

## 2 Switching Concepts

### 2.1 Frame Forwarding

- Ingress-Port / Egress-Port
- MAC Address Table, content addressable memory (CAM)
- Learn: Source MAC Address, Forward: Destination MAC Address
- Switching Forwarding Methods
  - Store-and-forward switching: Error Checking, Automatic buffering
  - Cut-through switching
    - \* Fragment free
    - \* Fast forward
- **2.1.8 Activity - Switch It!**

### 2.2 Collision and Broadcast Domains

- Collision Domain: Segment
- Broadcast Domain: bis router
- Alleviate Network Congestion
  - Fast port speeds
  - Fast internal switching
  - Large frame buffers
  - High port density