Wi-Fi sítě – návrh a monitoring

Capacity calculations

How many users?

x How many devices per user?

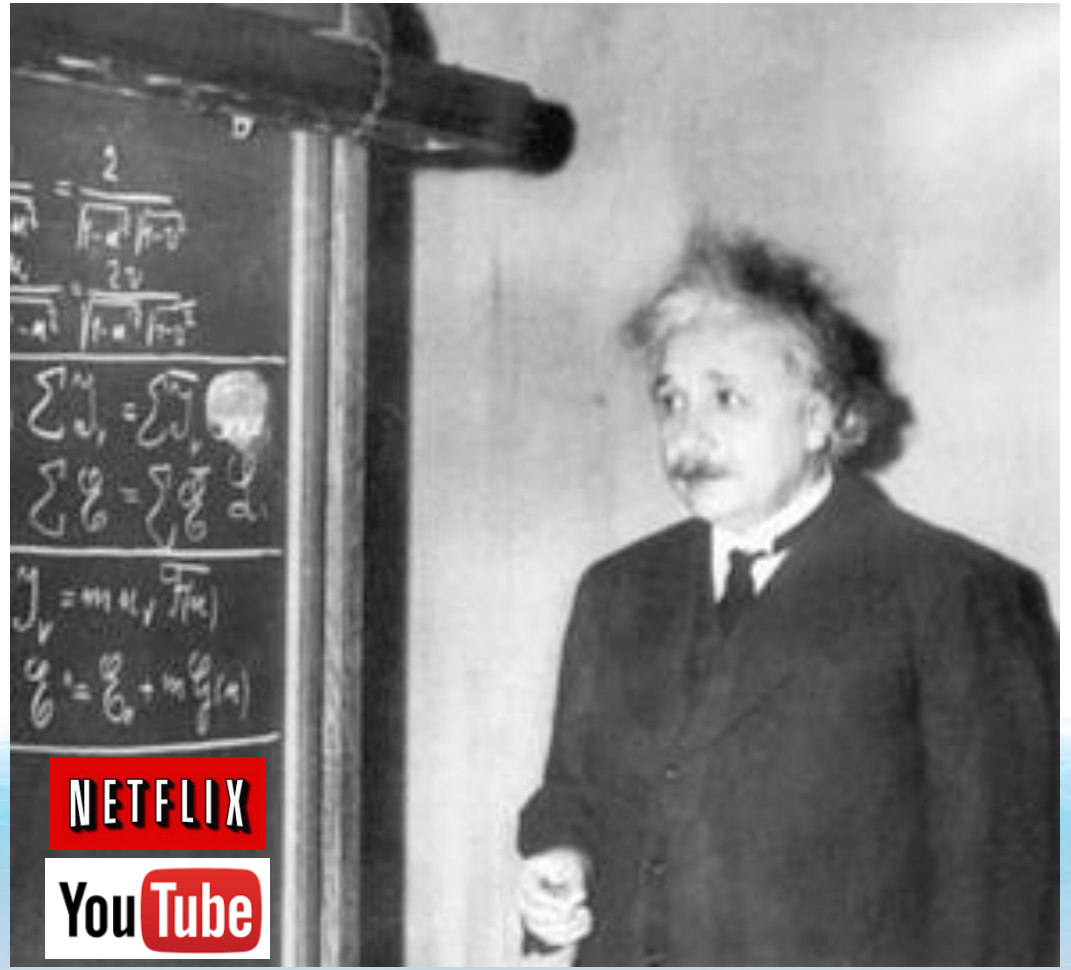
+ How many other devices?

= Devices and their types

x Which applications are run on the devices?

==========

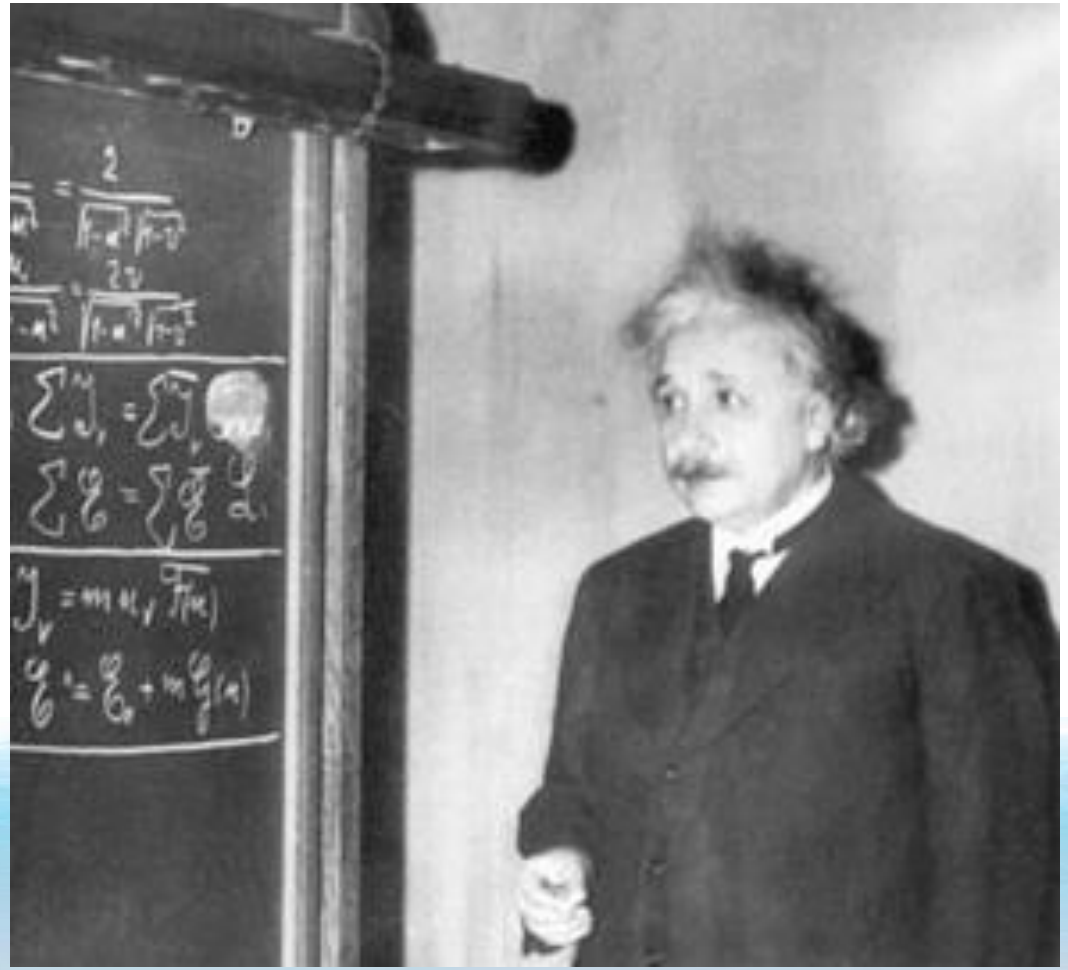
= Total capacity required



HKE
elektronické měřicí přístroje

What else affects capacity?

- Areas to cover
- Types of end user devices
- Types of access points
- Channels/bands used
- Single / multiple floors
- Wall materials



Ekahau Site Survey 8.x

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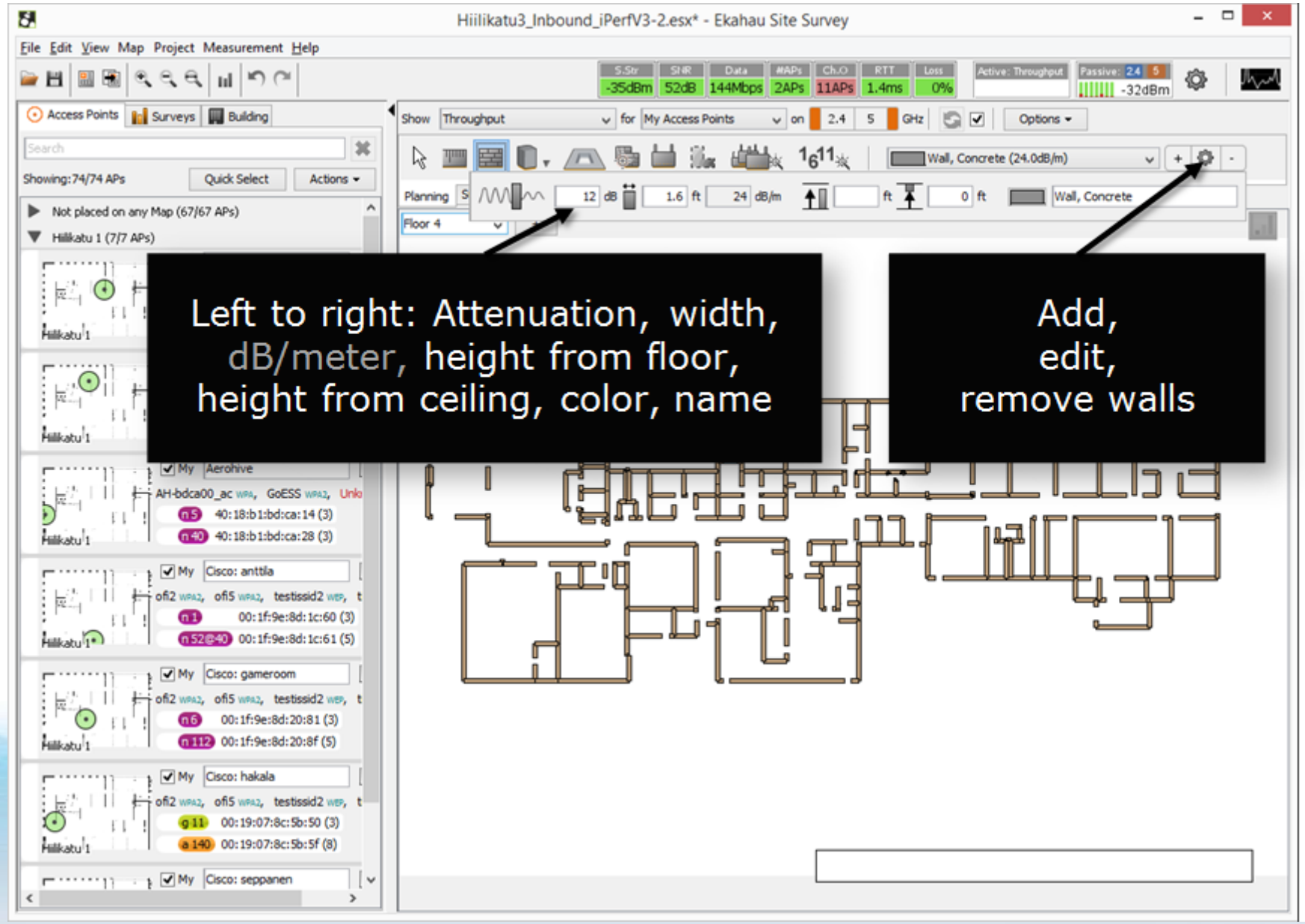
Wall Material Editor

Wall Outlining Wizard (WOW) - No More Wall Drawing

CAD floor plan (DXF or DWG)

Throughput Site Surveys

Second computer required in the network to act as the throughput server (iPerf v3)



HKE
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AirScout

Cloud Storage

Up to 30
Clients

Master
Controller

Tablet or Laptop
Based application

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Survey

- Survey the entire house.
- Listening for:
  - Other Wi-Fi
  - Congestion

Optimal Channel

- Least congestion
- Best overall coverage

AP Optimal Location

- Considers
  - All clients
  - Interference
  - Congestion

Quality Of Experience

- Weighted Function of:
  - Congestion
  - Interference
  - Signal
  - Applications

Report

- Data gathered
- Channel chosen
- AP Location
- PDF
- Store locally and to Cloud

- Real Attenuation
  - Through the building
  - To multiple sites
- Signal to Noise Ratio (SNR)
- Interference
- Congestion