

# ASPA: IETF110

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# ASPA Document Status

- Text clean up
- Sync with RTR
- Change in IX processing
- Issue with Valid/Unknown states at Downstream paths

# ASPA RTR Requirements

For selected AS:

- Cache MUST build SPAS union;
- Cache MUST send this union in a single PDU;
- Router MUST replace old set with new one;

*Btw, where is draft-ymbk-8210bis-01?*

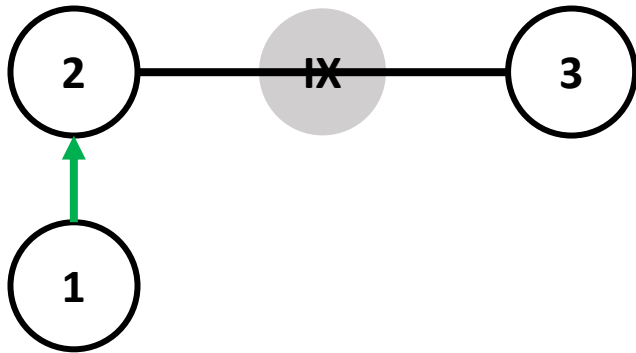
# Routes from IXes

- Some of IXes are transparent;
- Some are not;
- Some support prepending with its AS number;
- Some prepend 'customer' AS.

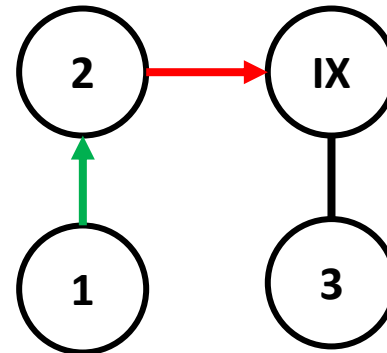
# Terms

- Line goes up – route is announced from customer to provider;
- Line goes down – route is announced from provider to customer;
- Line goes straight – route is announced from peer to peer;
- The arrow shows the order of the ASPA check, not the route advertisement!

# Applying Downstream Procedure

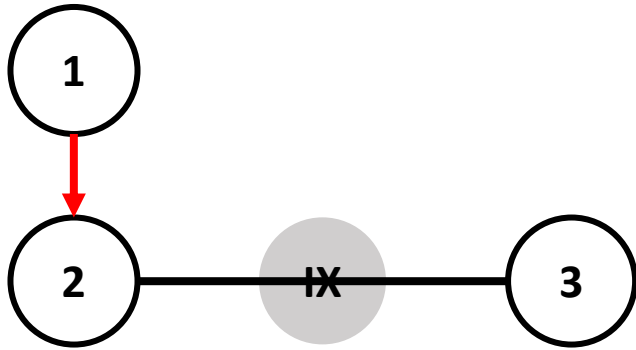


(1,2) is **Valid**  
The path is **Valid**

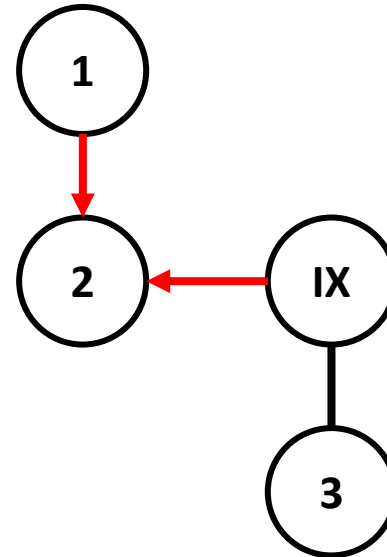


(1, 2) is **Valid**, (2, IX) is **Invalid**  
The path is **Valid**

# Applying Downstream Procedure



(1,2) is **Invalid**  
The path is **Valid**



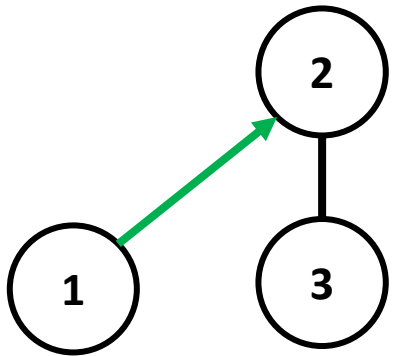
(1, 2) is **Invalid**, (IX, 2) is **Invalid**  
The path is **Invalid**

# Verification Procedure Paths from IX

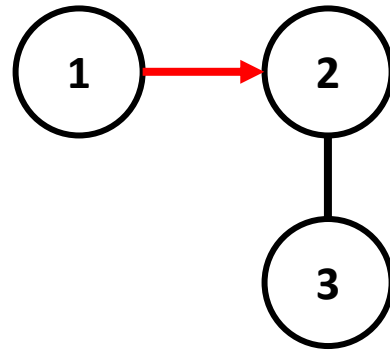
- If a route is received from a RS and the last segment in the AS\_PATH isn't equal to receiver's neighbor AS, the result equals to the outcome of upflow verification procedure applied to AS\_PATH with neighbor\_as replaced with the value of the last AS\_PATH segment
- If a route is received from a RS and the last segment in the AS\_PATH is equal to receiver's neighbor AS, the result equals to the outcome of downflow verification procedure applied to AS\_PATH



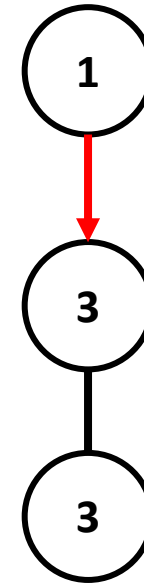
# (1, 2) Doesn't Change Outcome



(1,2) is **Valid**  
The path is **Valid**



(1,2) is **Invalid**  
The path is **Valid**



(1,2) is **Invalid**  
The path is **Valid**

# Plan for Q2

- Fix Valid/Unknown issue with downstream paths;
- Finish text cleanup;
- Wait for draft-ymbk-8210bis-01;
- Joined WGLC!