**NETWORK BASICS**

*1. The internet today*

Everybody knows that the Internet is a global computer network, which embraces hundreds of millions of users all over the world. It's hard to imagine our lives without Internet nowadays. It has revolutionized communications, to the extent that it is now our preferred medium of everyday communication. In almost everything we do, we use the Internet. Ordering a pizza, buying a television, sharing a moment with a friend, sending a picture over instant messaging. Before the Internet, if you wanted to keep up with the news, you had to walk down to the newsstand when it opened in the morning and buy a local edition reporting what had happened the previous day. But today a click or two is enough to read your local paper and any news source from anywhere in the world, updated up to the minute.

In our world, global information networks are vital infrastructure. The Internet has changed business, education, government, healthcare, and even the ways in which we interact with our loved ones—it has become one of the key drivers of social evolution.

The Internet has clearly impacted all levels of education by providing possibilities for learning. People can use the Internet to create and share knowledge and develop new ways of teaching and learning that stimulate student’s imagination at anytime, anywhere, using any device.

*2. Tracking technology*

Location tracking is not one, single technology. Rather, it is the convergence of several technologies that can be combined to create systems. Similar systems can be created to deliver location-based services to wireless devices.

Current technologies being used to create location-tracking and location-based systems include:

**Geographic Information Systems (GIS)** - Сan capture, store, analyze and report geographic information.

**Global Positioning System (GPS) (***спутниковая система навигации***)** - A constellation (созвездие) of 27 Earth-orbiting satellites. A [GPS](https://electronics.howstuffworks.com/gadgets/travel/gps.htm) receiver, like the one in your mobile phone, can locate four or more of these satellites, figure out(выяснять) the distance to each, and deduce(выводить) your location through trilateration. For trilateration to work, it must have a clear line of sight to these four or more satellites. GPS is ideal for outdoor positioning, such as surveying, farming, transportation or military use.

**WLAN.**