
SCiFi
API 12
20 Slides
30 Minutes

Agenda

1)What is an API?

2)Motivations

3)Princípios

4)Design

5)Detalhamento

6)Genera Standards

7)Next Steps

8)Now and After

What is an API?

It is a set of routines and standards set by software for the use of its functionality by applications that do not intend to engage in implementation details of the software, but only use their services

Motivations

Allow the expansion of SCIFI go beyond the development of your code in java

Principles

- KISS – Keep It Simple...
- Complexity has cost and should show its value
- Transparency is key
- Delphi, the methodology
- ...
- The Cathedral and the Bazzar

API 12

#	LABEL	RETURN STRING	OBSERVATIONS
1	ID	SCIFI	Used to identify SCIFI equipment
2	VERSION	12	Used to identify SCIFI version
3	SUBVERSION	0	
4	DEVICE	AP - AP identification. Ex: TL-740.2 SERVER – 'CONTROLLER'	For auto-detection and auto-configuration
5	COORDINATES	latitude,longitude,altitude Ex: -22.894442,-43.118939,12	Altitude in meters above sea level
6	TAGS	Comma separated tags	For automatic build/rebuild of MRTG and NAGIOS' groups
7	CONNECTED2	IP or equipment name above this	For automatic build/rebuild of NAGIOS' map
8	USERS	# of connected users	AP - # of clients Server - scan MRTG bases and consolidate this numbers
9	NEIGHBORHOOD	Comma separated MACs	For future security analysis
10	UPTIME	# of minutes since up	Uptime

# API	OID
X	.1.3.6.1.4.1.2021.8.1.101.X

ID

- Goal
  - Return 'SCIFI'
- Current/Probable returns
  - SCIFI
- Comments:
  -

VERSION

- Goal
  - Return API number
- Current/Probable returns
  - 12
- Comments:
  -

SUBVERSION

- Objetivo
  - Return API subversion
- Current/Probable returns
  - 0
- Comments:
  -

DEVICE

- Goal
  - Identify the type of equipment
- Current/Probable returns
  - Type and version of device
    - Ex: TL-740.1
- Comments:
  - @ APs
    - Kind and version of AP
  - @ CONTROLLER
    - Return “CONTROLLER”

USERS

- Goal
  - Quantity of users
- Current/Probable returns
  - 0
- Comments:
  - @ AP
    - Users at AP
  - No servidor
    - Users at all APs

COORDINATES

- Goal
  - Device Localization
- Current/Probable returns
  - Latitude, Longitude e Altitude
    - Ex: -22.894442,-43.118939,12
- Comments:
  -

TAGS

- Goal
  - To allow a good classification
- Current/Probable returns
  - Comma separated tags
    - Ex: “POE,SDC”
- Comments:
  -

CONNECTED2

- Goal
  - What is the father?
- Current/Probable returns
  - Device above
    - Ex: 172.30.3.56
- Comments:
  -

NEIGHBORHOOD

- Goal
  - Who's around the AP?
- Current/Probable returns
  - Comma separeted MACS
- Comments:
  -

UPTIME

- Goal
  - How long has this device been running?
- Current/Probable returns
  - Up time in minutes
- Comments:
  -

General Standards

- SCIFI information and configuration
  - /etc/scifi
- SCIFI Log
  - /var/log/scifi
- Transition structures must use symbolic links
- Unify files and remove duplicity

Now and After

Now	After
SNMP V1	SNMP V3
Read Only	Read/Write
Operators need SSH	Only Admistrator have SSH
Centos based	RHEL and embeded based

Next Steps

1)Evaluate the API

2)Short term deliverables for next version, others for the following version

3)Testing

4)Pilot implementations at ND

5)Production Fase

6)Return to item 1

API 12

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