

## Default Route Preference Values

The JUNOS Software routing protocol process assigns a default preference value to each route that the routing table receives. The default value depends on the source of the route. The preference value is a value from 0 through 4,294,967,295 ( $2^{32} - 1$ ), with a lower value indicating a more preferred route. Table 1 lists the default preference values.

**Table 1: Default Route Preference Values**

How Route Is Learned	Default Preference	Statement to Modify Default Preference
Directly connected network	0	–
System routes	4	–
Static and Static LSPs	5	static
RSVP-signaled LSPs	7	RSVP preference as described in the <i>JUNOS MPLS Applications Configuration Guide</i>
LDP-signaled LSPs	9	LDP preference, as described in the <i>JUNOS MPLS Applications Configuration Guide</i>
OSPF internal route	10	OSPF preference
IS-IS Level 1 internal route	15	IS-IS preference
IS-IS Level 2 internal route	18	IS-IS , preference
Redirects	30	–
Kernel	40	–
SNMP	50	–
Router discovery	55	–
RIP	100	RIP preference
RIPng	100	RIPng preference
PIM	105	<i>JUNOS Multicast Protocols Configuration Guide</i>
DVMRP	110	<i>JUNOS Multicast Protocols Configuration Guide</i>
Aggregate	130	aggregate
OSPF AS external routes	150	OSPF external-preference
IS-IS Level 1 external route	160	IS-IS external-preference
IS-IS Level 2 external route	165	IS-IS external-preference

**Table 1: Default Route Preference Values** (continued)

How Route Is Learned	Default Preference	Statement to Modify Default Preference
BGP	170	BGP preference, export, import
MSDP	175	<i>JUNOS Multicast Protocols Configuration Guide</i>

In general, the narrower the scope of the statement, the higher precedence its preference value is given, but the smaller the set of routes it affects. To modify the default preference value for routes learned by routing protocols, you generally apply routing policy when configuring the individual routing protocols. You also can modify some preferences with other configuration statements, which are indicated in the table. For information about defining and applying routing policies, see the *JUNOS Policy Framework Configuration Guide*.

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