|  |  |  |
| --- | --- | --- |
| Element | OSPF | RIPv2 |
| Type of Protocol | Link state | Distance vector |
| Classless support | Yes | Yes |
| VLSM support | Yes | Yes |
| Auto-summarization | No | Yes |
| Manual summarization | Yes | Yes |
| Noncontiguous support | Yes | Yes |
| Route propagation | Multicast on change | Periodic multicast |
| Path metric | Bandwidth | Hop |
| Hop count limit | None | 15 |
| Convergence | Fast | Slow |
| Peer Authentication | Yes | Yes |
| Hierarchical network requirement | Yes (Using multiple areas) | No (Flat only) |
| Updates | Event Triggered | Periodic |
| Algorithm | Dijkstra | Bellman-Ford |

Comparing OSPF to RIP