

Application Software	Programs end users run to accomplish tasks.
Bandwidth	<p>Transfer rate permissible over the media, and is described as bps or b/s (bits per second).</p> <p>**Modern bandwidth is described in millions/billions bits per second (i.e. Mbps or Gbps)</p> <p>*Older tech limited to thousands, (i.e. 56 Kbps)</p>
Black Hat	Unethical Hacker
Boolean/Logical	<p>Type of Data.</p> <p>Ex: True/False (in reply to active subscriber?)</p> <p>Only two possible answers: yes/no or true/false</p>
Buffer Overflow	<p>Most well known type of software injection attack.</p> <p>Because buffer is limited in size, if software doesn't ensure insertions in buffer are limited in size, sufficient amounts of malicious code could overflow buffer.</p> <p>Malicious overflow code could then be stored in memory and run to perform operations inserted by hacker.</p>
Circuit Switch Network	<p>Requires full pathway (or circuit) to be established and maintained during entire submission.</p> <p>Ex: Phone network b/c path exists during entire conversation and communication can be both ways.</p>
Client-Server	<p>Client is computer that will request info from another computer (the server) .</p> <p>The server takes requests and responds.</p> <p>*More expensive than peer to peer.</p> <p>BENEFITS: More storage=faster response time.</p>
Cloud Computing	<p>Allows organization to access resources/app anywhere, anytime. Beneficial because an org. may access resources it may not normally have.</p>
Coaxial Cable	<p>Commonly used network connection.</p> <p>*Transmits using electromagnetic waves.</p>
Database Server	<p>Permits dB access across a network.</p> <p>Performs tasks such as data analysis, data manipulation, security, and archiving.</p> <p>May/may not store database itself.</p> <p>**MySQL is popular.</p>

Date/Time	Type of Data
Device Drivers	Interface b/w OS and hardware.
Email Server	Provides email service. Accepts email request from clients. IMAP,POPS,HTTP,MAPI,MIME
Fiber Optic Cable	Transmits via light pulses as opposed to electromagnetic ones.
File Server	Computer with large hard disk storing files, but can also store software to be run over network.
Flat File Database	One large single table without relations between tables. *Most common is CSV file (files separated by comma) *Flat file is used if amount of data is fairly small. Ex: Spreadsheet
Floating Point	Decimal. Ex: 4.2
FTP Server	Hosts files and allows clients access to files. Access is in form of uploading/downloading files. Requires either user has an account or logs in as anonymous user.
Grey Hat	Both ethical and unethical at times. A fence sitter.
Hierarchical Database	Organizes data by using tree-like or organizational chart type structure. *Main data points can have multiple sub-data points (Parent/child structure)-Subpoints can only have one main data point. * Records can be broken up so one portion is in one location and another is in another section. Ex: Employee database could list all employees, but a child relation could contain info about employee position, pay level, responsibilities. Another child relation could include info about employee projects. Sub data is always specific to main data point.

IAS Availability	Requires data/information be available when needed.
IAS Confidentiality	Requires data be kept secure so that it does not fall to unauthorized users. It goes beyond security measures and extends to policies. Security measures should extend beyond network. A stolen laptop should not violate confidentiality.
IAS Integrity	Requires data are correct. Requires 3 different efforts: 1. Data gathering should include an accuracy component. 2. Data must be entered into system accurately. 3. Once data is in dB, changes made will leave a record of when the change was made and by whom.
Information Security Assurance Goals	"CIA" 1. Confidentiality 2. Integrity 3. Availability
Internet Usage Software	Email, FTP client, web browser
Intranet	A LAN that uses IP. Used to communicate within organization.
Kernel	Core component of OS. Loads when computer first boots Sits on top of hardware, is interface b/w hardware and software.
Local Application	Software stored on an individual computer.
Network Hub	Device that connects multiple computers together. *Broadcasts to all connected devices, even if message is intended for just one.
Network Server	Dedicated, high performance computer with large hard disk drives. It may be in a cabinet so multiple servers can be housed. **Stand alone computer, not a desktop.

Network Switch	<p>Device that connects multiple computers together.</p> <p>**Able to broadcast to just one if message is intended for one, but has ability to send message to all if needed.</p>
Number Integer	<p>Numeric data, whole numbers.</p> <p>Ex: 4</p>
Operating Systems	<p>Allows a user to easily access hardware/software, required to maintain computer environment.</p>
Packet Sniffing	<p>Means of obtaining a password or anything sent over network without encryption.</p>
Packet Switch Network	<p>Message pathway established as it's sent. The choice of the pathway is determined by network availability.</p> <p>Ex: Message traffic.</p>
Peer to Peer	<p>Workstation in which each computer is equal to another.</p> <p>*Cheaper than other types of servers and workstations.</p>
Productivity Software	<p>Application software used to aid in productivity. I.E. Presentation software, word processor, spreadsheets.</p>
Proxy Server	<p>Acts as a giant cache and allows pages accessed frequently in an organization to be accessed locally.</p> <p>*Also provides degree of anonymity, since IP address recorded is for proxy server and not individual client.</p> <p>*Can also be used to block requests to certain servers (i.e Facebook)</p> <p>*Can reject responses that contain certain content (i.e "porn")</p> <p>**SQUID is most common, but APACHE can also be used as proxy server.</p>
Reception	<p>First step when network receives message.</p>
Relational Database	<p>Most common structure for database.</p> <p>*Distinguished by multiple tables with interrelated fields.</p> <p>*When queried, data can be pulled from any # of relations that may be contained in multiple databases.</p> <p>*Provides lots of flexibility.</p>

Router	Used to connect multiple networks together. **Has decision making abilities, can purposefully drop messages if message traffic exceeds capacity. In the event multiple messages are sent, router can make the decision to determine which message is sent first.
Server Software	Works with hardware to provide network service.
Services (Daemons)	OS programs that start when OS is loaded. They run in the background and wait for an event to initiate.
Shell	Interface for user, often personalized. The shell provides access to the kernel. I.E. The GUI will translate mouse motions into calls to kernel/routines. Desktop elements include shortcuts, windows theme, menus, background.
Social Engineering	Targets users directly, could include calling and asking for password because there is an issue. Could also include phishing, which involves emails that will redirect to a malicious website.
SQL Injection	Hacker issues a SQL command to web server as part of URL. B/c web server is not expecting SQL command, may pass SQL command to database. Malicious SQL command may then do damage.
Steps of Strategic Risk Analysis	<ol style="list-style-type: none"> 1. Identify organization information assets. 2. Identify vulnerabilities. 3. Identify threats. 4. Implement policies.
String Data	Alphanumeric or text Ex: James (Last name) 623 Hill Street
System Software	Consists of programs that make up the OS and directly support system itself. **Includes services or DAEMONS
Transmission	Last step network performs when sending a message.

Tuples	Records represented by rows.
Twisted Pair	Network connection commonly used in the past. It is still seen a lot today because it was used extensively in the phone systems. Is cheap and already in place. **transmits using electromagnetic waves.
Unshielded Twisted Pair (UTP)	Most commonly used network connections. Looks just as it sounds, wires twisted together in a pair.
Utility Programs	Allow user to monitor system performance.
Virtual Machine	Allows access to multiple machines without having to purchase multiple computers. Also allows user to run software for a computer that normally would not be able to run that software.
Web Server	Role is to respond to HTTP requests. *Most HTTP requests are for HTML docs, but could include any web accessible resource. It's all combined into the URL. **APACHE is most popular web server-can execute scripts for dynamic pages, use security mechanisms, log request for trend tracking.
White Hat	Ethical Hacker