Assignment 1

Application and Transport Layer Protocols

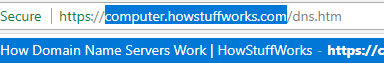
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Internet Protocol’s in the Transport layer are (Oracle, 2011):

* TCP
  + TCP is in charge of the reliable transfer of packet’s from the host to the destination. Also that the packets sent are reassemble in the correct order once they do reach the host. (Unuth, 2018)
* UDP
  + UDP is a more unreliable protocol that does similar functions as TCP. With UDP, the host does not receive confirmation from the receiver as to if a packet was received or not. As such, it doesn’t wait for any message before sending packets. Useful when it would be too much hassle to have a sender verify every packet sent with a data transfer that doesn’t require it. (Tutorials Point, 2018)
* SCTP
  + SCTP is like TCP and UDP but with more features. SCTP allows for multiple streams and multiplexed streams. You can also use multiple IPs for a connection instead of only one like in TCP. With that it adds a type of built in fault tolerance, as if one were to fail or go down, it would use continue using one of the other IPs. It also allows for features found in UDP like the ability to have no confirmation on packets received and sent. (Hogg, 2012)

Some of the Internet Protocol’s in the Application Layer are (Oracle, 2011):

* NFS
  + NFS is a type of file system that will let computers or users on the network access and modify files as if they were on the original computer. With this, admins or users can upload files and set different privileges for different users on the network. With the files all in one main computer or server, all the user’s can freely use them within their privileges without the files being on their physically workstation. (What is NFS?, 2017)
* DNS
  + DNS is a database of website names and IP addresses. Instead of user’s having to remember the exact IP address to a certain website, they can type the name of the website instead and still get to the destination. (How Domain Name Servers Work, 2000)
  +  The DNS name highlighted
* RIP
  + RIP is a router exchange protocol. Each router broadcasts set’s of destinations that each router can use. Data is sent through a router, then from that set of destinations is sent to another router best in order for data to reach it’s destination. (Price-Evans, n.d.)

# References

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