

ISP IS-IS Best Practice

CLNS addressing

- **Adopt a convention**
- **Sensible NSAP address aid troubleshooting**
- **Options available:**
 - **Map loopback address to NSAP using byte match**
 - **10.15.1.4 \leftrightarrow 49.0001.0100.1500.1004.00**

IP addressing

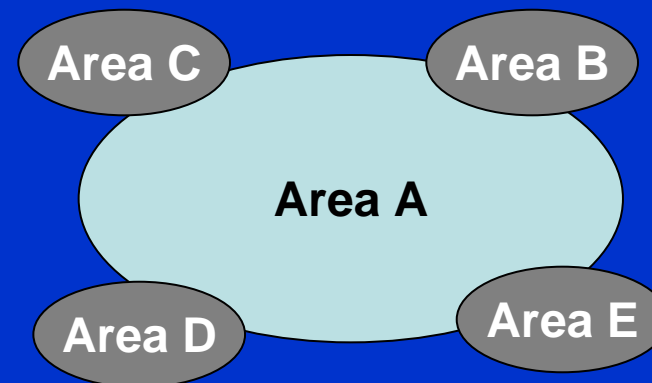
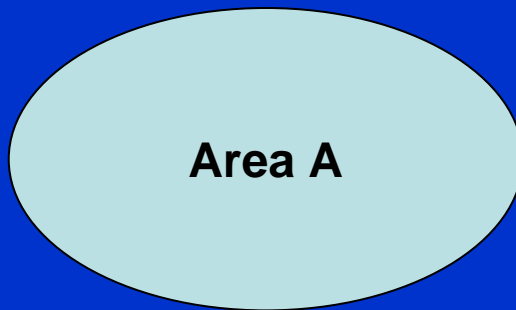
- **Use a separate block for:**
 1. **Loopback (most important)**
 2. **Backbone links**
 3. **DMZ**
 4. **Customer address**
- **Infrastructure blocks are 1 & 2**
- **Reserve Infrastructure block for flexibility in Global BGP announcement**

Routing strategy

- Resources available
- Business model
- Security consideration
- Availability and redundancy design
- Fast convergence
- **Administrative control**

Routing Strategy (Cont')

- One area or multiple Area?



Level 1 and 2 strategy

- After the routing strategy is determined
- Major advantage is admin control
- Level 2 for backbone
- Level 1 for 'any other' area
- Options:
 - Start with Level-2 Only (no problem scaling up to hundreds of routers)
 - Add Level 1
 - Loopback prefix leaking for multiple area strategy

Protocol specific Caveats

- **External overload signaling**
 - Fate sharing with Dcef
- **Set Overload bit upon startup**
 - Deny transit transit before IS-IS route converge
- **ignored lsp error**
 - Ignore LSP with corrupted checksum instead of purging the LSP