

# Requirements for OSPF Topology- Transparent Zone

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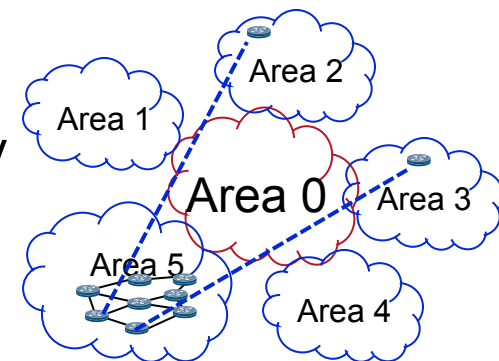
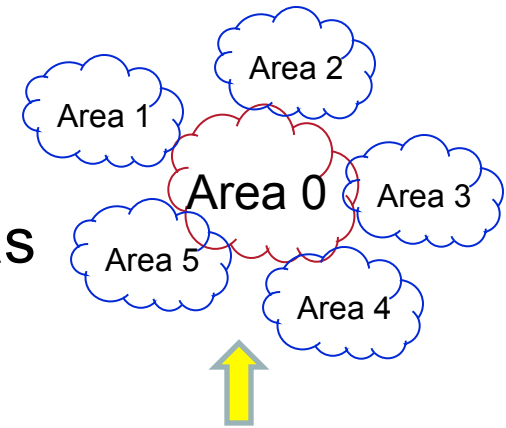
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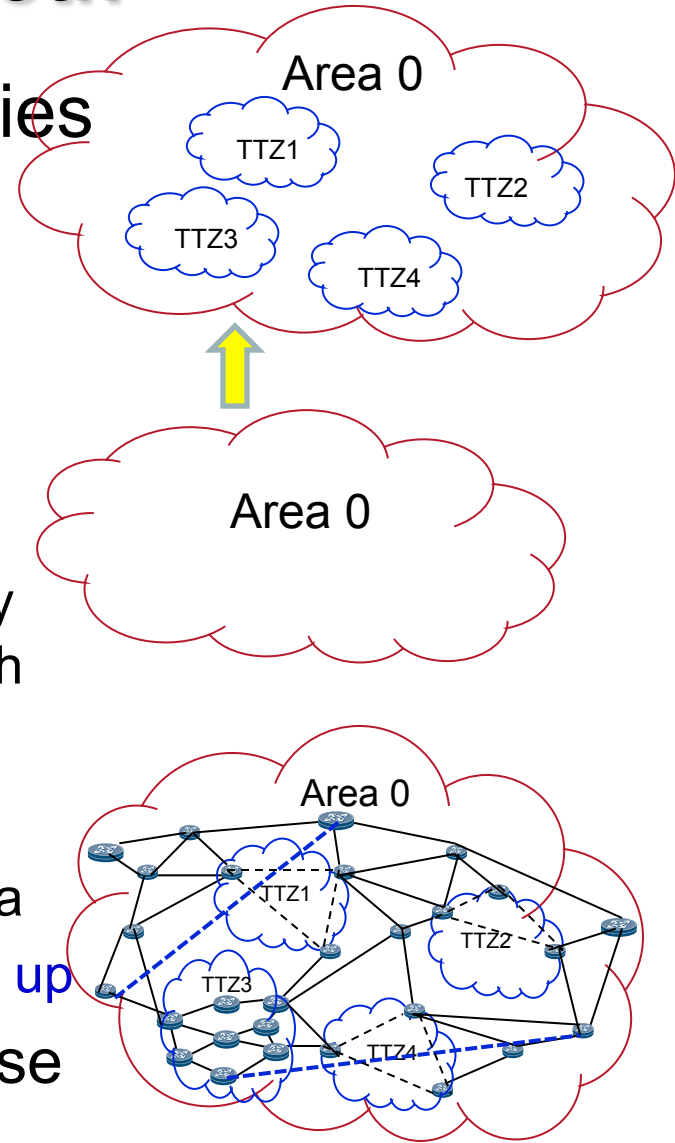
# Area in OSPF

- It provides 2 levels of hierarchies
  - ✓ backbone area and non backbone areas
- Splitting an area into more areas for scalability, but
  - ✓ it is a **very challenging** task since significant network architecture changes
  - ✓ It may **interrupt the services** carried by the network, thus reduce the availability of the network
- Hiding area topology for convergence, but
  - ✓ it makes end to end service set up **very complex** since network topology beyond an area boundary can not be seen by a node inside the area
- These may lead to **more** work and expense on network operation and maintenance



# Good Parts of Both

- TTZ provides 1+ levels of hierarchies
  - ✓ TTZs in an area
- Splitting parts of an area into TTZs for scalability,
  - ✓ It is **easy** since no significant network architecture changes
  - ✓ It is **smooth**, services carried by network may not be affected, availability of network is high
- Hiding TTZ topology for convergence,
  - ✓ Network **topology beyond** TTZ boundary is **visible** to a node in TTZ and to a node in area
  - ✓ E2E service crossing TTZs can be **easily set up**
- These may lead to **less** work and expense on network operation and maintenance



# Requirements for TTZ

1. TTZ MUST be backward compatible
2. Migration to TTZ SHOULD be smooth
3. Migration from TTZ back to original SHOULD be smooth
4. TTZ MUST be able to reduce the size of topology more than one order of magnitudes
5. E2E service crossing TTZs SHOULD be set up easily
6. Protection on service crossing TTZs SHOULD be transparent
7. Configuration on TTZ SHOULD be minimum
8. Changes to existing protocols for TTZ SHOULD be minimum

# Next Step

Welcome comments