

1. a. CEF is primarily used to speed up packet switching by reducing the overhead and delays introduced by other routing techniques. In comparison to quick switching route caching CEF uses less CPU power layer 3 services like encryption might benefit from more CPU processing capacity.

When CEF ~~more~~ mode is activated, CEF gives full switching capability at each line card. In large dynamic network. CEF gives a degree of switching consistency and stability that is unparalleled. Fast switching cache entries are regularly ~~invalidated~~ invalidated by routing change in dynamic network. These changes may cause traffic to use the routing table for process switching instead of using the route cache for fast switching. Because the existence of FIB lookup table. route cache maintenance is not needed any more. Thus CEF can switch more efficiently.

2. a.

b.