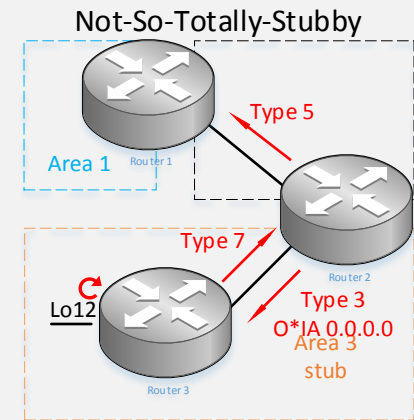
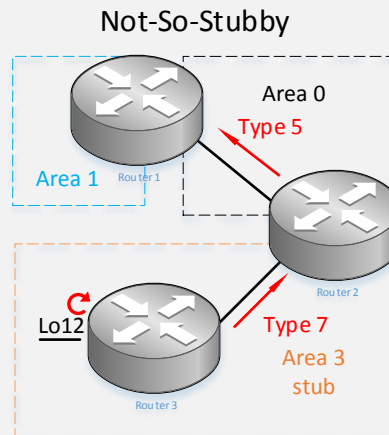
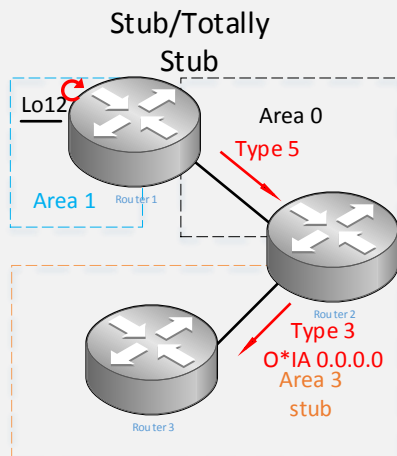


OSPF Stub Areas Reference Sheet



OSPF Stub Area Type / Attributes

	Stub	Total Stubby	Not-So-Stubby (NSSA)	Not-So-Totally-Stubby
Blocked LSA Types	4, 5	3, 4, 5	4, 5	3, 4, 5
Generate Default	Yes	Yes	No (manually)	No (manually)
Redistribution allowed	No	No	Yes	Yes

Summarization

inter-area summarization performed with the **area range** command

- Performed on ABRs
- Summarizes LSA-1 to LSA-3

External summarization performed with the **summary-address** command

- Performed on ASBRs
- Summarizes LSA-5 to LSA-5
- Summarizes LSA-7 to LSA-7

Null 0 discard route can be disabled with **no discard-route [internal | external]**

- **Internal** refers to inter-area summarization (area x range)
- **External** refers to redistributed summarization (summary-address)

Default Routing

Non-Stub Areas - origination of Type-5 External LSAs

Stub/Total/NSSA-Totally - origination of Type-3 Inter-area route reachability

NSSA - (default-information originate) is a Type-7 default route advertisement, for external route reachability (E1/E2,N1/N2)

OSPF Database recursion

External routes: **Forward Address** field determines who the next recursive lookup should be performed toward. Type-5 External LSAs, the forward address is normally set to 0.0.0.0.

A Type-5 External LSA that was translated from a Type-7 NSSA External LSA forward address is non-zero, the next recursive lookup is performed toward the **non-zero forwarding address**