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Tutorial - 5

JOVIAL JOE
IES17CS016

Q.) Write notes on

(i) Indirect TCP
(ii) Mobile TCP

Answers

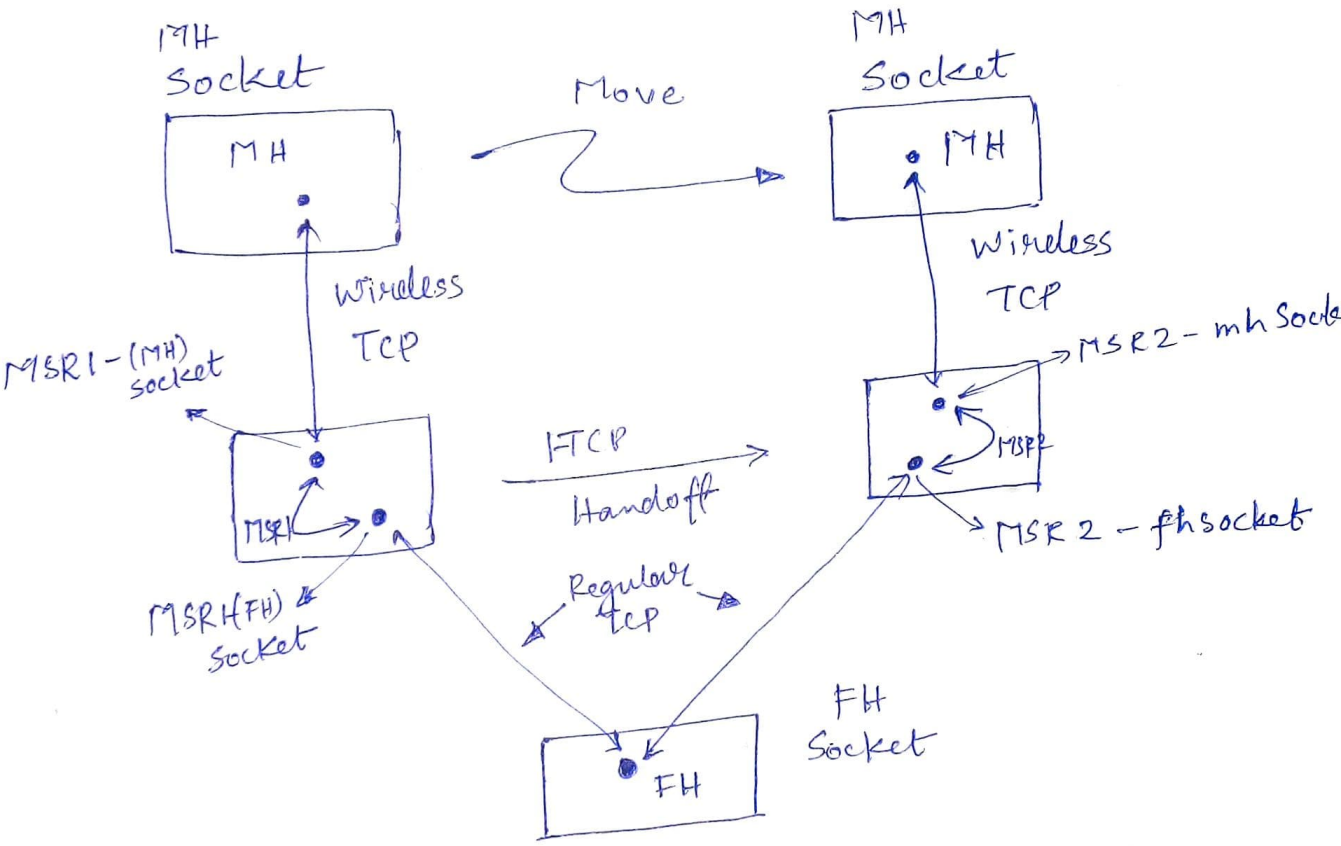
i.) Indirect TCP (I-TCP)

- It is one of the many mechanisms the we use to improve Classical TCP
- I-TCP is a transport layer protocol for mobile host which is based on the indirect protocol model
- It is fully compatible with the TCP/IP on the fixed network and is build aroung the following simpl concepts

1. A transport layer connection between a Mobil host and a Fixed host is established as two seperate connection
   - one over wireless medium & another over fixed network with the curred MSR being the center point.

2. If the mobile host switches cells during the life time of an I-TCP connection, the center point of the connection moves to the new MSR (mobile support router)
(fixed host)

3. The FH is completly unaware of the indirection and is not affected even when the mobile host (MH) switches cells.



MH = Mobile Host

FH = Fixed Host

MSR = Mobile Support Router

I-TCP connection Setup.

(ii) Mobile TCP (M-TCP)

- M-TCP is extended transmission layer protocol which supports transmission layer mobility over traditional IP layer
- MTCP tries to improve over all throughput, to lower the delay to maintain end-to end semantics of TCP, and to provide a more efficient hand over.
- Additionally MTCP is especially adapted to the problems arising from lengthy or frequency disconnections.
- The M-TCP approach assums a relatively low bit error rate on the wireless link.
- Therfore it does not perform caching or retrans mission.
- But since MTCP lacck buffers it also faces some demerits - one of which is not so correct assuption of ~~MTCP~~ low bit error.