

Cultivating the Next Generation of Network Engineers



- Everything we do is extremely
reliant on the Internet
- The network is everywhere

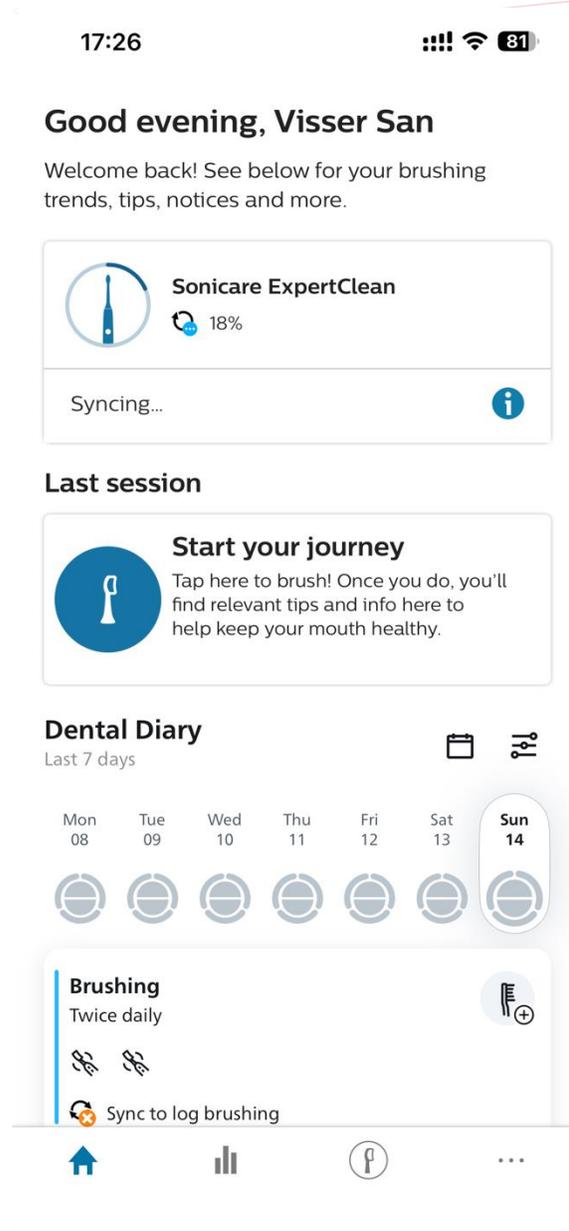
- Everything we do is extremely
reliant on the Internet
- The network is everywhere
- And it is only getting bigger

Everything is connected

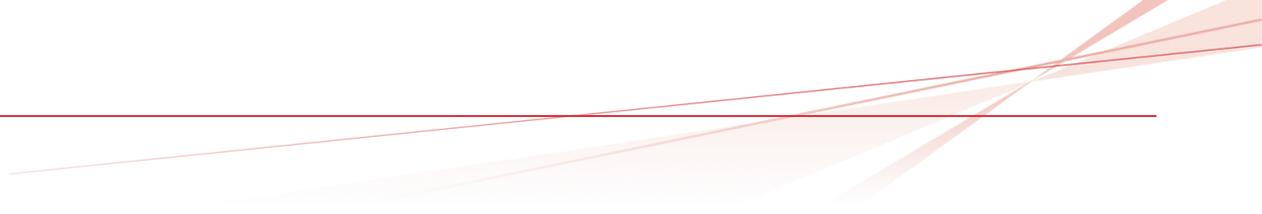
- Stock trading
- Remote work
- Health care
- Self driving cars
- Airline
- Payment Processors

Everything is connected

- Stock trading
- Remote work
- Health care
- Self driving cars
- Airline
- Payment Processors
- My toothbrush....



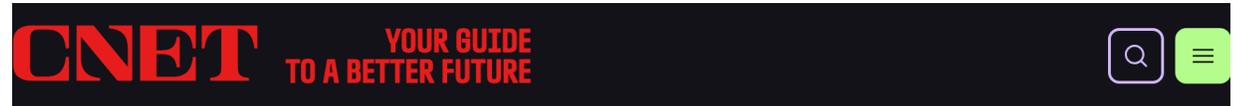
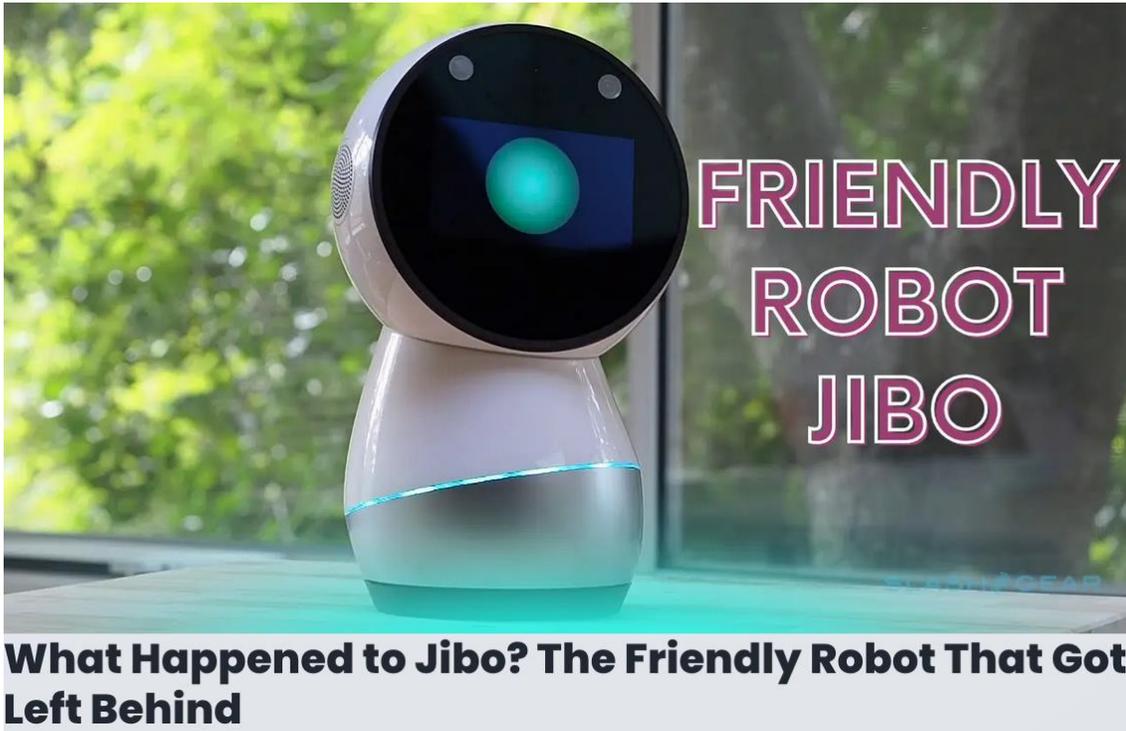
- We're facing a huge talent gap
- Networking is just a utility now
- People don't know what we do
- Network is not going anywhere



- Cellular connection
- Wi-Fi
- Security Cameras
- ID badging service
- Weather Forecast
- Power, Gas, etc.

Despite efforts to prove its relevance, Juicero is shutting down

By Trevor Mogg Updated September 2, 2017



Why You Can Trust CNET

Our expert, award-winning staff selects the products we cover and rigorously researches and tests our top picks. If you buy through our links, we may get a commission. [Reviews ethics statement](#)

Home > Home Security

Google's Nest Secure Has Fully Shut Down: We've Got Answers if You're Worried

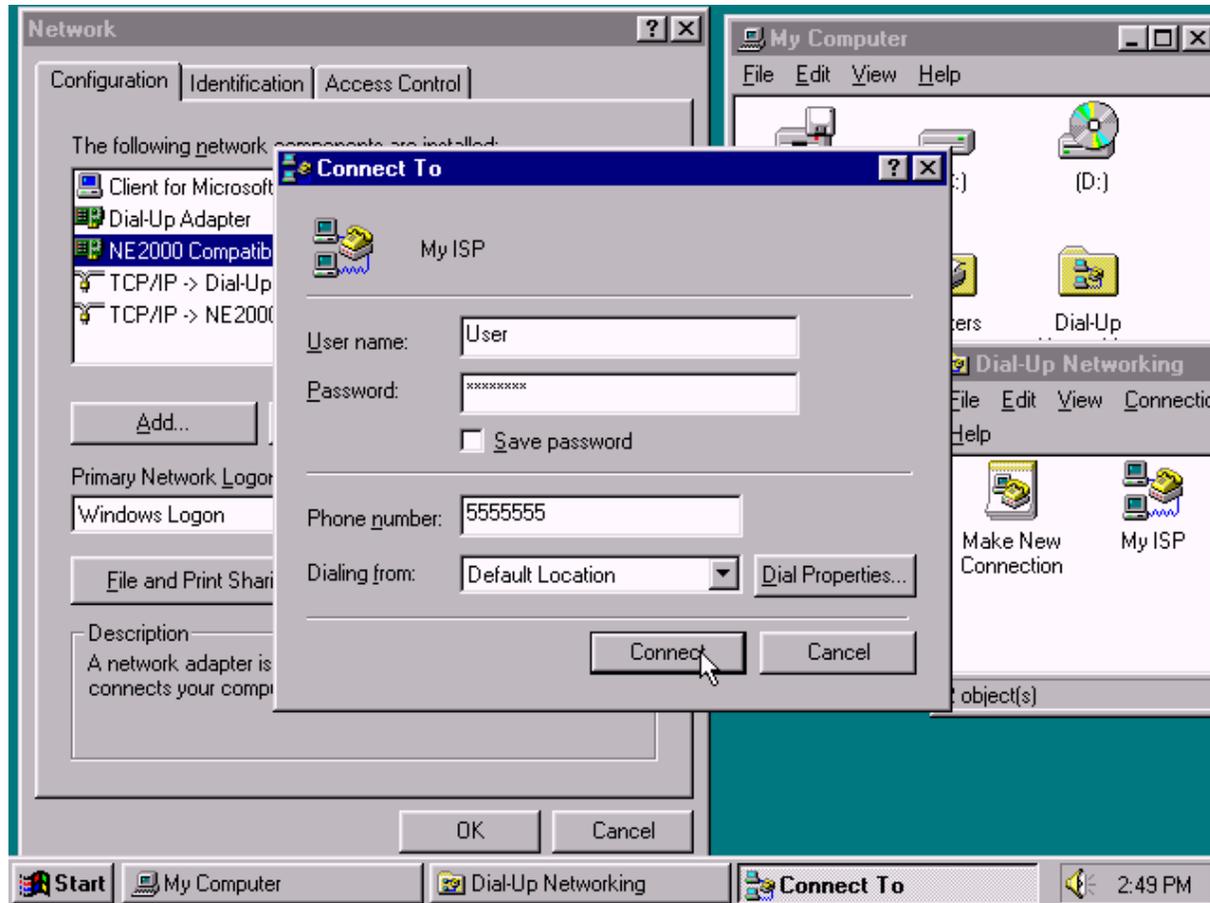
The Nest Secure home system no longer works after Google's April 2024 update. Here's what's affected and what Google is offering instead.

- Declared as a human right since
2016
- The world depends on the Internet
- The Internet depends on network
engineers

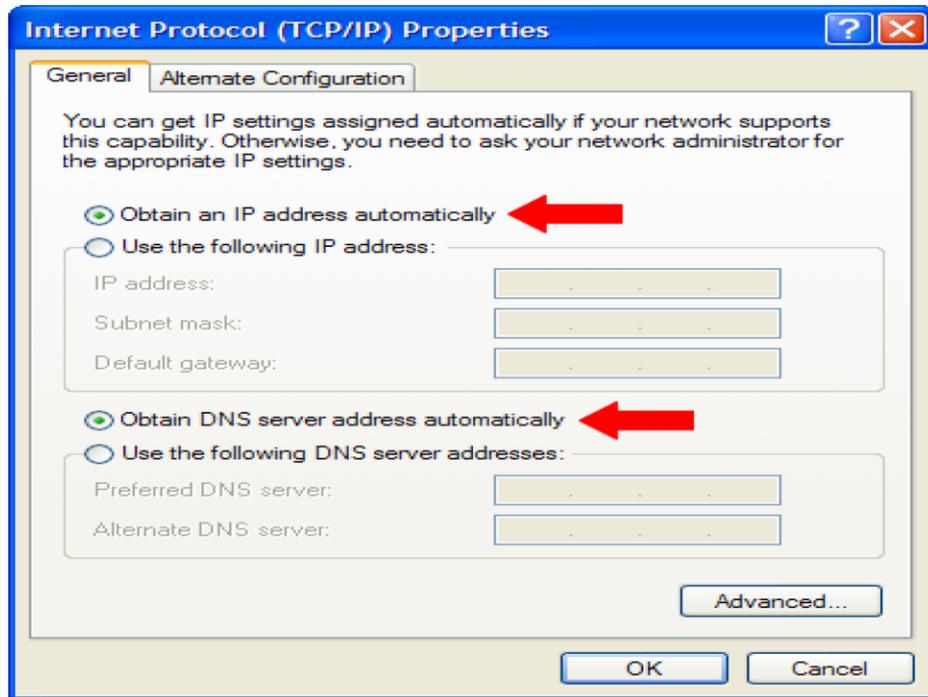
- Founders of the Internet is retiring
- Networking is more specialised
- Less generalised and low-level understanding
- How do we bring in new people

Things have become too “easy”

- We are always connected
- No one thinks about the network unless there is an issue
- The “Wi-Fi” is down



Learning Networking the hard way



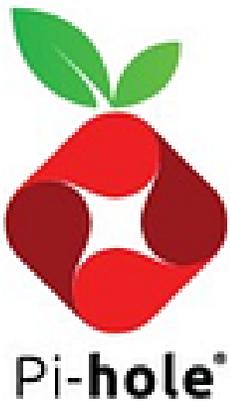
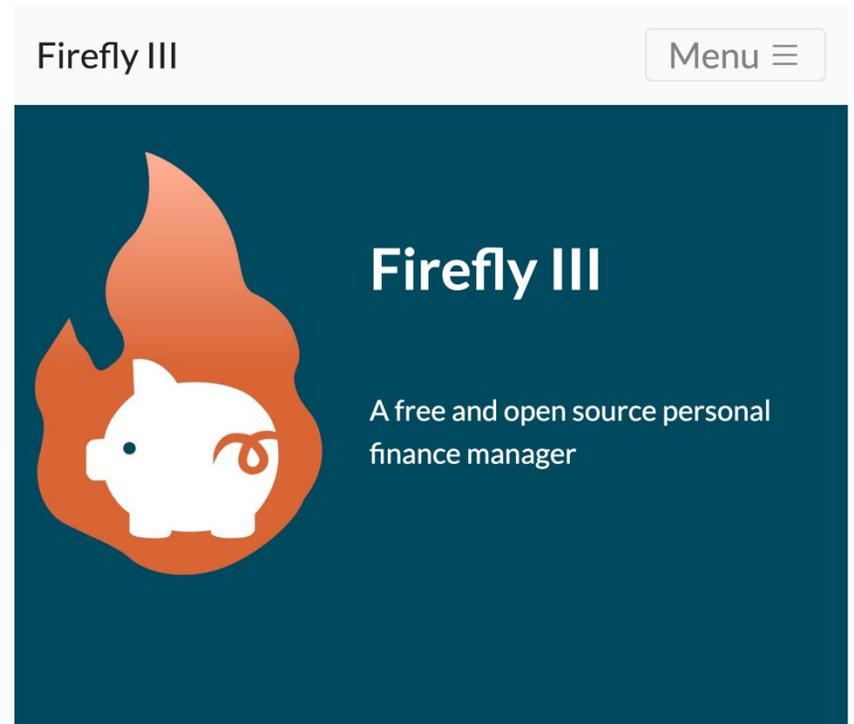
Why Study Network Engineering?

- Nothing works without the network
- You can work in any industry
- It's a very flexible job
- Always something new to learn
- It's extremely collaborative

Adopting the Apprenticeship model

- Networking is complex
- An outage now has much larger impact
- Theoretical knowledge only takes you so far
- It is easy to become overwhelmed and burnt out
- Apprenticeship model helps build experience
 - Internships, training programs, etc
- Homelabs are great for personal growth
 - Similar concepts can be applied for training programs
- Training programs such as APIE, NOGs, APNIC Academy

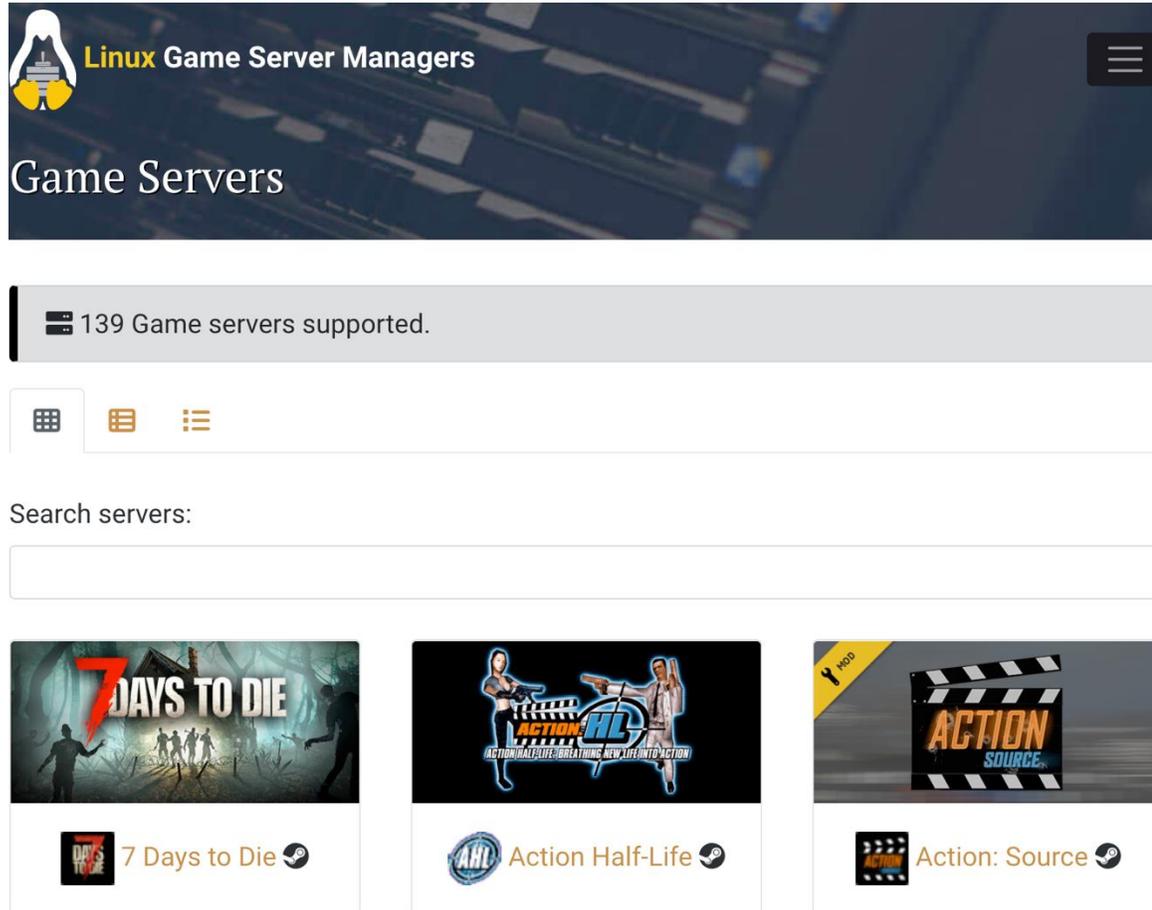
Start with a goal: Personal growth



HedgeDoc

Learning Networking the hard way

Start with a goal: For fun



The screenshot shows the Linux Game Server Managers website. At the top left is the logo, a yellow figure holding a server tower, with the text "Linux Game Server Managers" next to it. Below the logo is the heading "Game Servers". A grey bar below the heading contains the text "139 Game servers supported." Below this bar are three icons: a grid, a list, and a list with a search icon. Underneath is a search bar with the text "Search servers:". At the bottom, there are three server cards. The first card is for "7 Days to Die" and features a dark, atmospheric image of a house and figures. The second card is for "Action Half-Life" and features a blue and white image of two characters. The third card is for "Action: Source" and features a black and white image of a clapperboard.



Action 1: Bring in Young Talent

- **Mentor:** Find someone to share your expertise with today
- **Create Pathways:** Advocate for internships, shadowing, and structured apprenticeships
- **Be Accessible:** Respond to those who reach out looking for guidance
- **Get them interested at a young age**

- Be Visible
 - Stop Simplifying your job titles or duties
- Share Your Stories
 - Explain the complex, high-stakes problems you solve
- Community Engagement
 - Present at schools, colleges, tech meetups

- IT is the fundamental platform for all business growth
- Be an early partner in business strategy and design
- Continuously reinforce the need for robust infrastructure investments
- Show that network engineers are essential, not just support staff

The greatest professional resource you have is the people around you

- Never Eat Alone
- Establish Peers
- Be Present
- Don't just build your network,
maintain it



Internet Initiative Japan

日本のインターネットは1992年、IIJとともに始まりました。以来、IIJグループはネットワーク社会の基盤をつくり、技術力でその発展を支えてきました。インターネットの未来を想い、新たなイノベーションに挑戦し続けていく。それは、つねに先駆者としてインターネットの可能性を切り拓いてきたIIJの、これからも変わることのない姿勢です。IIJの真ん中のIはイニシアティブ

IIJはいつもはじまりであり、未来です。

本書には、株式会社インターネットイニシアティブに権利の帰属する秘密情報が含まれています。本書の著作権は、当社に帰属し、日本の著作権法及び国際条約により保護されており、著作権者の事前の書面による許諾がなければ、複製・翻案・公衆送信等できません。本書に掲載されている商品名、会社名等は各会社の商号、商標または登録商標です。文中では™、®マークは表示しておりません。本サービスの仕様、及び本書に記載されている事柄は、将来予告なしに変更することがあります。