

Sideways Dictionary is like a dictionary, but using analogies instead of definitions. Consider four attempts to explain a concept. Which works best, and why? When might a different one be better? What properties make an analogy better or worse?

Access Control List

- A. It's like an automatic car wash. When you pull your car up to the car wash (after paying) the list would determine what level you purchased. Some people will get a full detail of their car (full access), others will get a car wash and their interiors vacuumed (partial access), and some will be denied (no access) because they are notorious for breaking the car washes they use!
- B. It's like a parent giving "privileges" to a teenage child. With an ACL on a file-sharing system, you may get read-only, commenting, editing, or sharing privileges – depending on how good you've been.
- C. It's like ID card access for buildings. When you walk up to a building and tap your ID, the lock checks whether you're on the approved list for that building. ACLs do the same thing for accessing files or software.
- D. It's like turnstiles for software. If you're an authorized visitor, you'll stroll straight through.

Domain Name Servers

- A. It's like a bird moving between trees in the forest. He tells the local wise owl, who confirms the tree is available and hoots accordingly so that everyone nearby knows. Word gradually spreads to all the other wise owls in the forest, including some less wise and slightly slower ones, until everyone knows the bird has moved. The owls are the network of Domain Name Servers, the tree is your domain name, and the bird is you.
- B. It's the phone book of the internet. You know your contacts by their names, but the phone book has their telephone numbers.

When you want to call someone, you use their name to look up an associated telephone number. Similarly, when you want to visit a website, like google.com, your computer looks up that name in the *Domain Name lookup service*, and finds the associated number of the computer that stores that website.
- C. It's like a wedding dinner seating plan. You look up your name, it sends you to table 11 next to Uncle Dave!
- D. It's like the GPS of the internet. Humans prefer place names, computers prefer numerical coordinates. Domain Name Servers convert one to the other.

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Cloud Computing

- A. It's like a library, as opposed to a bookstore. You can access every book on the planet without having to own them all.
- B. It's like a power grid for computing. Manufacturers used to build their own power generators, and had to keep building more as they grew. The power grid allows businesses to buy power generated elsewhere, use only as much they need, and gradually increase usage as their business grew. The same is happening now with data storage and processing power: you can rent another computer's time.
- C. It's like a bank. You upload your money, then download as much or as little as you like, wherever you are, by visiting an ATM.
- D. It's like outsourcing computation. Instead of running a calculation yourself, you can pay someone else's computer to run that calculation for you.

DDoS Attack

- A. It's like Darth Sidious issuing Order 66. In Star Wars, Order 66 was the order that Darth Sidious (Palpatine) issued to the clone army. It activated secret programming in the clones, and directed the entire clone army to attack their Jedi Masters.

In a DDoS attack, a controller (Palpatine) instructs a distributed set of (usually) dormant bots to wake up and start sending requests to a set of servers. It overloads the servers and they go down.
- B. It's like if your telephone were forced to constantly call a pharmacy, along with 10,000 other phones. Real calls can't get through. There are so many fake calls that the pharmacy can't block them all.
- C. It's like 20 sumo wrestlers trying to get through a revolving door at the same time. The server jams up pretty quickly.
- D. It's like a high school prank where you invite everybody to a house party, so instead of 20 people, 900 show up.