Configuring Routing Protocols

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In addition to static routing, the Cisco ASR 901 supports the following routing protocols:

- OSPF—An Interior Gateway Protocol (IGP) designed for IP networks that supports IP subnetting and tagging of externally derived routing information. OSPF also allows packet authentication and uses IP multicast when sending and receiving packets. For more information on how to configure OSPF, see the IP Routing: OSPF Configuration Guide, Cisco IOS Release 15.1S .
- IS-IS—An Open System Interconnection (OSI) protocol that specifies how routers communicate with routers in different domains. For more information on how to configure IS–IS, see the IP Routing: ISIS Configuration Guide, Cisco IOS Release 15.1S .
- BGP—An interdomain routing protocol designed to provide loop-free routing between separate routing domains that contain independent routing policies (autonomous systems). For more information on how to configure BGP, see the IP Routing: BGP Configuration Guide, Cisco IOS Release 15.1S .

For information about Bidirectional Forwarding Detection (BFD) including sample routing configurations with BFD, see Configuring BFD.

Note Cisco ASR 901 router supports IP routing on SVI interfaces.

Note Cisco ASR 901 router does not support IGP fast timers.

Note Cisco ASR 901 router does not support CLNS routing.

Note The maximum number of prefixes supported in Cisco ASR 901 router is 12000.

Note The maximum number of SVI's supported in Cisco ASR 901 router is 250.

Changing Default Hashing Algorithm for ECMP

The hashing algorithm for ECMP is changed from Cisco IOS Release 15.3(2)S onwards. You can use the following commands to configure various types of ECMP hash configurations for improved load distribution of IP traffic.

- **asr901-ecmp-hash-config global-type**
- **asr901-ecmp-hash-config ipv4-type**
- **asr901-ecmp-hash-config ipv6-type**
- **asr901-ecmp-hash-config mpls-to-ip**

For detailed information on these commands, see the Cisco ASR 901 Series Aggregation Services Router Command Reference guide at the following location:
http://www.cisco.com/c/en/us/td/docs/wireless/asr_901s/cr/b_cr_for_asr901s.html.