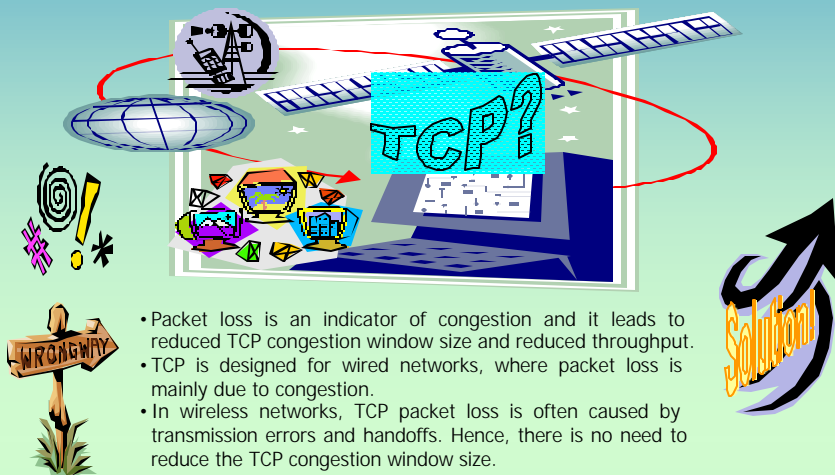


# Improvement of TCP Over Wireless Links

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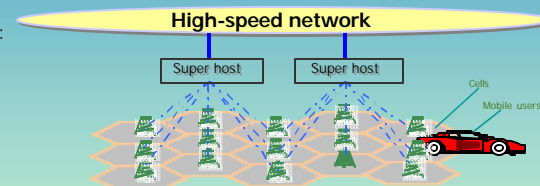
## Original TCP



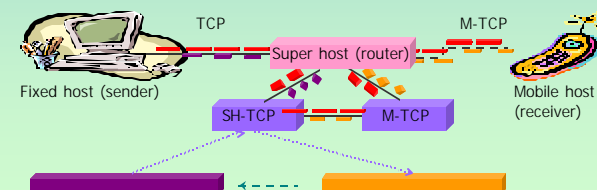
## M-TCP

The proposed solution for TCP over wireless links:

- Network is divided into wired and wireless segments.
- TCP connection is split at the super host.
- Wired domain is handled by original TCP.
- Wireless domain is handled by M-TCP.



- Super host always keeps the last ACK.
- Last ACK is used to force the fixed host into persistent mode when packet loss occurs.
- Fixed host is prevented from reducing the congestion window size.

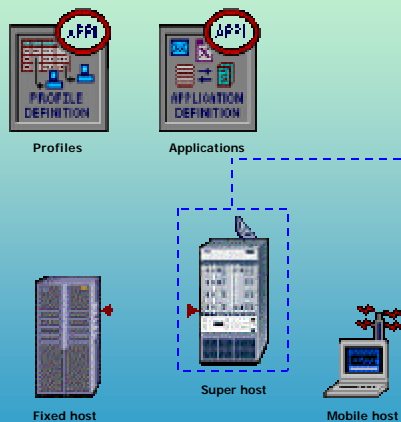


References:

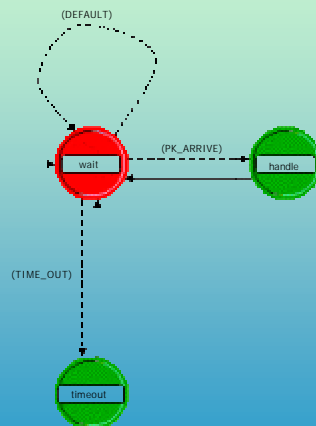
- K. Brown and S. Singh, "M-TCP: TCP for Mobile Cellular Networks," in *Proc. SIGCOMM 97*, Oct. 1997, pp. 19-43: <http://www.acm.org/sigcomm/ccr/archive/1997/oct97/ccr-9710-brown.pdf>.
- OPNET documentation V.8.0.B, OPNET Technologies Inc., Washington DC.

## OPNET Simulation Scenario

### Network Model



### Process Model



### Simulation Results

