



*Consiglio Nazionale delle Ricerche  
Istituto di Calcolo e Reti ad Alte Prestazioni*

## **Report d'installazione nella sede Aterp per il Progetto Cogito**

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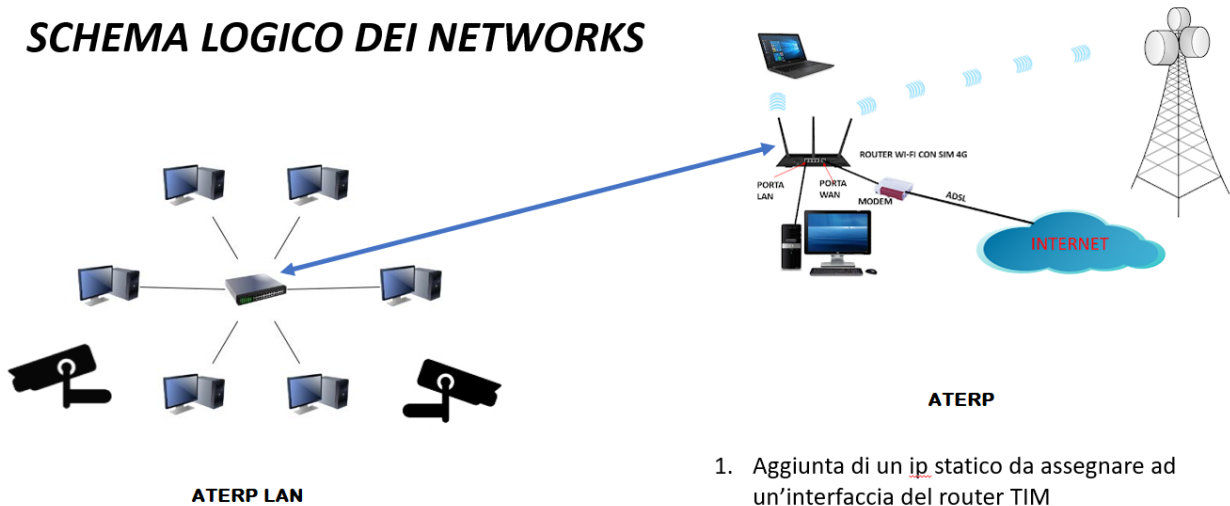
## Installazione sede Aterp Progetto Cogito

### SCHEMA LOGICO DEI NETWORKS

per interconnessione rete Cogito TIM 4G ↔ rete COGITO

### SCHEMA LOGICO DEI NETWORKS

## SCHEMA LOGICO DEI NETWORKS



1. Aggiunta di un ip statico da assegnare ad un'interfaccia del router TIM
2. Aggiunta delle opportune rotte statiche Lato TIM:
  1. Configurazione statica dell' interfaccia del router «verso» **ATERP**
  2. Aggiunta delle opportune rotte statiche

### Configurazione IP e tabelle di routing dedicate su simulazione LINUX ( router network 4G COGITO )

```
alpine64-net65:~# ip r s
default via 192.168.X.1 dev eth0 metric 202
192.168.Y.0/24 dev eth1 scope link src 192.168.Y.1
192.168.Z.0/30 dev eth2 scope link src 192.168.Z.2
192.168.Z.10 via 192.168.Z.1 dev eth2
192.168.Z.11 via 192.168.Z.1 dev eth2
192.168.X.0/24 dev eth0 scope link src 192.168.X.175
alpine64-net65:~# ip a s
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
    qlen 1000
    link/ether 08:00:27:91:80:20 brd ff:ff:ff:ff:ff:ff
    inet 192.168.X.175/24 brd 192.168.X.255 scope global eth0
        valid_lft forever preferred_lft forever
    inet6 fd2e:4f55:214b:0:a00:27ff:fe91:8020/64 scope global dynamic flags 100
        valid_lft forever preferred_lft forever
```

```
inet6 fe80::a00:27ff:fe91:8020/64 scope link
    valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
qlen 1000
    link/ether 08:00:27:d8:e7:76 brd ff:ff:ff:ff:ff:ff
    inet 192.168.Y.1/24 brd 192.168.Y.255 scope global eth1
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fed8:e776/64 scope link
        valid_lft forever preferred_lft forever
4: eth2: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
qlen 1000
    link/ether 08:00:27:bb:5f:44 brd ff:ff:ff:ff:ff:ff
    inet 192.168.Z.2/30 brd 192.168.Z.3 scope global eth2
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:febb:5f44/64 scope link
        valid_lft forever preferred_lft forever
```

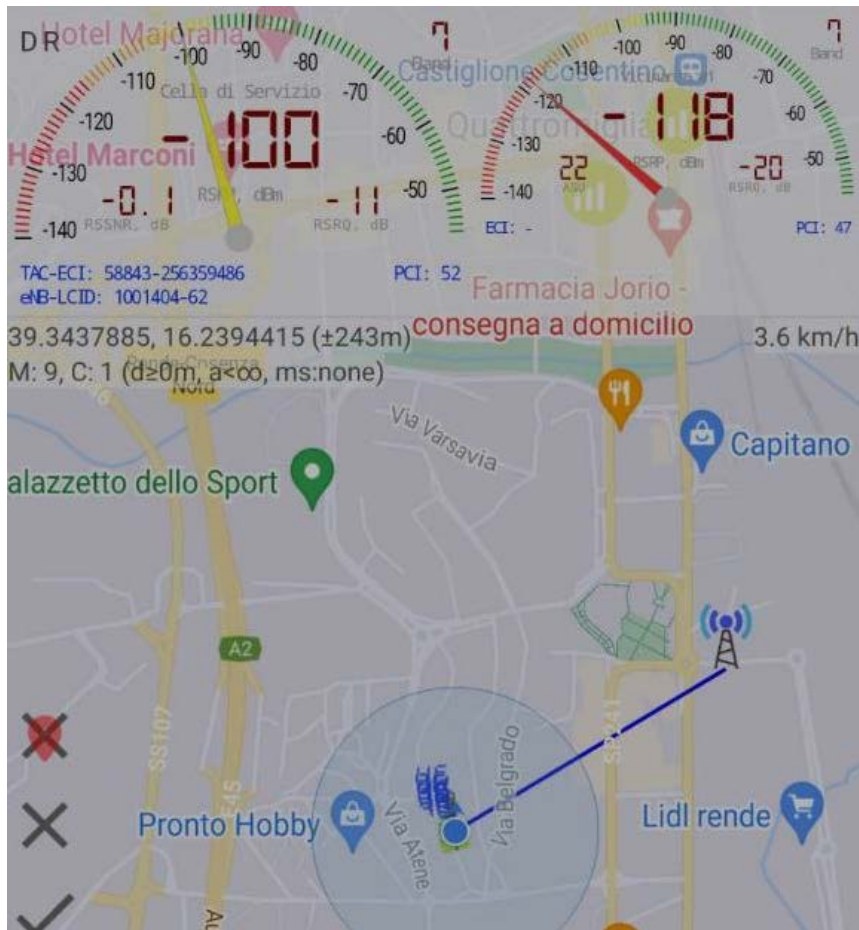
### **Configurazione IP e tabelle di routing dedicate su simulazione LINUX ( router network XYZ ATERP )**

```
alpine64-net90:~# ip r s
default via 192.168.X.1 dev eth0 metric 202
192.168.Y.10 via 192.168.Z.2 dev eth1
192.168.Y.11 via 192.168.Z.2 dev eth1
192.168.Z.0/24 dev eth1 scope link src 192.168.Z.1
192.168.X.0/24 dev eth0 scope link src 192.168.X.174
alpine64-net90:~# ip a s
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
qlen 1000
    link/ether 08:00:27:70:1e:51 brd ff:ff:ff:ff:ff:ff
    inet 192.168.X.174/24 brd 192.168.X.255 scope global eth0
        valid_lft forever preferred_lft forever
    inet6 fd2e:4f55:214b:0:a00:27ff:fe70:1e51/64 scope global dynamic flags 100
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fe70:1e51/64 scope link
        valid_lft forever preferred_lft forever
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
qlen 1000
    link/ether 08:00:27:f5:6d:4f brd ff:ff:ff:ff:ff:ff
    inet 192.168.Z.1/24 brd 192.168.Z.255 scope global eth1
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fef5:6d4f/64 scope link
        valid_lft forever preferred_lft forever
```

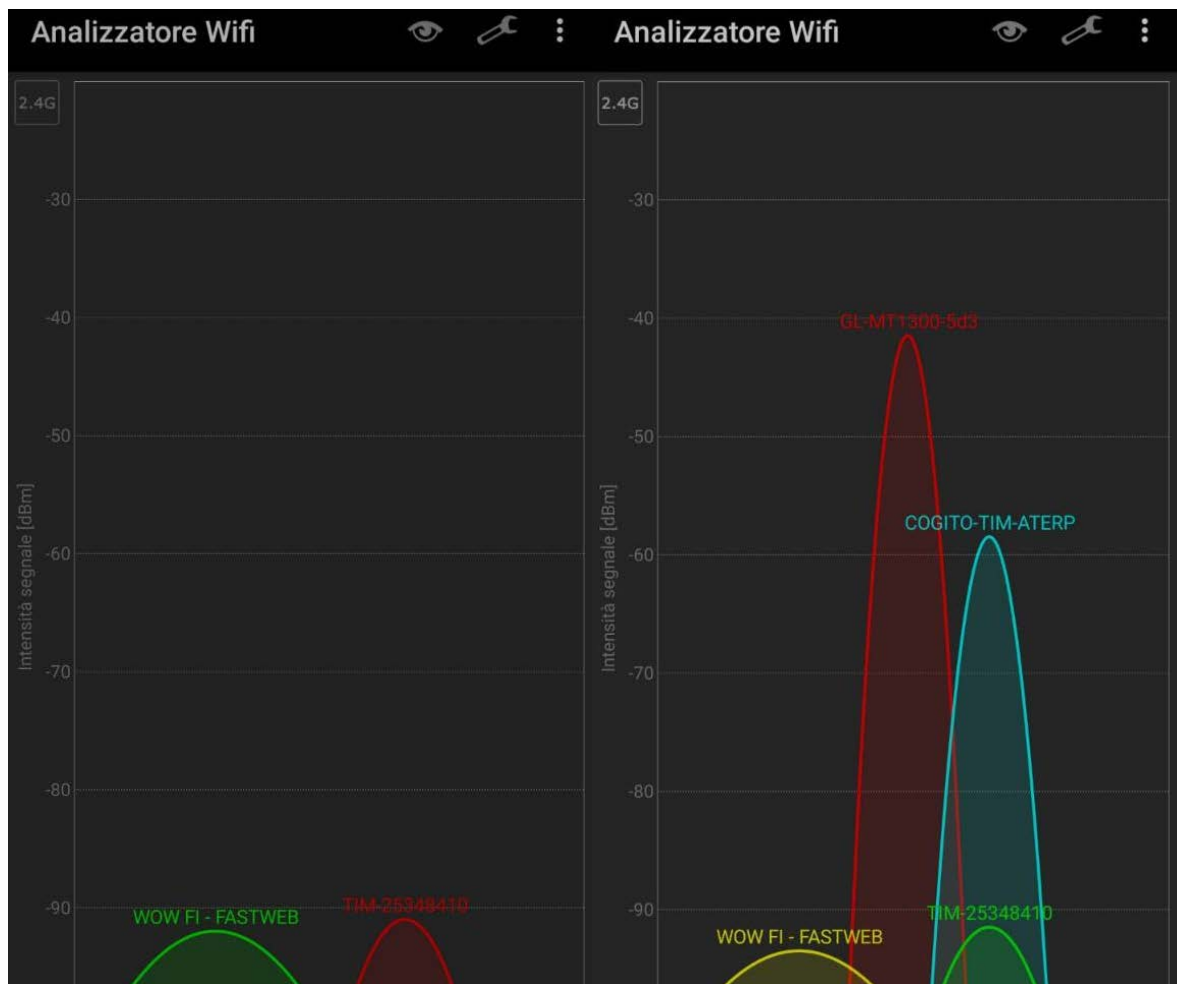
Si riporta di seguito il report d'installazione presso la sede Aterp del progetto Cogito.



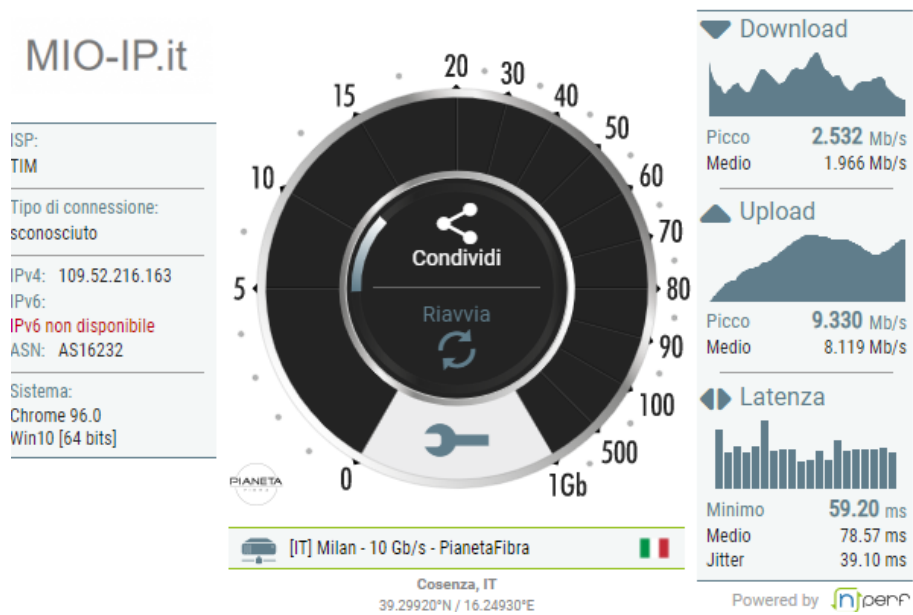
I 3 SSID dei network wifi della rete Aterp.



QOS e distanza dal punto di accesso 4G presso la sede Aterp



## Rapporto dello stato delle reti wifi installate presso Aterp ( pre e Post setup )



Speedtest effettuato presso l'Aterp

Ringraziamenti:

Si ringrazia il collega Danilo Cistaro per il supporto tecnico prestato e per la collaborazione nella fase di test.