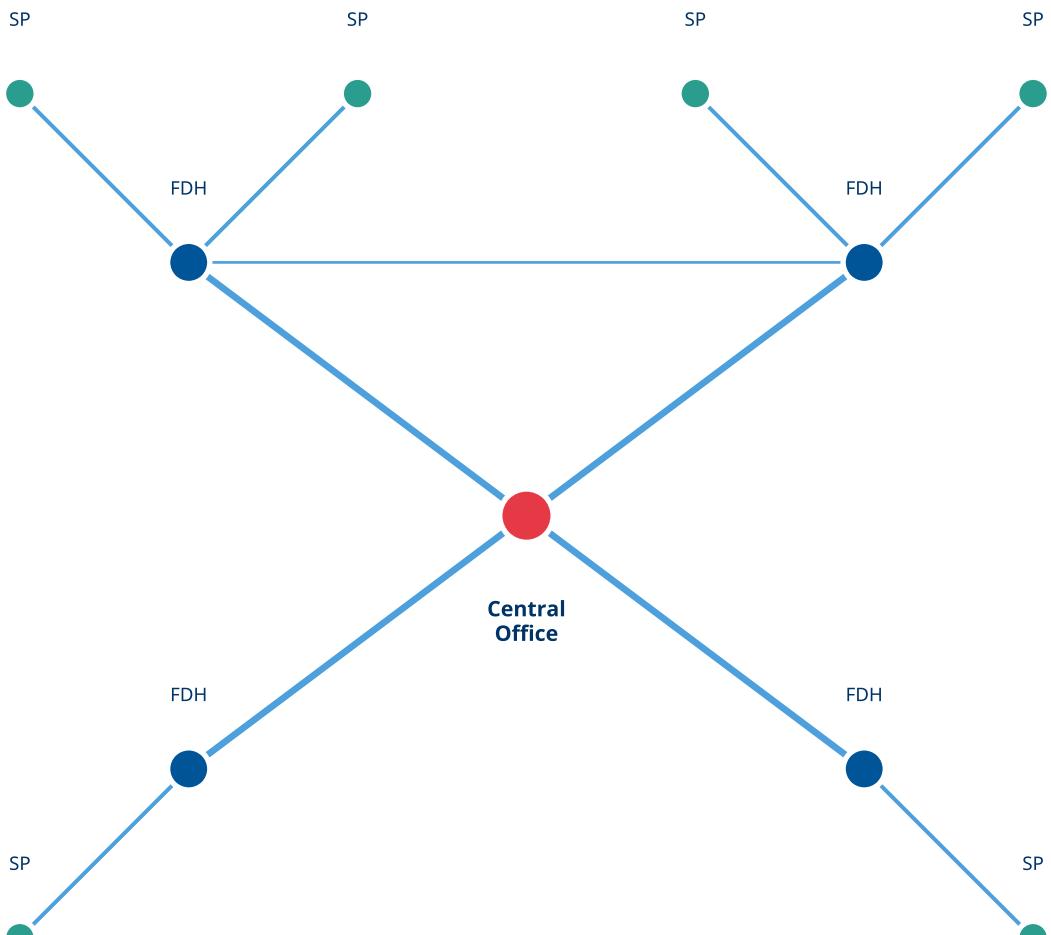


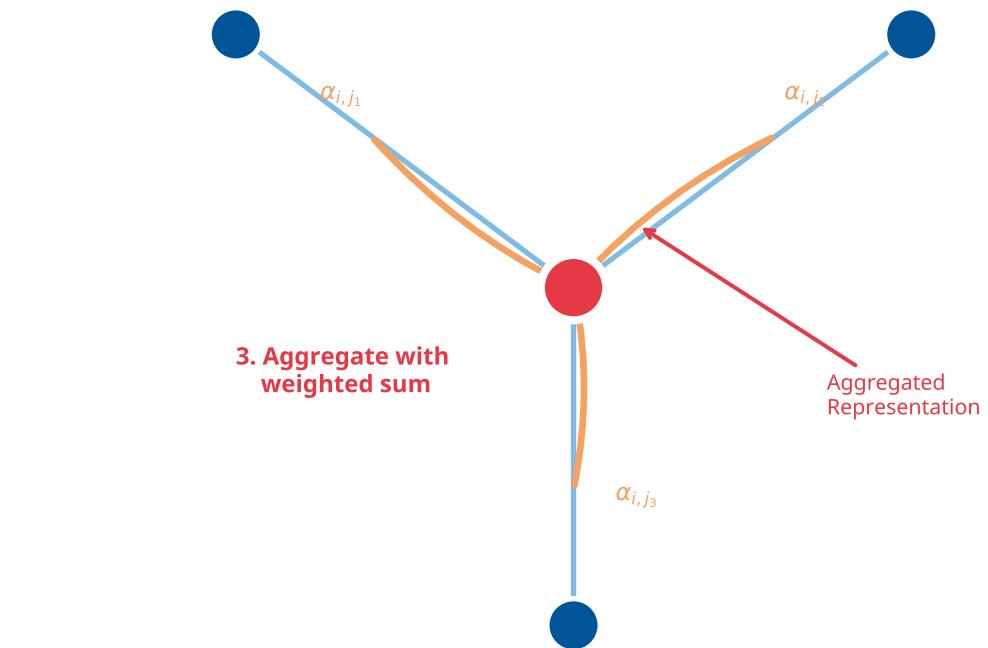
Fiber Optic Network as Graph



- Central Office
- Fiber Distribution Hub
- Splice Point
- Fiber Connection

GNN Message Passing Mechanism

1. Collect neighbor features
2. Compute attention weights



$$h_i^{(l+1)} = \sigma \left(\sum_{j \in \mathcal{N}(i)} \alpha_{ij} W h_j^{(l)} \right)$$