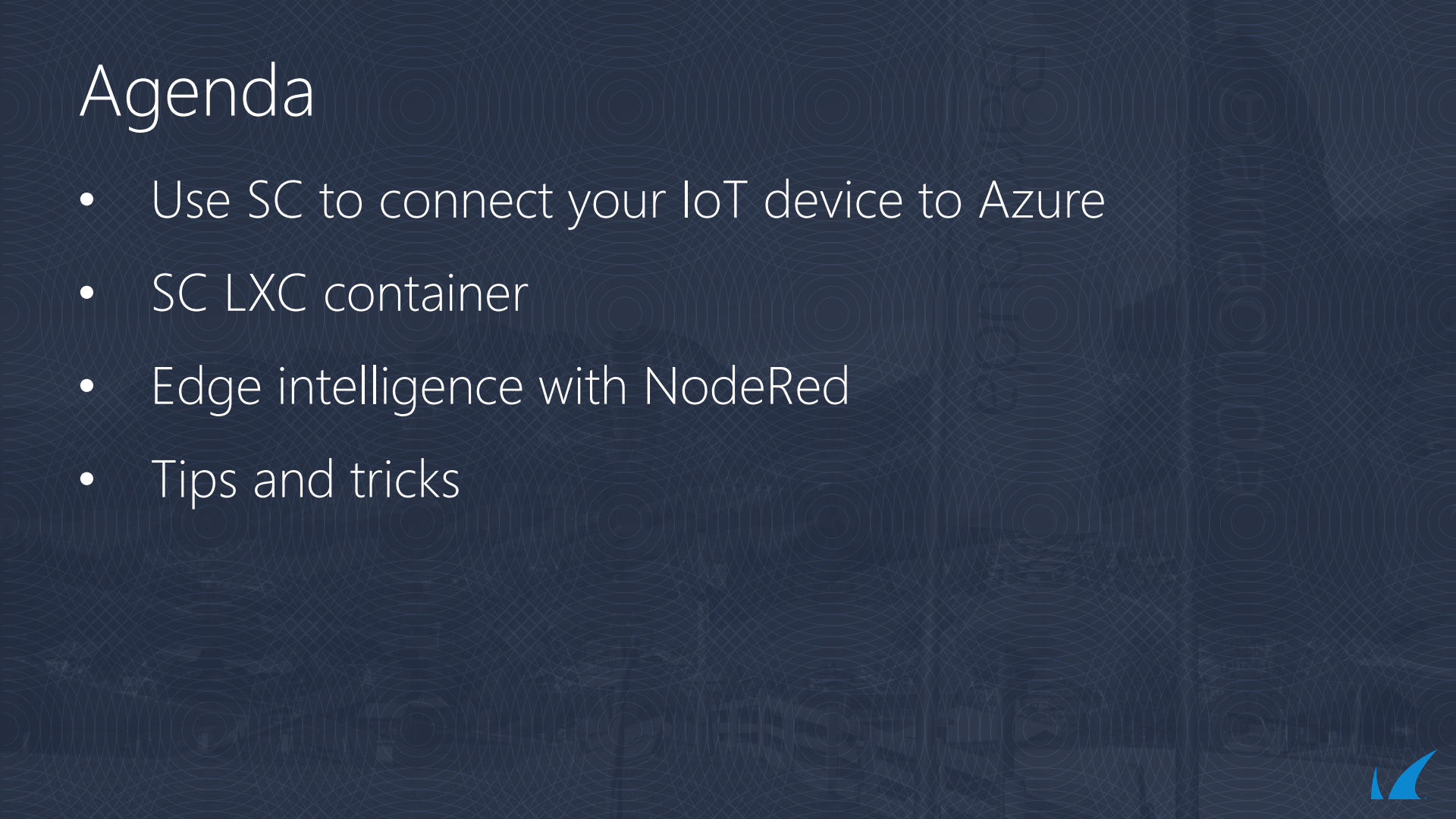

Barracuda
TECHSUMMIT19
BARRACUDA TECHNICAL SUMMIT
Using Secure Connector for IoT
Best practice

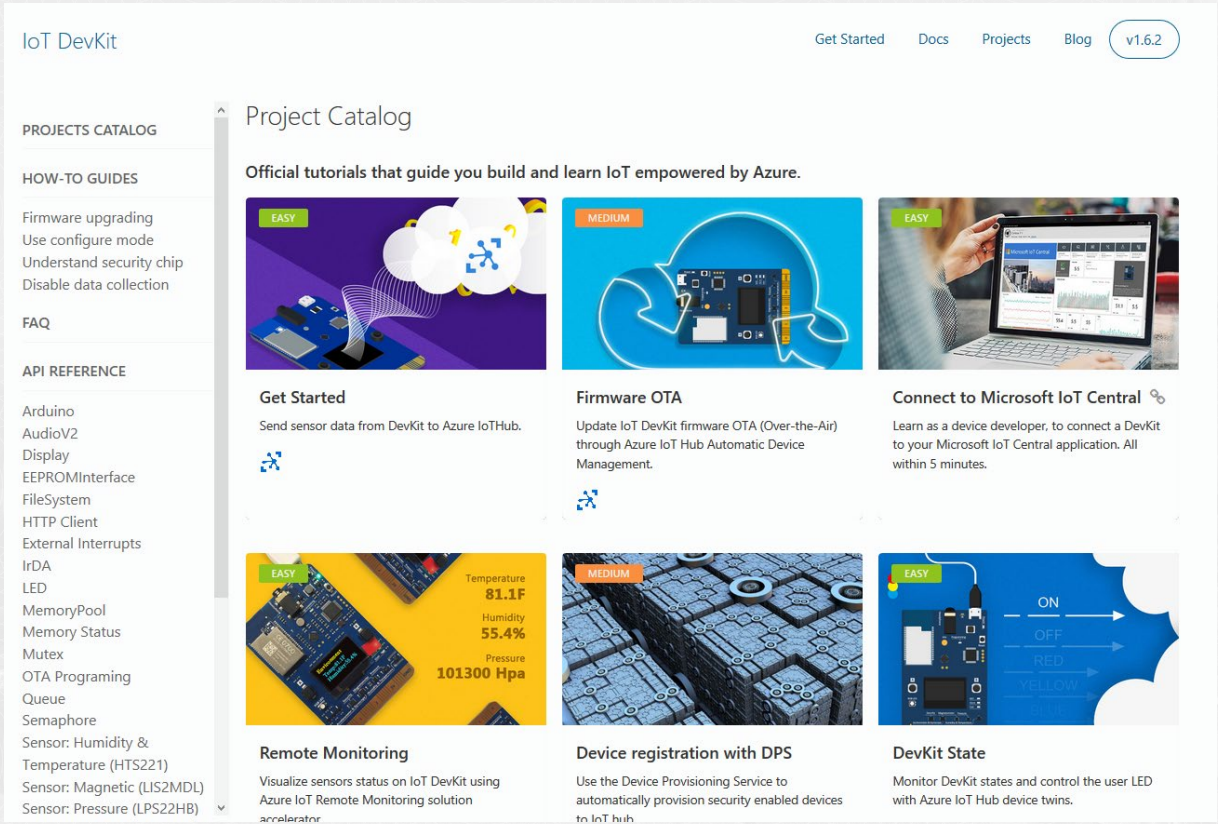
Agenda

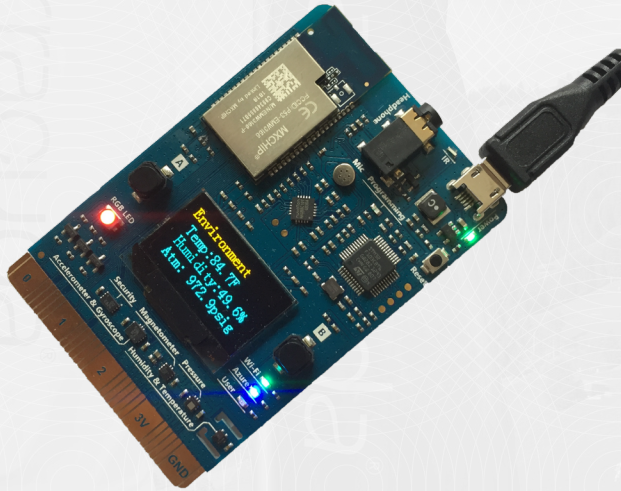
- Use SC to connect your IoT device to Azure
- SC LXC container
- Edge intelligence with NodeRed
- Tips and tricks



MXChip DevKit

MXChip DevKit

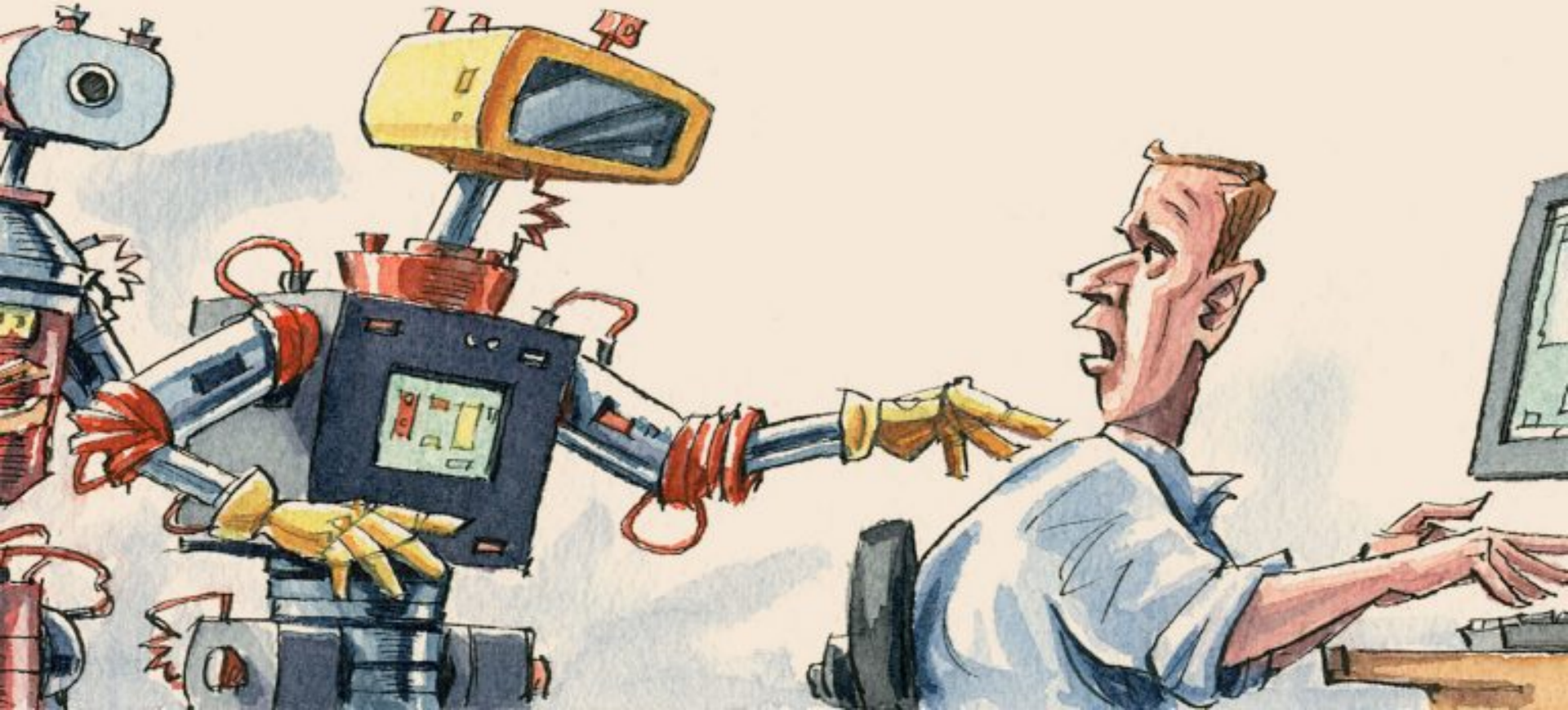




https://microsoft.github.io/azure-iot-developer-kit/docs/projects/

Edge computing

What do we expect?



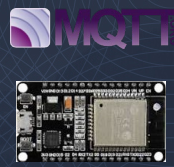
Cross platform challenges

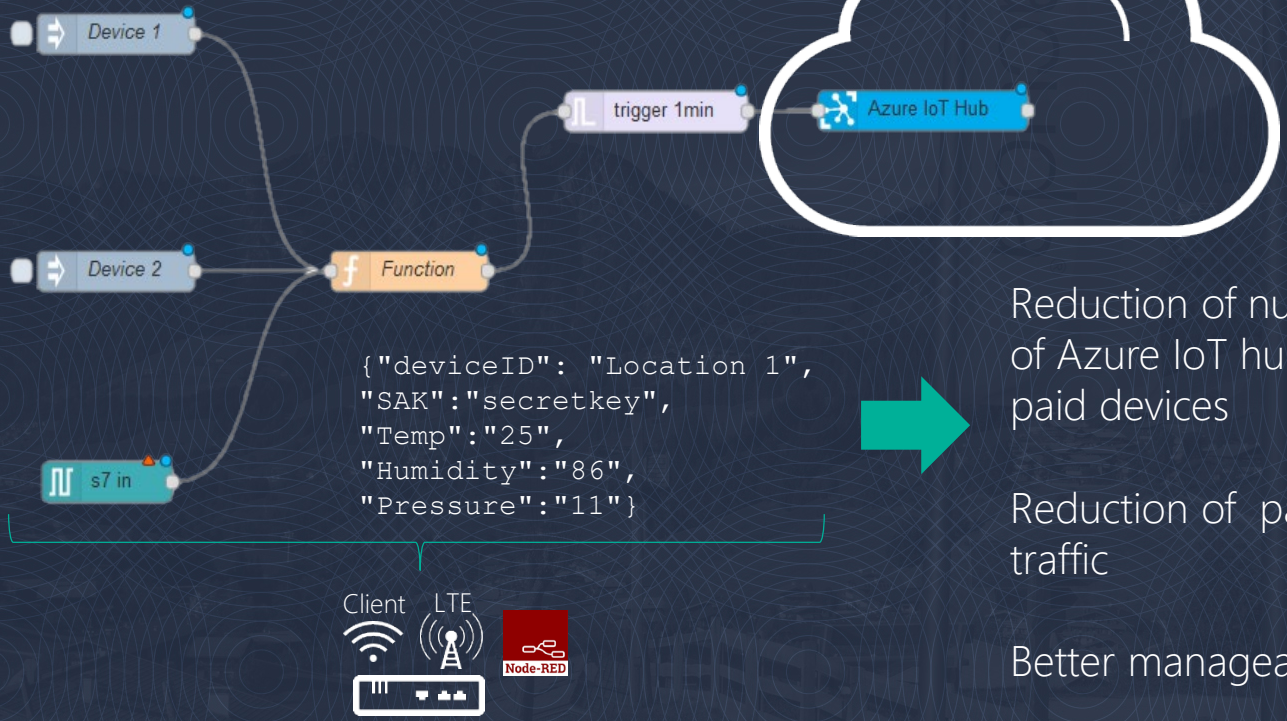
```
{"deviceID":"Device1",
"SAK":„supersecureaccesskey",
"Protocol":"mqtt",
"Data":{„Temp":"25"}}
```

```
{"deviceID":"Device2",
"SAK":„supersecureaccesskey1",
"Protocol":"mqtt",
"Data":{„Humidity":„58"}}
```

```
{"deviceID":"Device3",
"SAK":„supersecureaccesskey3",
"Protocol":"mqtt",
"Data":{„Pressure":„11"}}
```

Data reduction & Control consolidation





Reduction of number of Azure IoT hub paid devices

Reduction of paid traffic

Better manageability

Live Demo

More performance is on the way!

SC2	2 cores @ 1GHz (1 core)
	1 GB RAM (512 MB)
	16 GB storage (2 GB)
SC3	4 cores @ 1.2GHz
	2 GB RAM
	16 GB storage + 8 GB internal

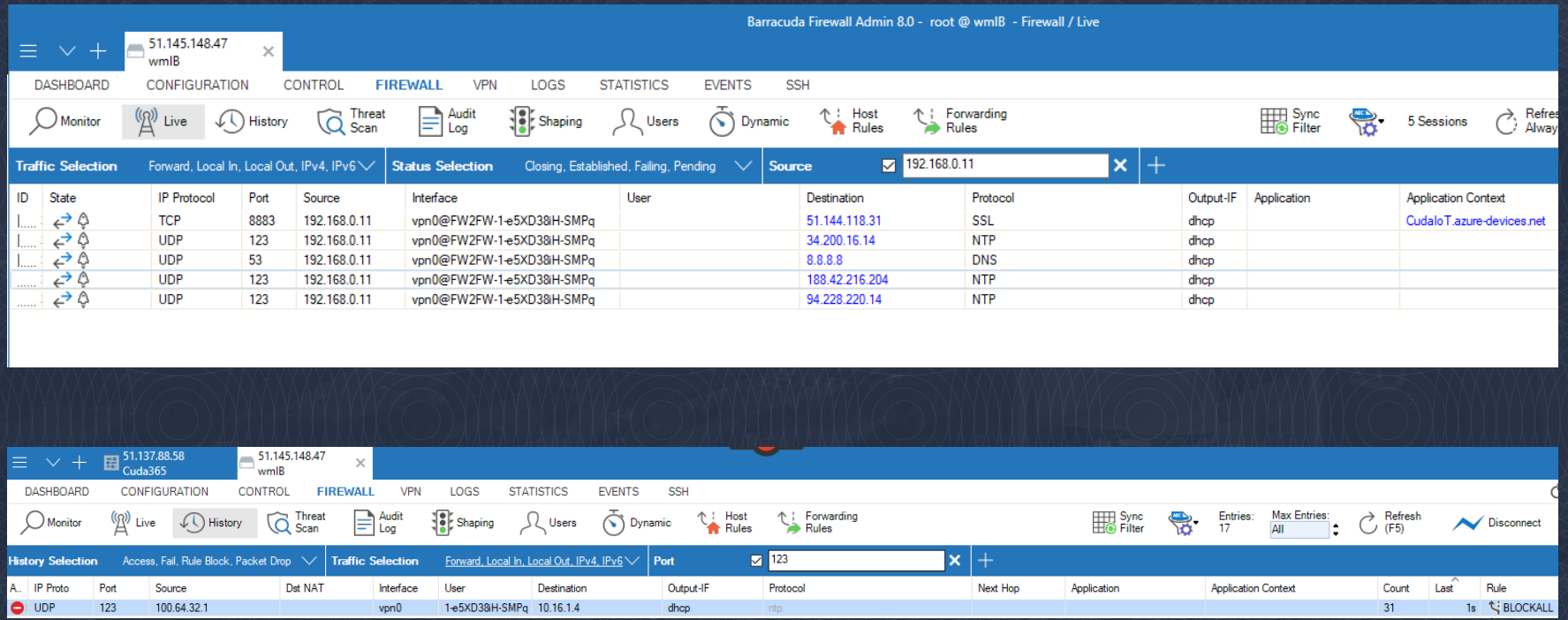
Tips and tricks

Epoch

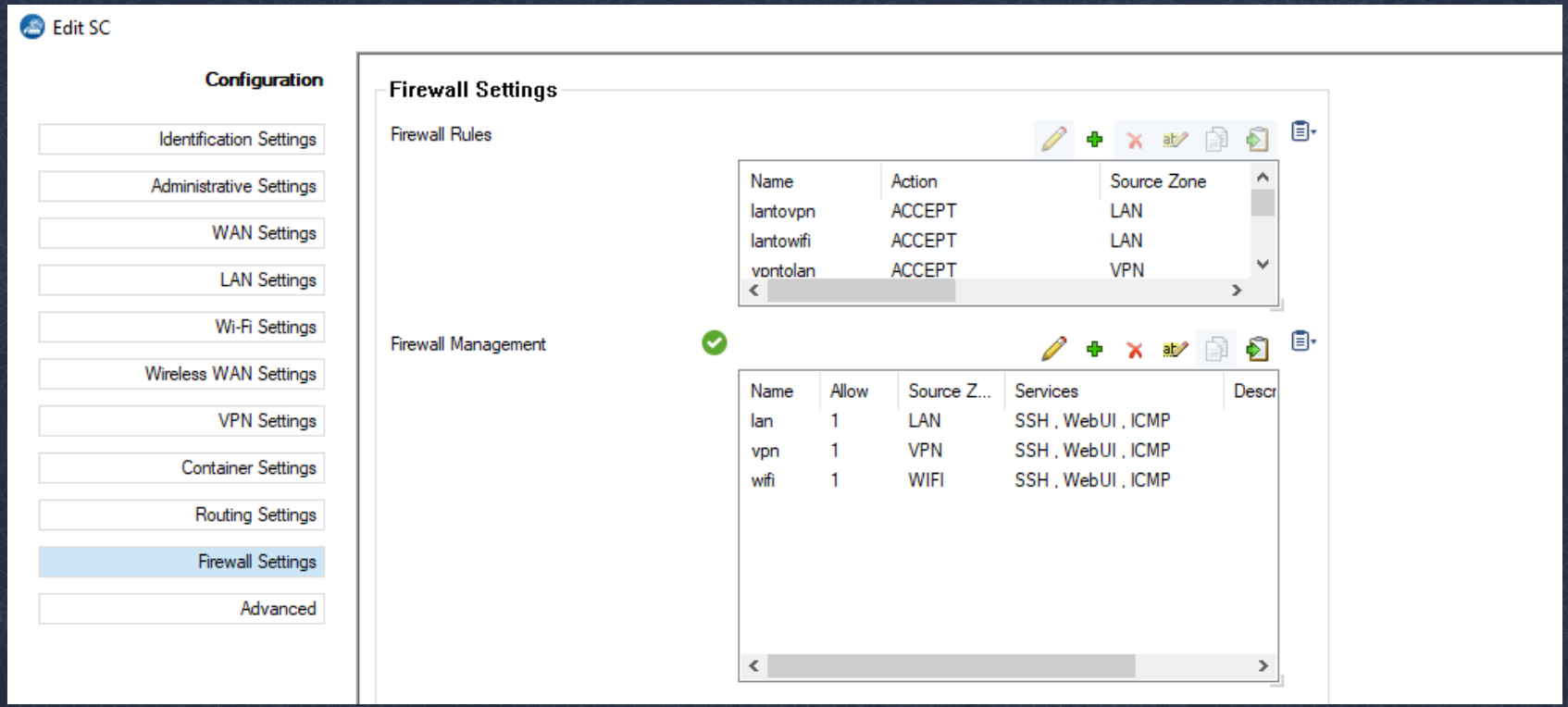
00000000 00000000 00000010 01100000

root@SMPq:~# date
Thu Jan 1 00:10:10 UTC 1970

Internet is not Internet

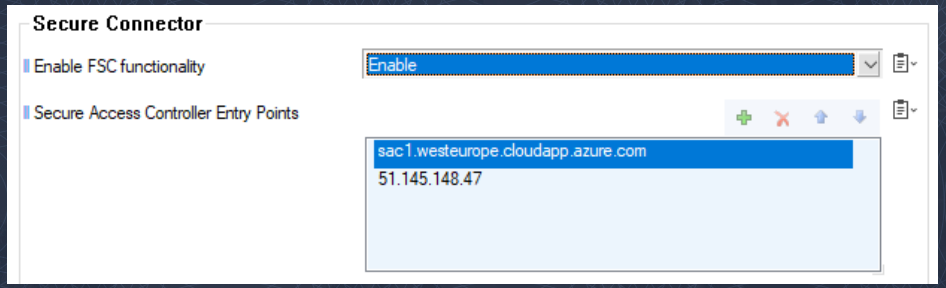


Make it easy


Edit SC
Configuration
Identification Settings
Administrative Settings
WAN Settings
LAN Settings
Wi-Fi Settings
Wireless WAN Settings
VPN Settings
Container Settings
Routing Settings
Firewall Settings
Advanced
Firewall Settings
Firewall Rules
Name
Action
Source Zone
lantovpn
ACCEPT
LAN
lantowifi
ACCEPT
LAN
vpntolan
ACCEPT
VPN
Firewall Management
Name
Allow
Source Z...
Services
Descr
lan
1
LAN
SSH , WebUI , ICMP
vpn
1
VPN
SSH , WebUI , ICMP
wifi
1
WIFI
SSH , WebUI , ICMP

Static IP and the cloud

- Use DNS and IP as fallback



- Use static IP in public cloud (not default)

https://docs.microsoft.com/en-us/azure/virtual-network/virtual-network-ip-addresses-overview-arm#public-ip-addresses.

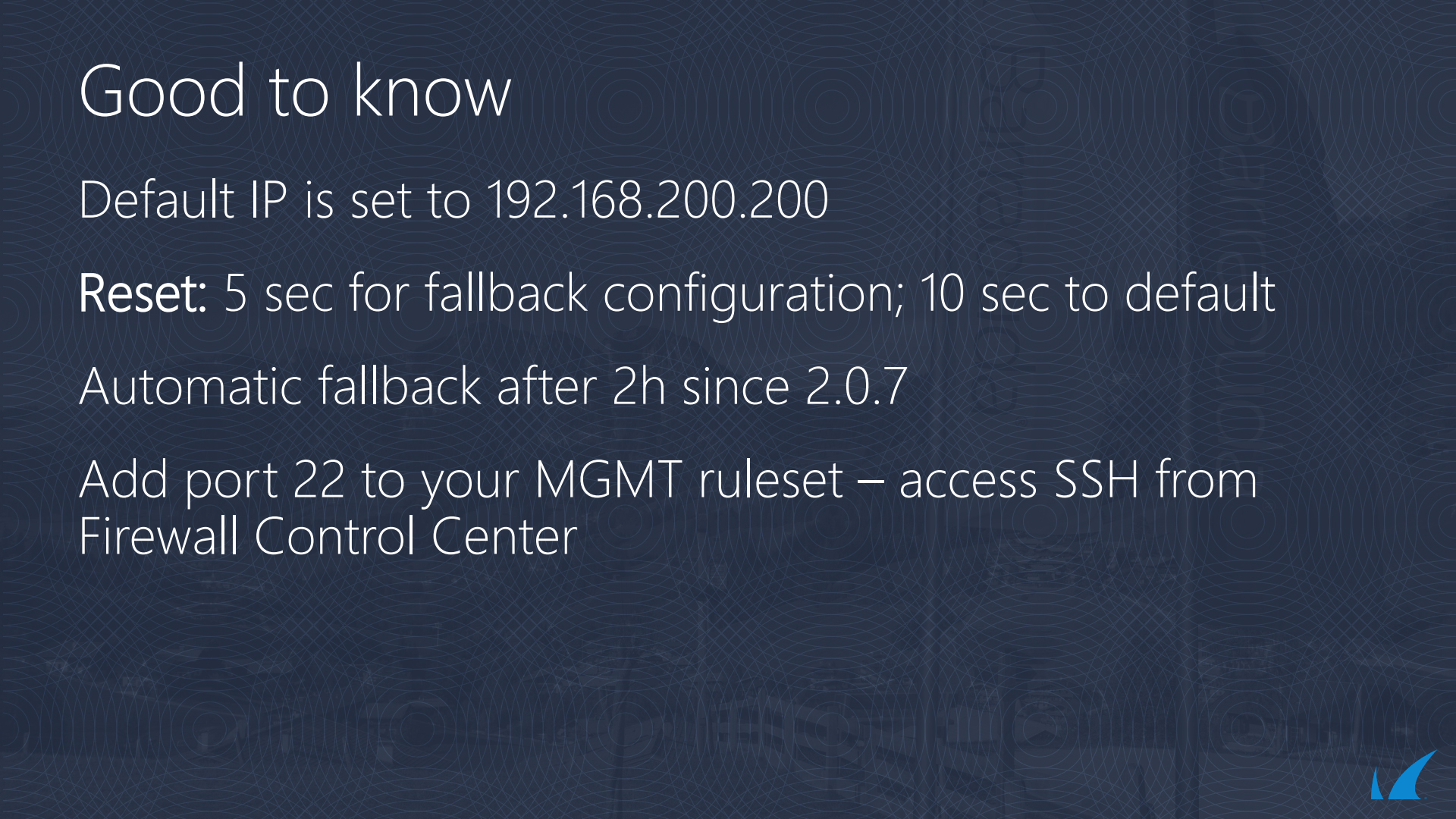
Good to know

Default IP is set to 192.168.200.200

Reset: 5 sec for fallback configuration; 10 sec to default

Automatic fallback after 2h since 2.0.7

Add port 22 to your MGMT ruleset – access SSH from Firewall Control Center




Thank you
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