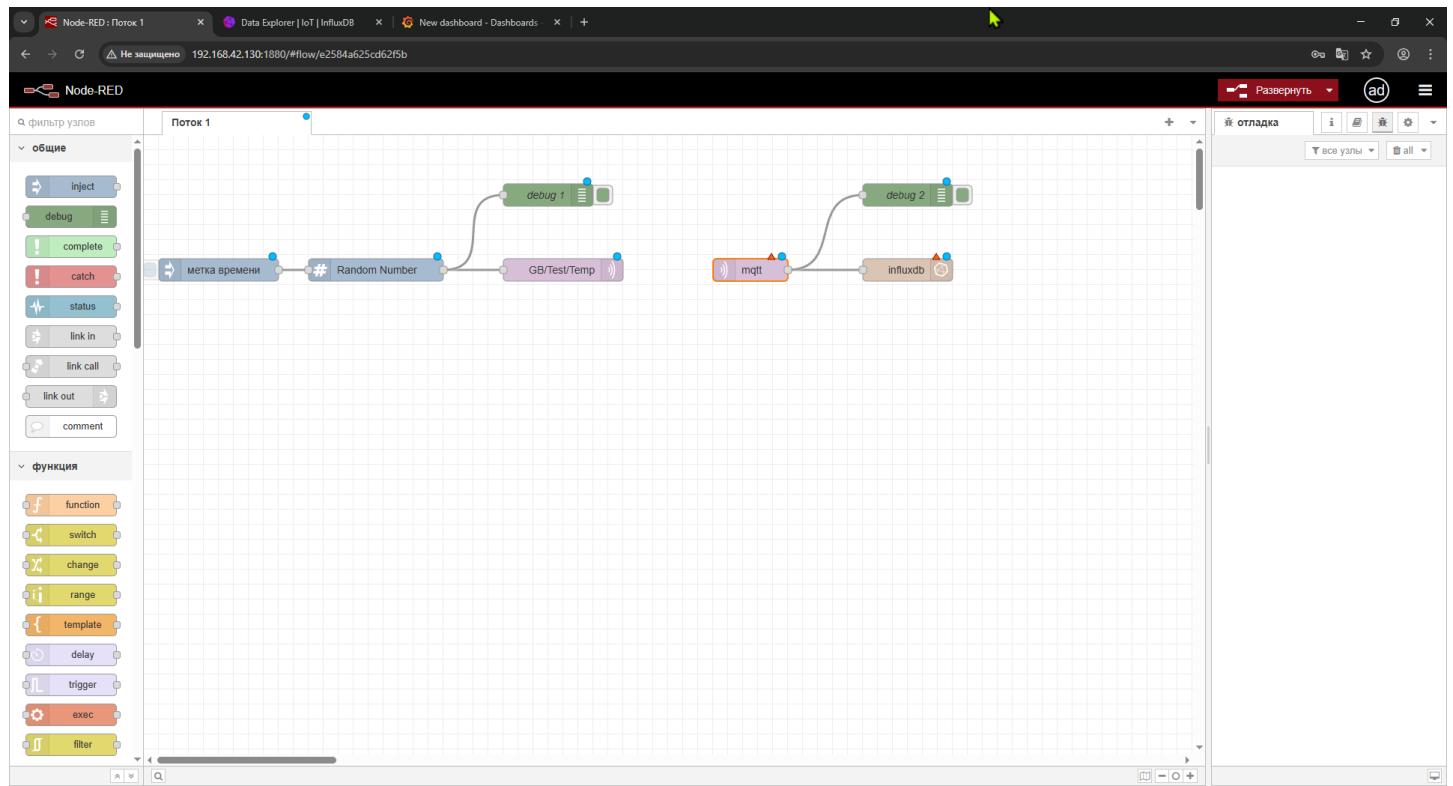
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*.

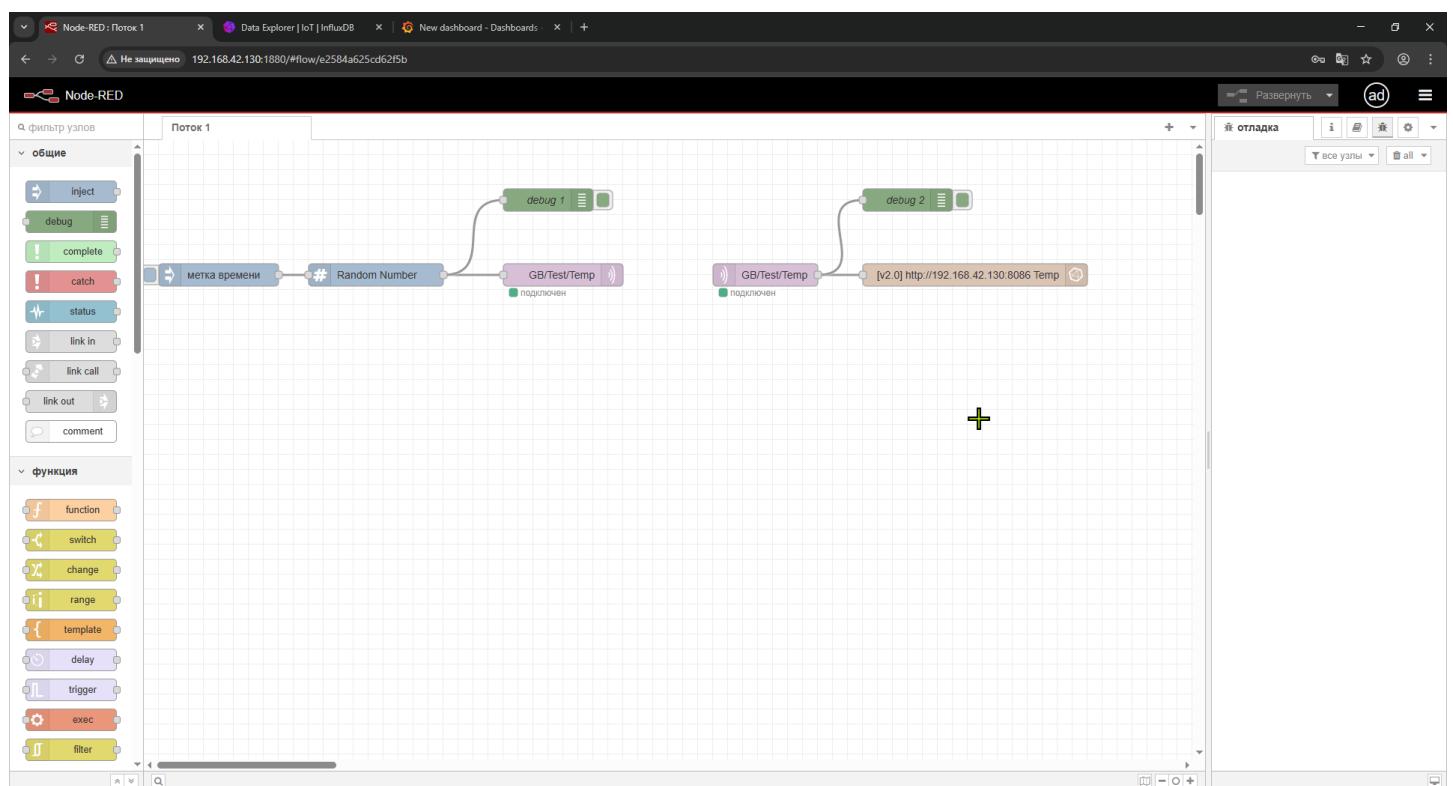
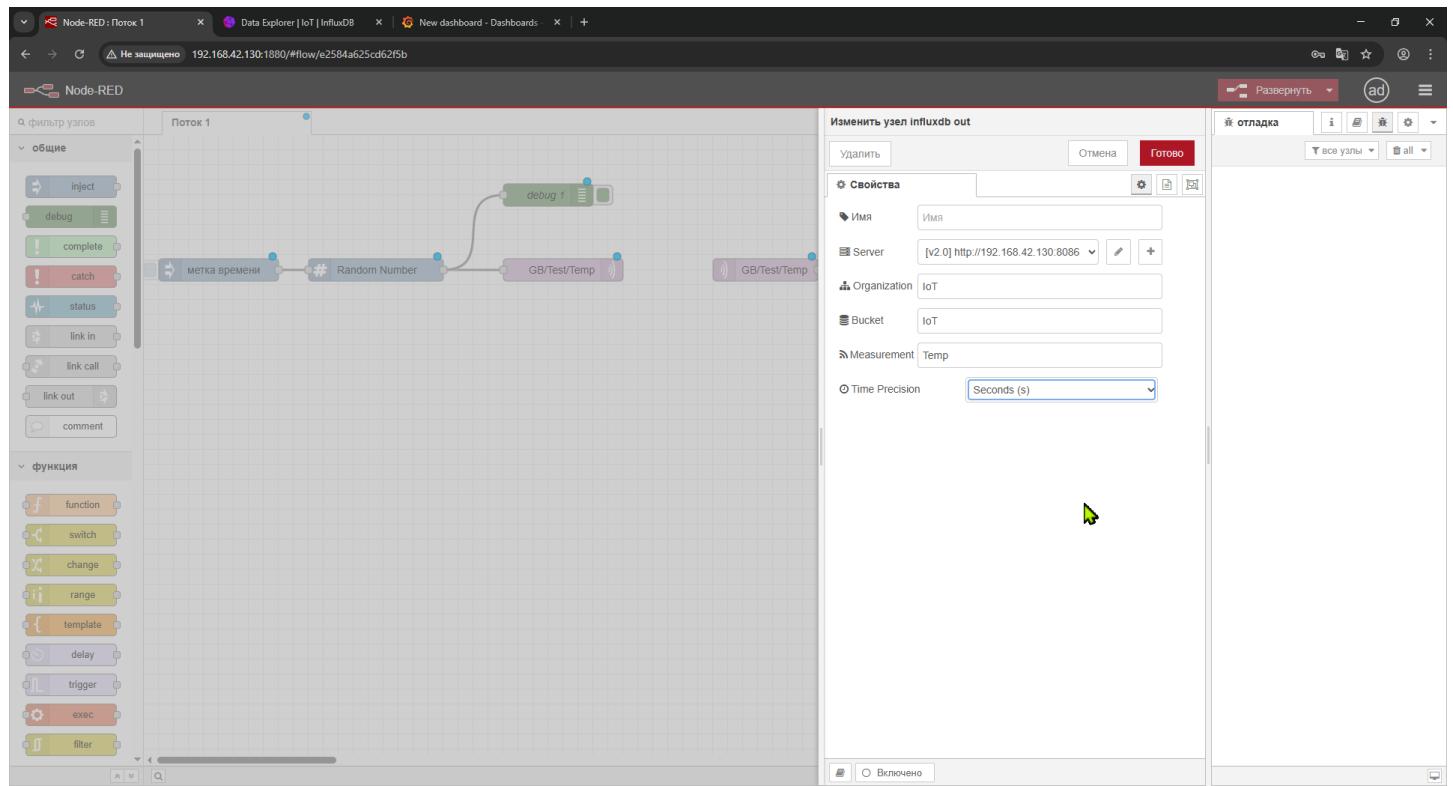
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Mon Jun  9 02:55:30 2025 from 192.168.42.1
root@debian:~# http
root@debian:~# mosquitto_pub -h 192.168.42.130 -p 1883 -t GB -m "22.5" -u "IoT" -P "123"
root@debian:~# mosquitto_pub -h 192.168.42.130 -p 1883 -t GB -m "25.5" -u "IoT" -P "123"
root@debian:~# mosquitto_pub -h 192.168.42.130 -p 1883 -t GB -m "21.9" -u "IoT" -P "123"
root@debian:~#

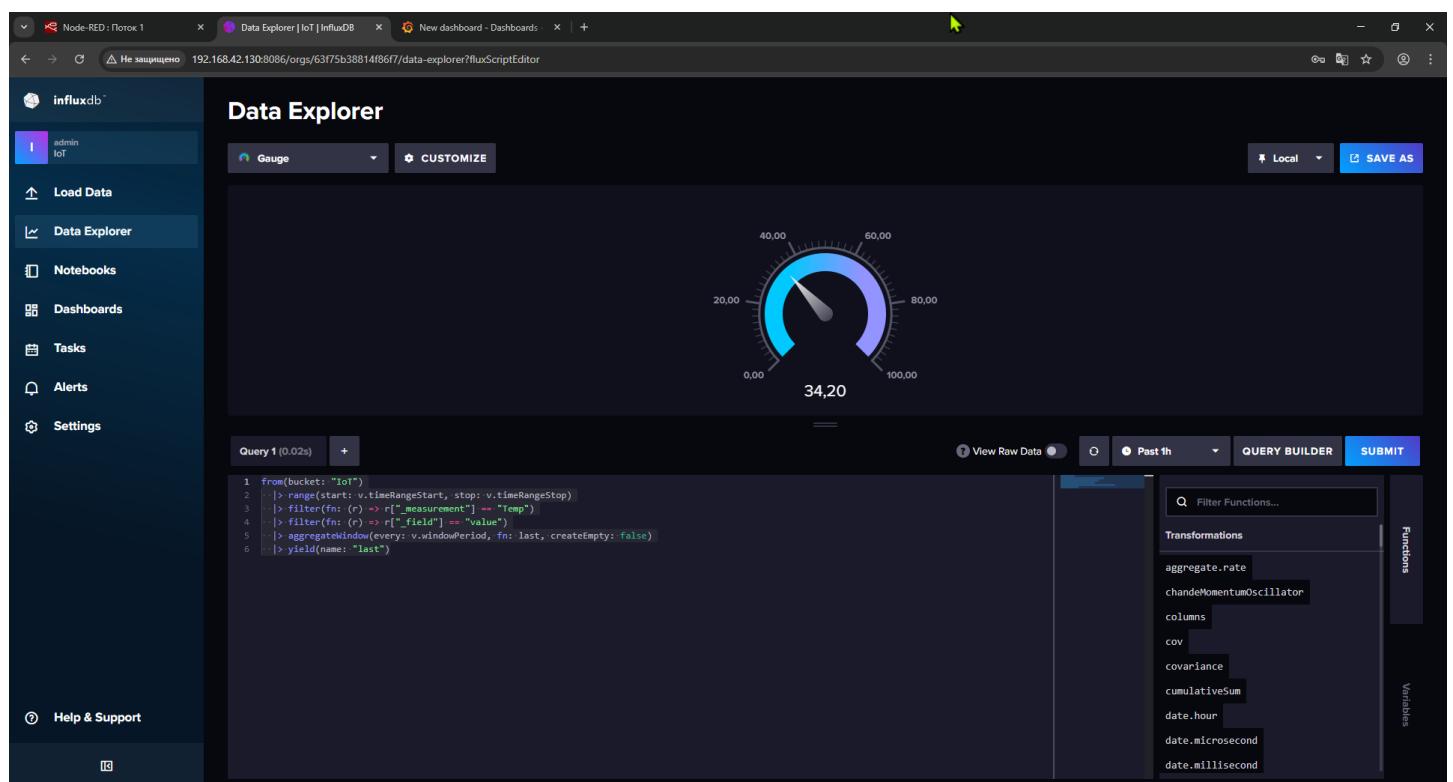
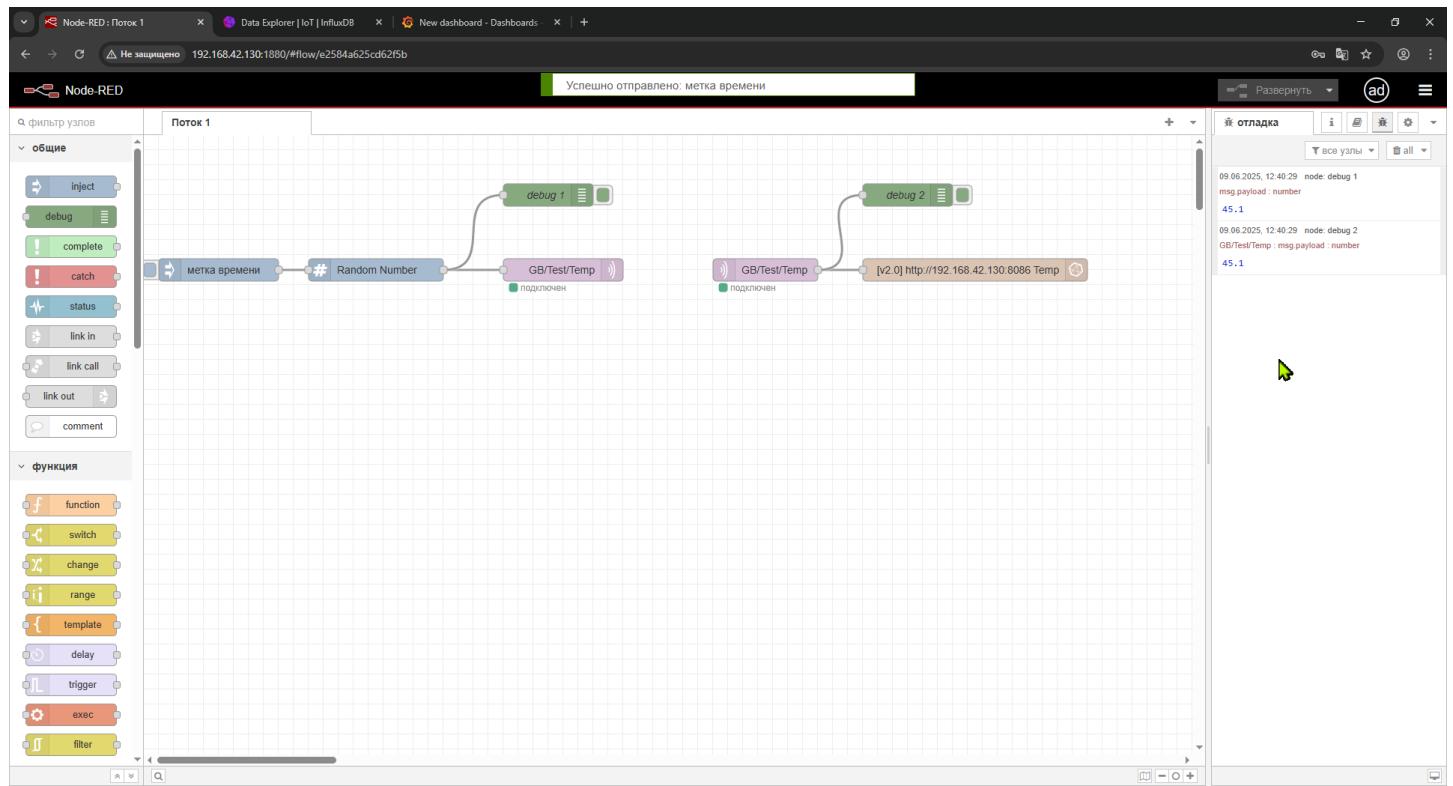
```

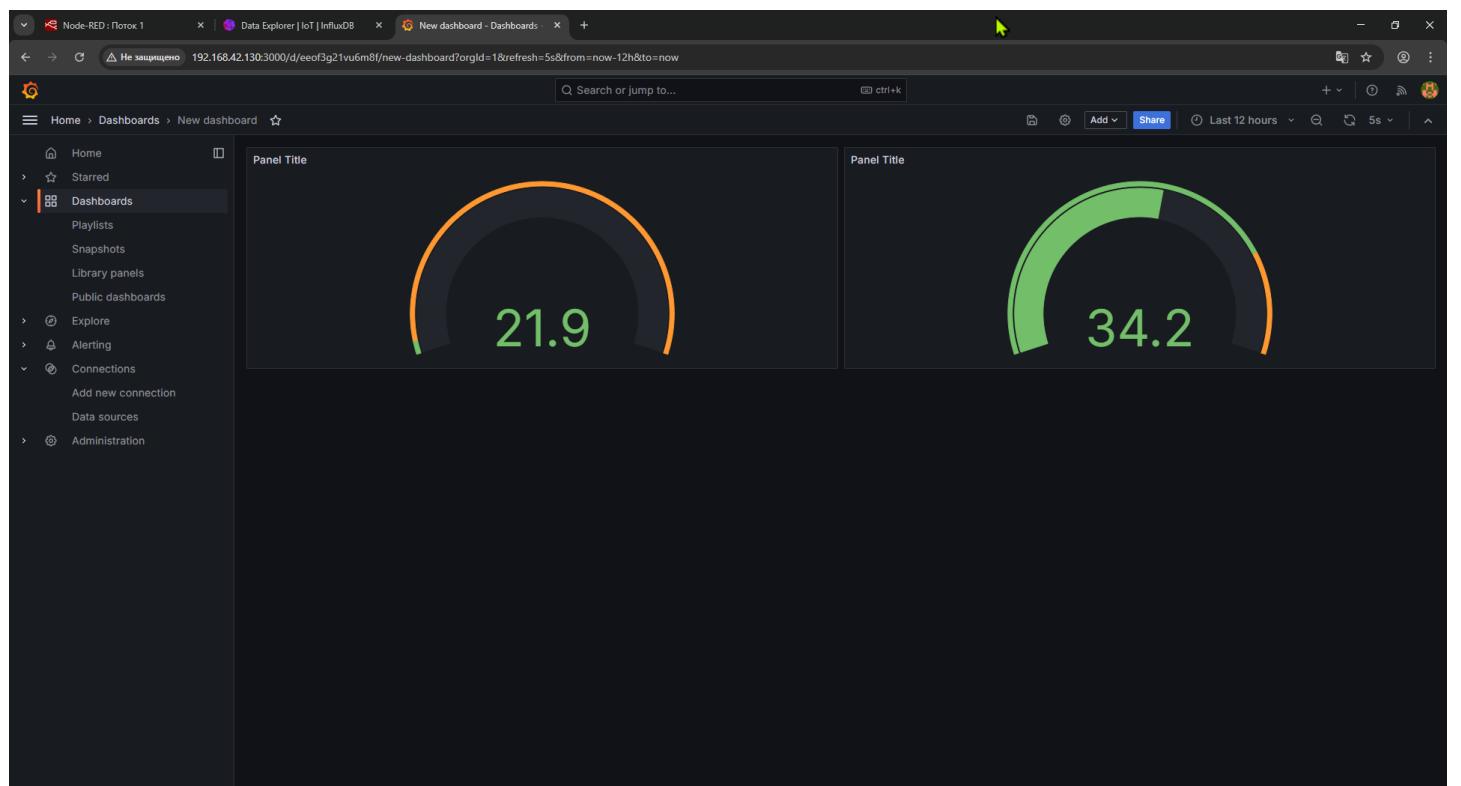
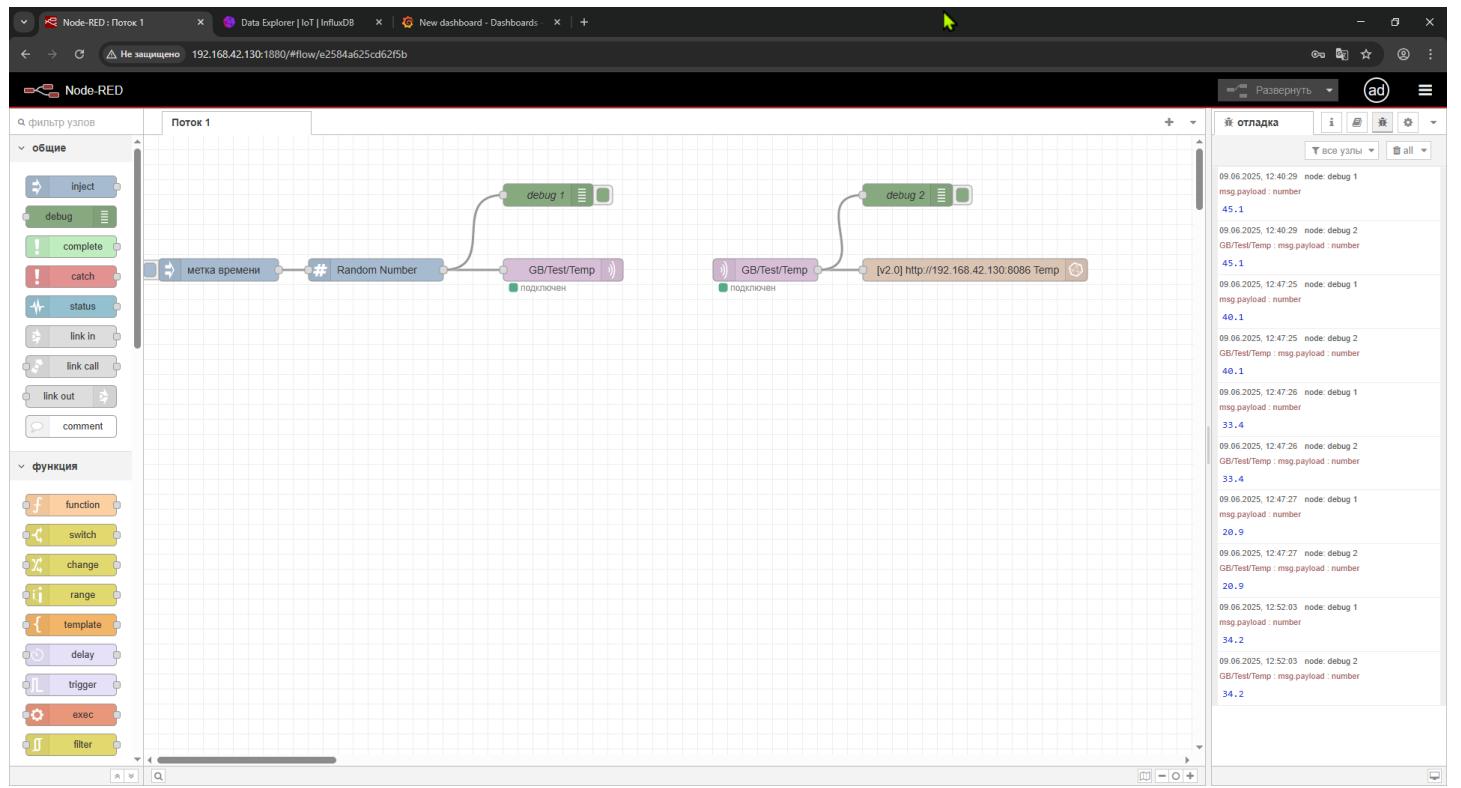












Node-RED : Порт 1

Data Explorer | IoT | InfluxDB

New dashboard - Dashboards

Не запущено 192.168.42.130:8086/orgs/63f75b38814f86f7/data-explorer?fluxScriptEditor

Data Explorer

influxdb

admin IoT

Load Data

Data Explorer

Notebooks

Dashboards

Tasks

Alerts

Settings

Help & Support

Simple Table

CUSTOMIZE

Local

SAVE AS

table last _measurement mqtt_consumer _field value _value 45.1 _time 2025-06-09T08:40:30.000Z host debian topic GB/Test/Temp

0 mqtt_consumer value 28.9 2025-06-09T08:47:30.000Z debian GB/Test/Temp

0 mqtt_consumer value 34.2 2025-06-09T08:52:05.000Z debian GB/Test/Temp

Query 1 (0.0s) +

FROM Search buckets

ToT _monitoring _tasks + Create Bucket

Filter _measurement 1 topic 1 _field 1 host 1

Search _measurement tag values Search topic tag values Search _field tag values Search host tag values

Temp GB value debian

Value

View Raw Data

Past 24h

SCRIPT EDITOR SUBMIT

WINDOW PERIOD

CUSTOM AUTO

5s Fill missing values

AGGREGATE FUNCTION

CUSTOM AUTO

mean median last

Новая вкладка

Node-RED : Порт 1

Data Explorer | IoT | InfluxDB

New dashboard - Dashboards

ngrok - Inspect

a73c-188-253-209-18.ngrok-free.app

ERR_NGROK_6024 - You are about to visit a73c-188-253-209-18.ngrok-free.app

You are about to visit:
a73c-188-253-209-18.ngrok-free.app
Website IP: 188.253.209.18

- This website is served for free through [ngrok.com](#).
- You should only visit this website if you trust whoever sent the link to you.
- Be careful about disclosing personal or financial information like passwords, phone numbers, or credit cards.

[Visit Site](#)

Администратор: Windows PowerShell
ngrok

Take our ngrok in production survey! <https://forms.gle/aX1BPWzEA360udFn6>

Session Status	online
Account	Fred (Plan: Free)
Update	update available (version 3.23.0, Ctrl-U to update)
Version	3.22.1
Region	Europe (eu)
Latency	92ms
Web Interface	http://127.0.0.1:4040
Forwarding	https://a73c-188-253-209-18.ngrok-free.app -> http://192.168.42.130:1880
Connections	ttl opn rtt5 rt5 p50 p90
HTTP Requests	-----

```

16:06:55.161 +00 GET /red/images/node-red-256.svg 200 OK
16:06:55.161 +00 GET /red/images/spin.svg 200 OK
16:06:54.471 +00 GET /locales/editor 200 OK
16:06:54.471 +00 GET /locales/node-red 200 OK
16:06:54.472 +00 GET /locales/node-red 200 OK
16:06:54.472 +00 GET /locales/editor 200 OK
16:06:54.472 +00 GET /locales/infotips 200 OK
16:06:54.471 +00 GET /locales/jsonata 200 OK
16:06:54.471 +00 GET /favicon.ico 200 OK
16:06:54.614 +00 GET /red/images/node-red.svg 200 OK

```

Setup - ngrok

dashboard.ngrok.com/get-started/setup/windows

Fred

Getting Started

Setup & Installation

Your Authtoken

Universal Gateway

Endpoints

Domains

TCP Addresses

TLS Certificates

Kubernetes Operators

Traffic Policy

Traffic Policy

IP Policies

TLS Certificate

Authorities

App Users

Traffic Observability

Traffic Inspector

Events Stream

Secure Tunnels

Agents

Ingress

Identity & Access

Team Members

Billing

Usage

Early Access

Support

Documentation

1 Connect

Get an endpoint online.

Agent Windows

Choose another platform

Installation

Chocolatey Download

Install ngrok via Chocolatey with the following command:

```
choco install ngrok
```

Run the following command to add your authtoken to the default `ngrok.yml` configuration file.

```
ngrok config add-authtoken 2yGjRtjalzsdpmvipVq3k
```

Deploy your app online

Ephemeral Domain Static Domain

Put your app online at an ephemeral domain forwarding to your upstream service. For example, if it is listening on port `http://localhost:8080`, run:

```
ngrok http http://localhost:8080
```

Once running, your endpoints will be listed on the [endpoints](#) page.

Помощь

The screenshot shows the 'Setup' section of the ngrok dashboard. On the left is a sidebar with various management links. The main area is titled 'Connect' with the sub-section 'Windows'. It shows how to install the 'Agent' (Chocolatey) and provides a command to add an authtoken to the configuration file. Below this, there's a section for deploying an app online using an ephemeral domain, with a command provided for that as well.

Node-RED: Поток 1

4e9d-188-253-216-66.ngrok-free.app/#flow/e2584a625cd62f5b

Node-RED

файл узлов

Поток 1

общие

inject

debug

complete

catch

метка времени

Random Number

GB/Test/Temp

[v2.0] http://192.168.42.130:8086 Temp

отладка

14.06.2025, 20:34:52 node: debug 1
msg.payload : number
40,8

14.06.2025, 20:34:52 node: debug 2
GB/Test/Temp : msg.payload : number
40,8

14.06.2025, 20:37:51 node: debug 1
msg.payload : number
24,3

14.06.2025, 20:37:51 node: debug 2
GB/Test/Temp : msg.payload : number
24,3

14.06.2025, 20:39:51 node: debug 1
msg.payload : number
42

14.06.2025, 20:39:51 node: debug 2
GB/Test/Temp : msg.payload : number
42

New dashboard - Dashboards

Home > Dashboards > New dashboard

Panel Title

21.9

Panel Title

42

Windows PowerShell
ngrok

Take our ngrok in production survey! <https://forms.gle/aX1BFwZe>

Session Status

Account
Update
Version
Region
Latency
Web Interface
Forwarding

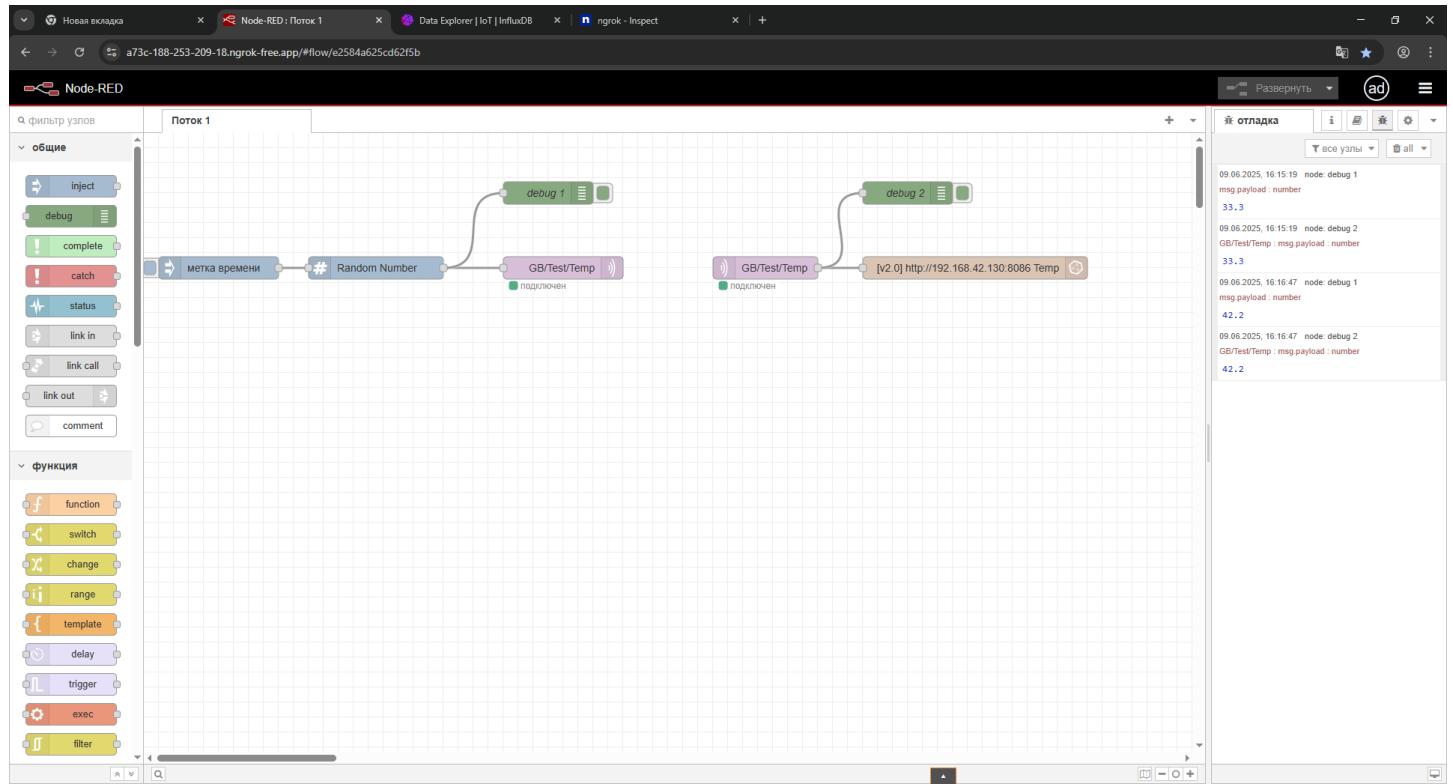
Connections

ttl ope rt1 rt5 p
65 1 0.00 0.01 0

HTTP Requests

The screenshot shows the Node-RED interface. At the top, there are tabs for 'Node-RED: Поток 1' and 'Data Explorer | IoT | influxDB'. Below is the main workspace with a flow consisting of an 'inject' node, a 'debug' node, a 'Random Number' node, and two more 'debug' nodes. To the right is a terminal window showing ngrok log entries. At the bottom, there's a dashboard with two panels, each containing a gauge with the value 21.9 and 42 respectively. A status summary on the right side provides information about the session status and connections.

The screenshot shows a Node-RED flow and a corresponding dashboard. The Node-RED interface includes a sidebar with common nodes like inject, debug, complete, catch, and status. A main canvas displays a flow starting with an inject node, followed by a debug node labeled 'debug 1'. This is followed by a 'Метка времени' (Time Stamp) node, a Random Number node, and a GB/Test/Temp node. The output of the GB/Test/Temp node is connected to a [v2.0] http://192.168.42.130:8086 Temp node. The dashboard below has two panels titled 'Panel Title' each featuring a gauge chart. The left gauge shows a value of 21.9, and the right gauge shows a value of 42.2. To the right of the dashboard is a terminal window showing ngrok logs, and above it is a browser window displaying the dashboard URL.



The screenshot shows the Node-RED dashboard titled "New dashboard - Dashboards". It features two panels: one with a gauge showing a value of 21.9 and another with a gauge showing a value of 42. Below the dashboard is a "Data Explorer" window. The "Table" view shows a table with columns: _start, _stop, _time, _value, and _field. The data includes:

_start	_stop	_time	_value	_field
2025-06-14 20:29:06 GMT+4	2025-06-14 21:29:06 GMT+4	2025-06-14 20:30:00 GMT+4	23.40	value
2025-06-14 20:29:06 GMT+4	2025-06-14 21:29:06 GMT+4	2025-06-14 20:35:00 GMT+4	48.88	value
2025-06-14 20:29:06 GMT+4	2025-06-14 21:29:06 GMT+4	2025-06-14 20:38:00 GMT+4	24.38	value
2025-06-14 20:29:06 GMT+4	2025-06-14 21:29:06 GMT+4	2025-06-14 20:40:00 GMT+4	42	value

The "Query 1 (0.17s)" button is visible at the bottom left of the Data Explorer. To the right, a terminal window titled "ngrok" shows session status and recent HTTP requests. One request is highlighted:

```

Session Status
  Account          Fred (Plan: Free)
  Update          update available (version 3.23.1, Ctrl-U to update)
  Version         3.22.1
  Region          Europe (eu)
  Latency         83ms
  Web Interface  http://127.0.0.1:4040
  Forwarding     https://1215-188-253-216-66.ngrok-free.app -> http://127.0.0.1:4040
  Forwarding     https://9f0e-188-253-216-66.ngrok-free.app -> http://127.0.0.1:4040
  Forwarding     https://da7-188-253-216-66.ngrok-free.app -> http://127.0.0.1:4040
  
```

GPON Home Gateway

Logout English | Español

Application>Port Forwarding

Port	LAN Port	Device Name	Internal Client	Protocol	Description	Status	Configuration Source	Delete
28960	28960-28960	192.168.1.65	192.168.1.65	UDP	CalltoDuty	ACTIVE	Own	Delete
7777	7777-7777	192.168.1.65	192.168.1.65	TCP	I4dServer2tcp	ACTIVE	Own	Delete
7777	7777-7777	192.168.1.65	192.168.1.65	UDP	I4dServer2udp	ACTIVE	Own	Delete
8080	8080-8080	192.168.1.65	192.168.1.65	TCP/UDP	Server2TCP/UDP	ACTIVE	Own	Delete
27015	27015-27015	Archer_C6	192.168.1.64	TCP/UDP	I4dServer_Archer_C6	ACTIVE	Own	Delete
27020	27016-27020	Archer_C6	192.168.1.64	TCP/UDP	I4dServer_v2_Archer_C6	ACTIVE	Own	Delete

Add

GPON Home Gateway

Logout English | Español

Application>Port Forwarding

Connection	WAN Port	LAN Port	Device Name	Internal Client	Protocol	Description	Status
NET_R_VID_561	28960-28960	28960-28960	192.168.1.65	192.168.1.65	UDP	CalltoDuty	ACTIVE
NET_R_VID_561	7777-7777	7777-7777	192.168.1.65	192.168.1.65	TCP	I4dServer2tcp	ACTIVE
NET_R_VID_561	7777-7777	7777-7777	192.168.1.65	192.168.1.65	UDP	I4dServer2udp	ACTIVE
NET_R_VID_561	27015-27015	27015-27015	Archer_C6	192.168.1.64	TCP/UDP	I4dServer_Archer_C6	ACTIVE
NET_R_VID_561	27016-27020	27016-27020	Archer_C6	192.168.1.64	TCP/UDP	I4dServer_v2_Archer_C6	ACTIVE
NET_R_VID_561	1880-1880	1880-1880	Archer_C6	192.168.1.64	TCP/UDP	Node-red	ACTIVE

USB

UPNP and DLNA

Maintenance

WAN Connection List

2_INTERNET_R_VID_561

Description

Add

Port	LAN Port	Device Name	Internal Client	Protocol	Description	Status	Configuration Source	Delete
960	28960-28960	192.168.1.65	192.168.1.65	UDP	CallOfDuty	ACTIVE	Own	Delete
77	7777-7777	192.168.1.65	192.168.1.65	TCP	I4dServer2tcp	ACTIVE	Own	Delete
77	7777-7777	192.168.1.65	192.168.1.65	UDP	I4dServer2udp	ACTIVE	Own	Delete
015	27015-27015	Archer_C6	192.168.1.64	TCP/UDP	I4dServer_Archer_C6	ACTIVE	Own	Delete
020	27016-27020	Archer_C6	192.168.1.64	TCP/UDP	I4dServer_v2_Archer_C6	ACTIVE	Own	Delete
80	1880-1880	Archer_C6	192.168.1.64	TCP/UDP	Node-red	ACTIVE	Own	Delete
00	9000-9000	Archer_C6	192.168.1.64	TCP/UDP	test01	ACTIVE	Own	Delete
85	8080-8085	Archer_C6	192.168.1.64	TCP/UDP	Test_8080_8085	DEACTIVE	Own	Delete
00	3000-3000	Archer_C6	192.168.1.64	TCP/UDP	Grafana	ACTIVE	Own	Delete
86	8086-8086	Archer_C6	192.168.1.64	TCP/UDP	InfluxDB	ACTIVE	Own	Delete