capport

IETF 106, Singapore

caveat participem

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/ (Privacy Policy)

Mark Nottingham ✔
@mnot

. @FlyAirNZ your in-flight wifi interferes with @apple's captive portal detection domains, which is user-hostile and usually an attempt to get people's browser cookies - disrespecting their privacy. Please stop. // an airpoints elite member

10:44 AM - 16 Jul 2019

Sign in to at_STARBUCKS_Wi2

https://service.wi2.ne.jp

⋮

(Language) ▼

failed to send a snmp request. commandName=[get_user_mac]

Wi2 Free Wi-Fi Service Terms and Conditions of Use

Article 1 (Applicability of Terms and Conditions of Use)
1. The following terms and conditions of use ("Terms of Use") govern the use of Wi2 Free Public Wireless LAN Service ("Service") that Wire and Wireless Co., Ltd. ("Wi2") provides to the user ("User").

2. Wi2 may revise these Terms of Use without User's consent.

Article 2 (Service Subscription)
Any applicant who wishes to use the Service ("Applicant", who will become "User" upon completion of the subscription) must agree to these Terms of Use and the Contractual Terms and Conditions before following the Service subscription procedure prescribed by Wi2. Any underage applicant is assumed to be applying for the Service with parental consent.

Article 3 (Conditions for Use of Service)
The User shall prepare, at its own responsibility and expense, any data

| Do not accept | Accept |

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Sign in to YTC HOTELS

10.10.0.1

⋮

العربية   Deutsch   Bahasa Indonesia   हिन्दी   italiano   Türkçe

Please sign in for internet connection

Room Number / User ID

Lastname / Password

☐ I have read and accepted the Terms and Conditions

| Login | Cancel |

Sign in to YTC HOTELS

data:text/html,

⋮

agenda

welcome, administrivia, agenda	5	chairs
status	10+5	chairs
hackathon report	20	Remi/Tommy
gStation implementation	15	Heng/Selva
AOB		

status

draft-ietf-capport-api	-04 expected
draft-ietf-capport-architecture-04	Ed. review
draft-ietf-capport-rfc7710bis	-01 TBD
(draft-ietf-intarea-provisioning-domains-08)	AD eval

7710bis-01 TODOs

Link Relation option: permanent network burden

    Going to remove (objections?)

DNS name for discovery? (e.g. capport.arpa + URI RR)

Network [experiment](#) revealed vendor use of DHCPv4 option

    Is use prevalent enough to warrant requesting [new option](#)?

hackathon report

Successful [Google Station](#) interop with Android and iOS

- expiry-date vs. seconds-remaining
- Clarifications about bytes-remaining
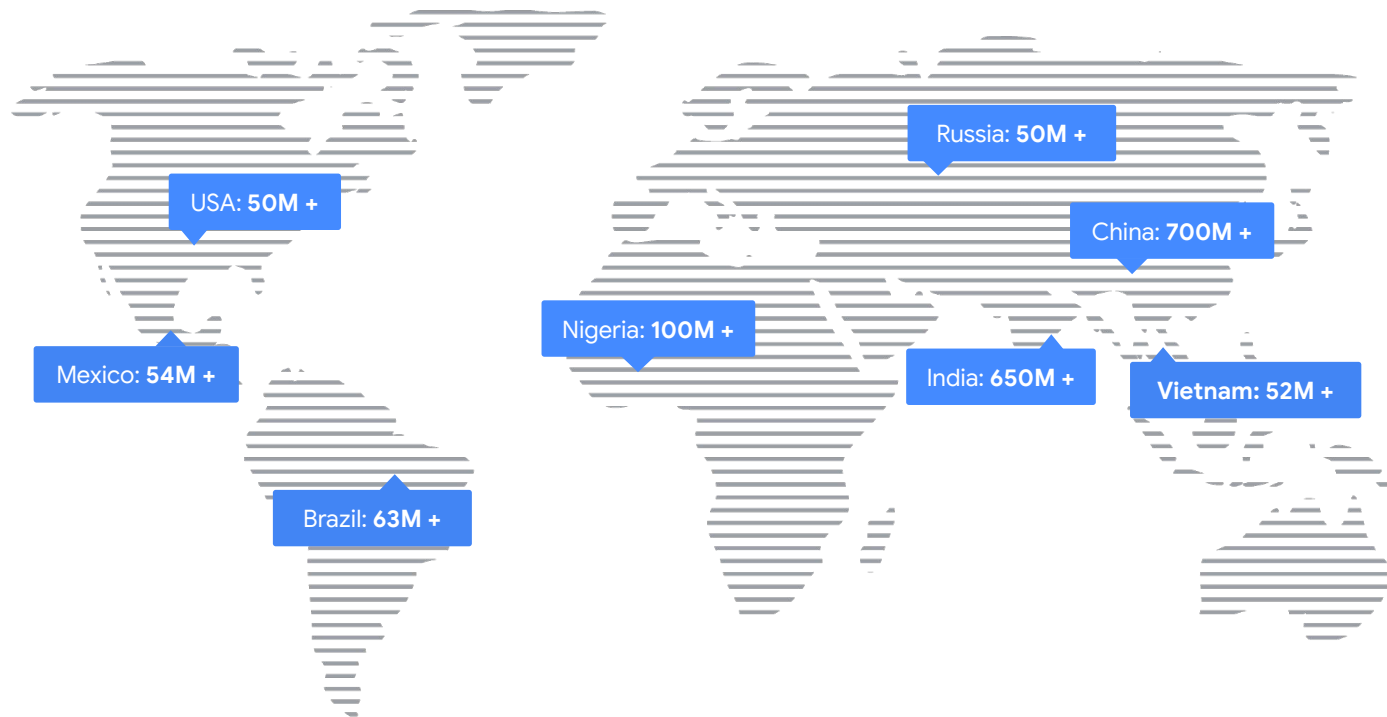- Other options may make sense in future

Google Station Overview

IETF, Nov 2019

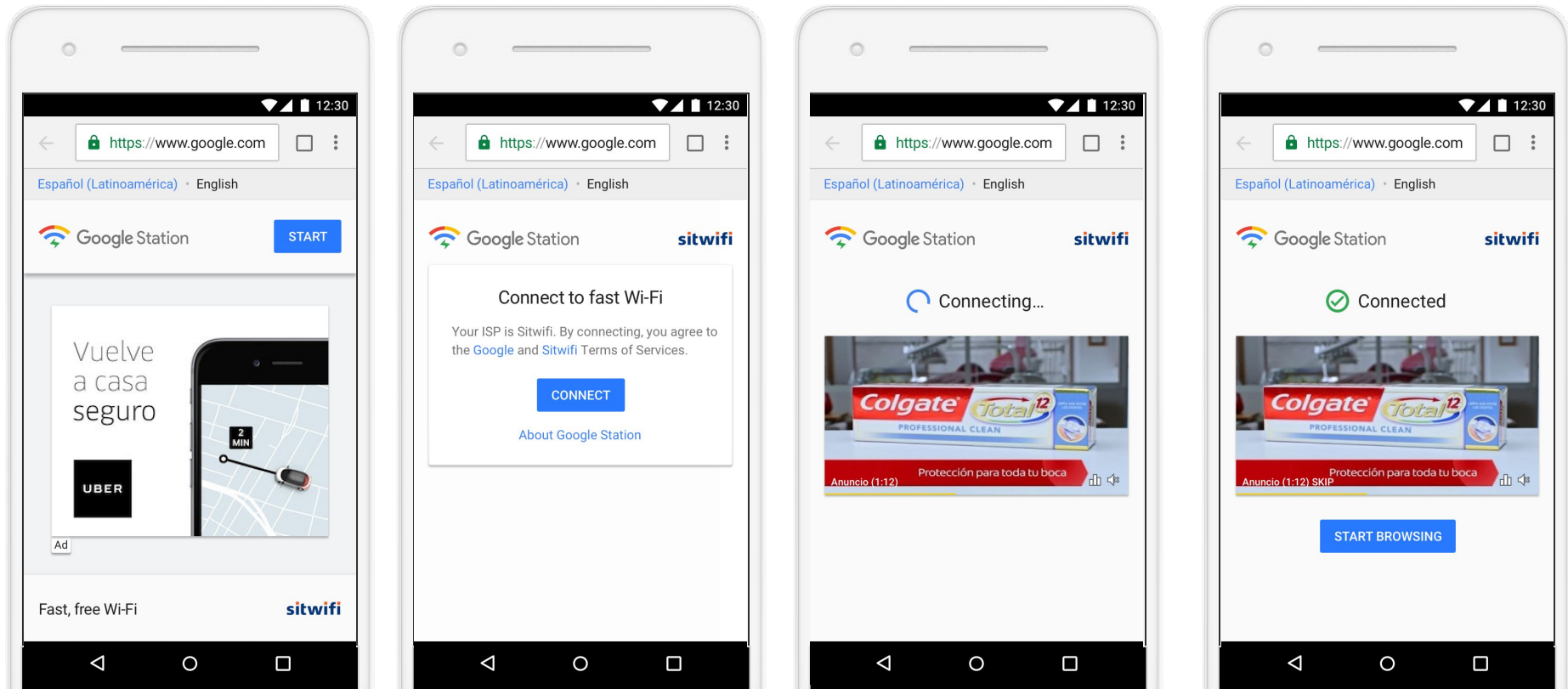# 50% of The World's Population is Offline

Russia: **50M +**

USA: **50M +**

China: **700M +**

Mexico: **54M +**

Nigeria: **100M +**

India: **650M +**

Vietnam: **52M +**

Brazil: **63M +**

Google Station partners with ISPs to offer public Wi-Fi
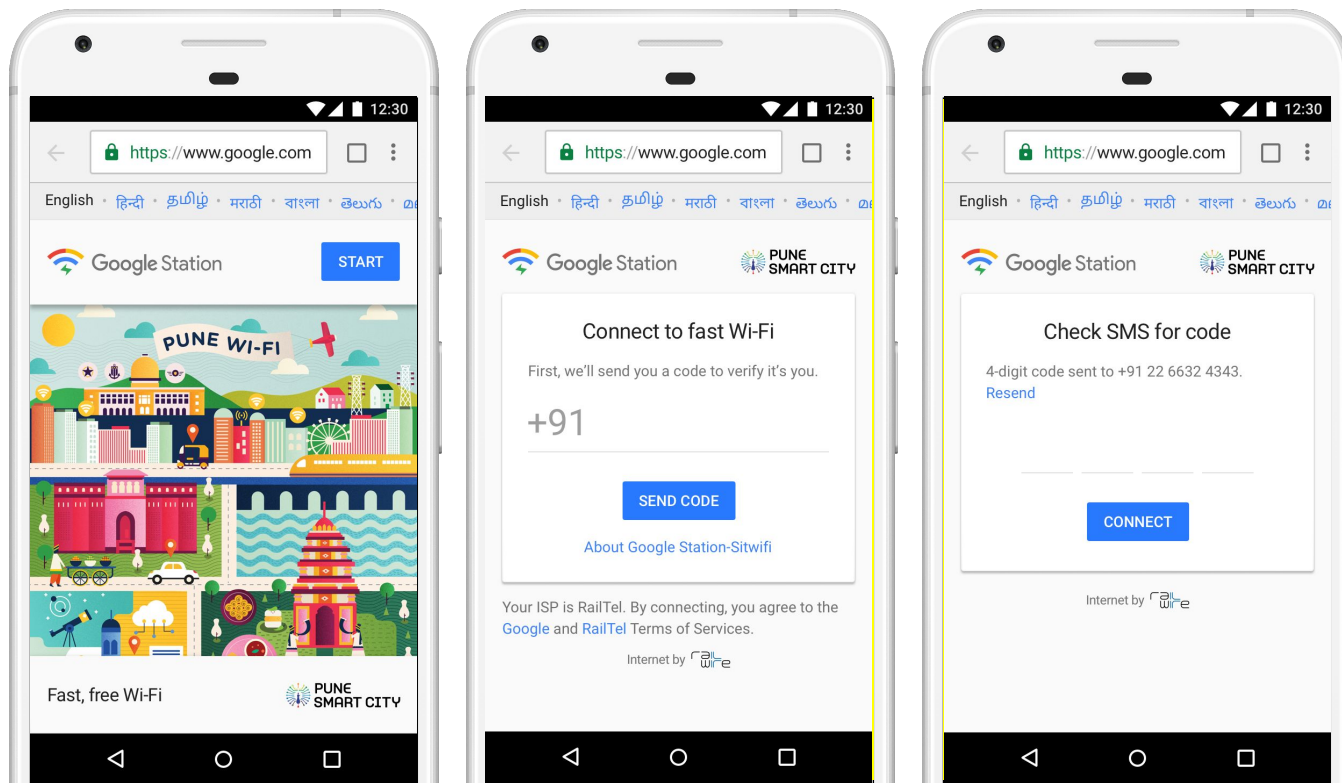
8
Countries

5000+
Venues

**13M**
MAUs

Meet the Google Station Captive Portal

Meet the Google Station Captive Portal

For users to gain access to free, fast Wi-Fi, they have to accept Terms, and in certain markets (regulations vary) they must meet Know-Your-Customer (KYC) requirements by entering their phone number.
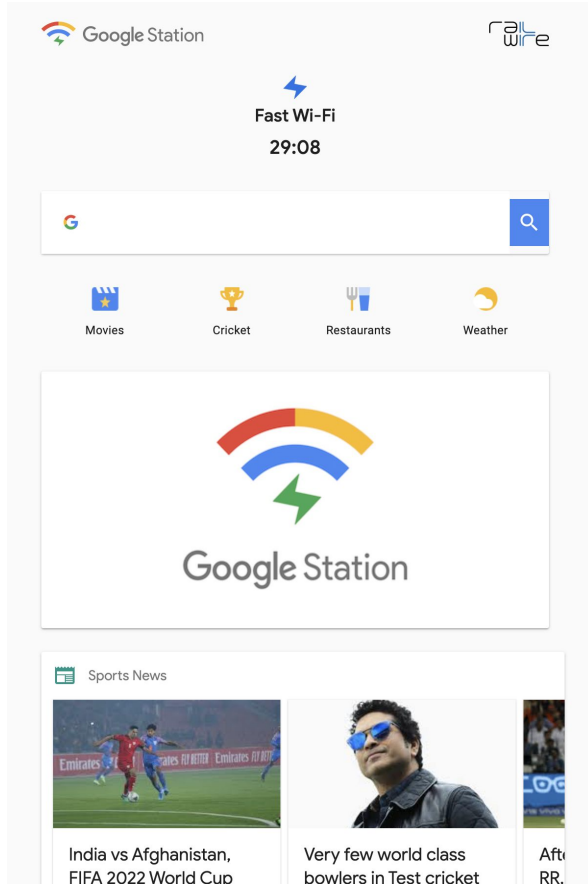
Meet the Google Station Captive Portal

Then, users see ads before being connected to the full internet. These ads help sustain Public WiFi networks which are costly to build and run.
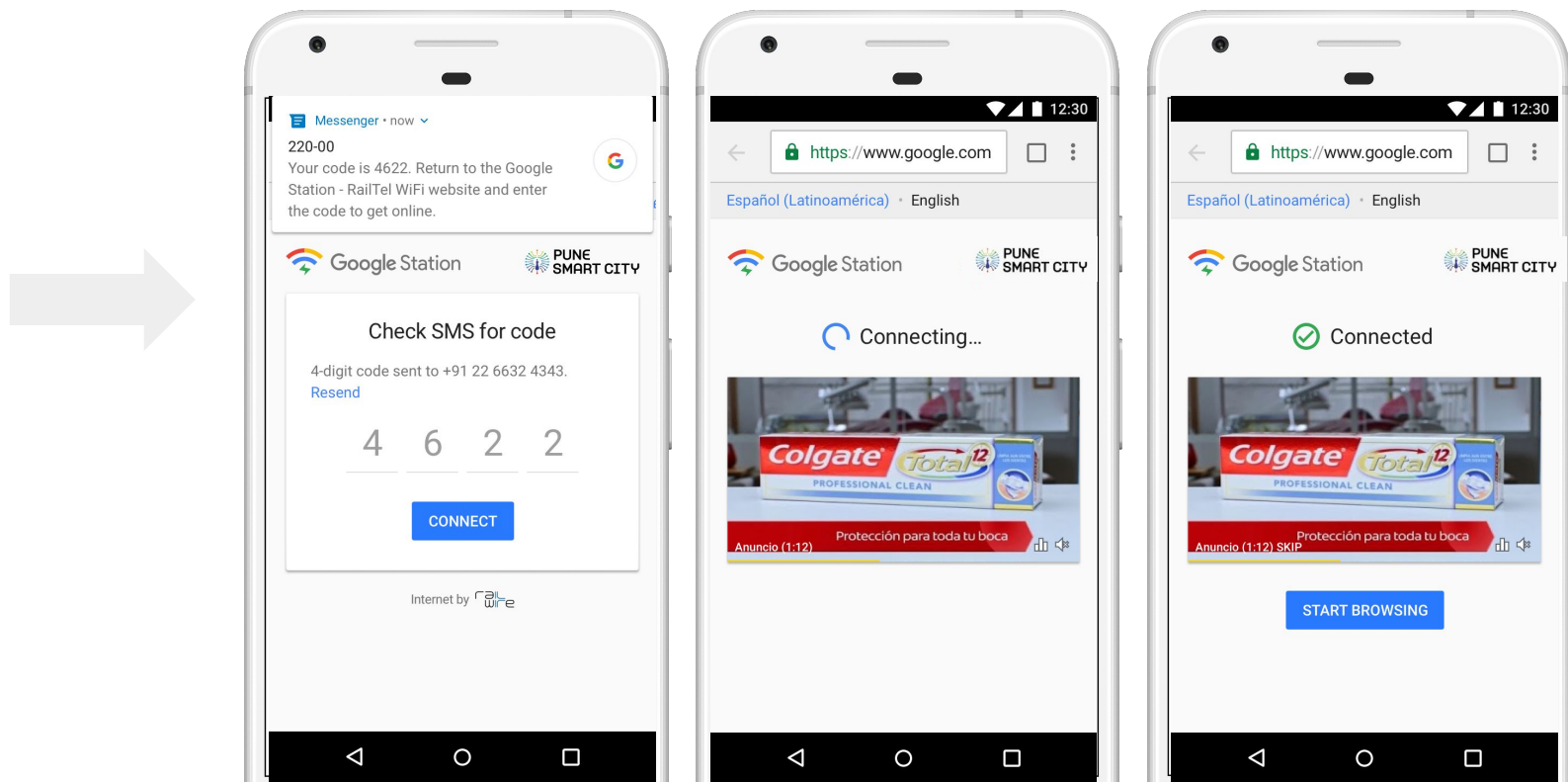
Success Feed is shown after connection

Currently only shown to iOS and browser, because in Android the webview auto-closes after connectivity is granted.

The page has:
- Shows time remaining
- Option for user to add 30 minutes
- Search bar
- Advertisement

100M
Lifetime users

Since 2016, 60 people have connected to Google Station
every minute

Mikrotik CAPPORT Proof of Concept

Mikrotik device is configured to provide the following:

- *Captive Portal API Server* (CP_API): customize mikrotik hotspot status page to return json
- *Captive Portal Enforcement* (CP_ENF)
- DHCP Server: custom option 160 is added and it configured to point at CP_API

Google station Captive Portal runs in borg and it hosts the Captive Portal (CP).

Sequence Diagram

CP_ENF, DHCP Server and
CP_API are all hosted on
mikrotik, while CP is hosted in
google cloud (borg).