# EstiNet
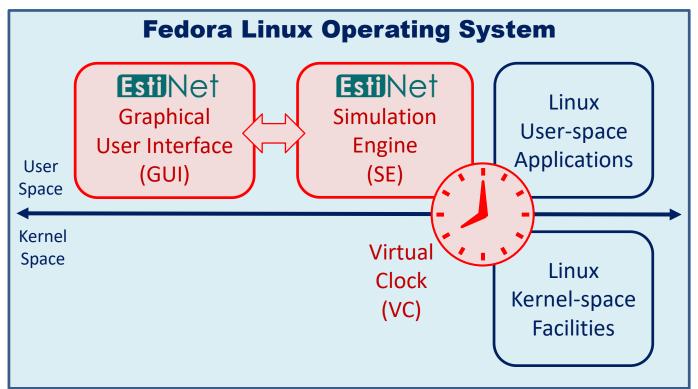
# A Network Simulation Platform Compatible with Linux Kernel-space Facilities and User-space Applications

## Fedora Linux Operating System



**EstiNet** Graphical User Interface (GUI)

**EstiNet** Simulation Engine (SE)

Linux User-space Applications

User Space

Kernel Space

Virtual Clock (VC)

Linux Kernel-space Facilities

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### Simulation Engine (SE) & Virtual Clock (VC)

- The SE mainly simulates network interface cards and propagation channel models.
- The VC mechanism makes the whole simulation environment operate based on a common virtual time.

### Graphical User Interface (GUI)

- The GUI makes the configuration of simulation visible, intuitive, understandable and fast.
- The playback animation and performance plot make the simulation results visible and easy to be realized.

### Linux User-space Applications

- Network traffic generator and analyzer
- Server-and-client network service
- Peer-to-peer network service
- Network monitoring and management

### Linux Kernel-space Facilities

- TCP/UDP, IPv4/IPv6, ARP, ICMP, etc.
- Netfilter framework for Firewall, NAT, etc.
- Routing mechanism for layer-3 packet forwarding
- Switching mechanism for layer-2 frame forwarding

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# EstiNet

Visit **www.estinet.com** for more details