

Mbulimi i një kantieri industrial me wireless



ens

easy network solutions



Projektoi

Easy Network Solutions

Paraqet: Elton Tërshana, Nëntor 2018

Qëllimi

- Ndërtimi i rrjetit të jashtëm
- Lidhja e pajisjeve (tablets, handhelds)
- Vështirësia për të parësore objektet e mëdha metalike

Ambjenti



Konceptimi paraprak

- Vizitë në terren për të vlerësuar kushtet dhe mundësitë e instalimit
- Ndarja e fazave të projektit



Fazat e projektit

Montimi i pajisjeve

Konfigurimi

Testim Monitorim

Pajisjet

- Kutia montimi të bëra posacërisht për këtë qëllim
- Kabllim me veshje të posacme
- Inverter 24V

Pajisjet

- OmniTIK 5 AC -13 copë
- mANT BOX 15s -15 copë
- SXT Lite 5 -13 copë



Konfigurimi

- Objektet metalike sjellin ndërlikime nga rastet rëndom të mbulimit me wireless
- Capsman

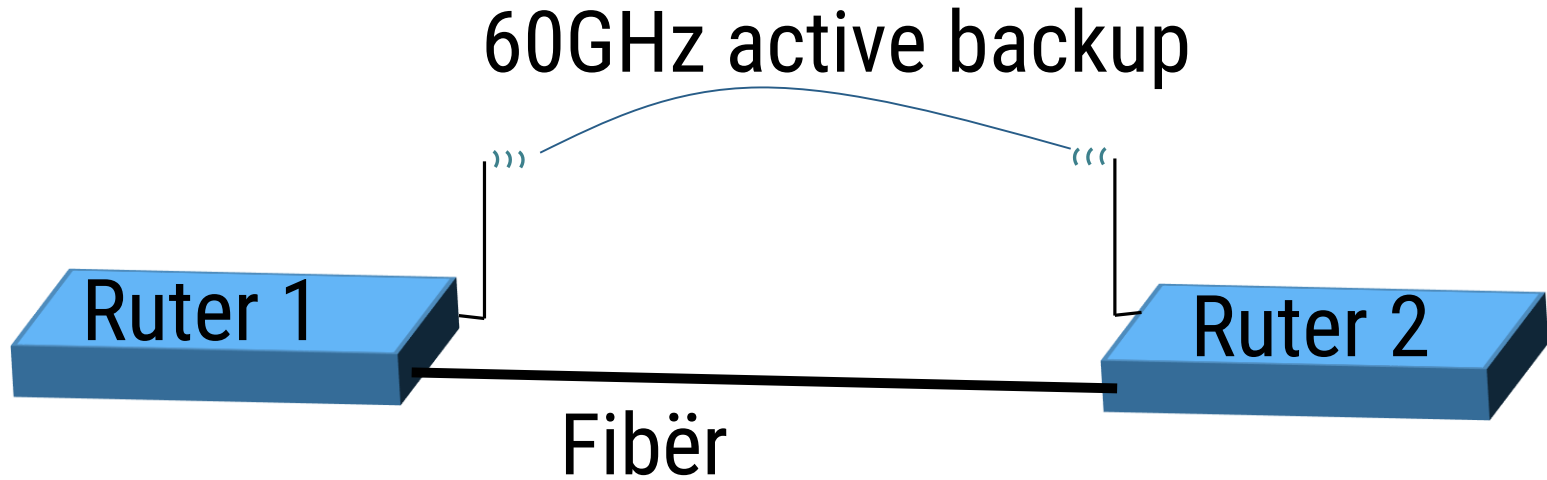
60GHz me Qendren

- Lidhja me Serverin nëpërmjet fibrës
- U ndërtua linjë mbështetëse ne 60GHz

Bonding

- Pajisje e re “Wireless Wire”
- Ruterave ekzistues të lidhur me fibër i shtojmë një linjë me 60GHz

Bonding



Bonding

00:20:11
00:37:10
00:20:11
00:20:11
17:29:33
00:00:00
00:00:00
21:31:42
17:46:38

Find

Interface <bonding1>

General Bonding Status Traffic

Slaves: ether3
sfp1

Mode: active backup

Primary: sfp1

Link Monitoring: mii

Transmit Hash Policy: layer 2

Min. Links: 0

Down Delay: 0 ms

Up Delay: 0 ms

LACP Rate: 30 s

MII Interval: 100 ms

OK
Cancel
Apply
Disable
Comment
Copy
Remove
Torch

enabled running slave

Bonding

Address List

Find

	Address	Network	Interface
	172.16.0.1/24	172.16.0.0	bonding1
D	192.168.2.174/24	192.168.2.0	ether5
	192.168.88.10/24	192.168.88.0	ether3

time
00:20:11
00:37:10
00:20:11
00:20:11
20d 17:29:33
00:00:00
00:00:00
8d 21:31:42
20d 17:46:38

Interface <bonding1>

General Bonding Status Traffic

Slaves: ether3
sfp1

Mode: active backup

Primary: sfp1

OK
Cancel
Apply
Disable
Comment

Bonding

Interface <bonding1>

General Bonding Status Traffic

Slaves: sfp 1 ether2

Mode: active backup

Primary: sfp 1

Link Monitoring: mii

Transmit Hash Policy: layer 2

Min. Links: 0

Down Delay: 0 ms

Up Delay: 0 ms

LACP Rate: 30 s

MII Interval: 100 ms

OK
Cancel
Apply
Disable
Comment
Copy
Remove
Torch

Bonding

Ethernet	1500	1598	158.8 kbps	43.5 kbps	27
Ethernet	1500	1600	42.5 Mbps	42.6 Mbps	4 593

- Files
- Log
- Radius
- Tools
- New Terminal
- MetaROUTER
- Partition
- Make Supout.rif
- Manual
- New WinBox
- Exit

8 items

Reset Counters Reset All Counters

#	Action	Chain	Src. Address	Dst. Address	Proto...	Src. Port	Dst. Port	In. Inter...
Discovery Settings								
		Interface		IP Address				
			bonding1				172.16.0.2	
			bonding1				192.168.88.2	
			ether2					
			ether5					
			ether5				192.168.2.39	
			ether5				192.168.2.97	
			ether5				192.168.2.47	
			ether5				192.168.2.96	
			ether5				192.168.2.2	

```
Terminal
227 172.16.0.2      56 64 0ms
228 172.16.0.2      56 64 0ms
229 172.16.0.2      56 64 0ms
230 172.16.0.2      56 64 0ms
231 172.16.0.2      56 64 0ms
232 172.16.0.2      56 64 1ms
233 172.16.0.2      56 64 0ms
234 172.16.0.2      56 64 0ms
235 172.16.0.2      56 64 0ms
236 172.16.0.2      56 64 0ms
237 172.16.0.2      56 64 0ms
238 172.16.0.2      56 64 0ms
239 172.16.0.2      56 64 0ms
  sent=240 received=227 packet-loss=5% min-rtt=0ms avg-rtt=0ms max-rtt=14ms
SEQ HOST          SIZE TTL TIME  STATUS
240 172.16.0.2      56 64 0ms
241 172.16.0.2      56 64 0ms
242 172.16.0.2      56 64 0ms
243 172.16.0.2      56 64 0ms
244 172.16.0.2      56 64 0ms
245 172.16.0.2      56 64 0ms
246 172.16.0.2      56 64 0ms
247 172.16.0.2      56 64 0ms
```

Bandwidth Test (Running)

Test To: 172.16.0.2 Start Stop Close

Protocol: udp tcp

Local UDP Tx Size:

Remote UDP Tx Size:

Direction: both

TCP Connection Count: 20

Local Tx Speed: 40M bps

Remote Tx Speed: 40M bps

Random Data

User: admin

Password:

Lost Packets: 0

Tx/Rx Current: 40.0 Mbps/39.8 Mbps

Tx/Rx 10s Average: 40.0 Mbps/39.9 Mbps

Tx/Rx Total Average: 40.1 Mbps/39.8 Mbps

running...