Setting up eBGP

BGP for networks who peer: Part 3b

Wolfgang Tremmel
wolfgang.tremmel@de-cix.net

BGP (new) Webinars Overview

- 01 - Prefixes and AS numbers
- 02 - BGP Introduction
- 03a - Setting up iBGP
- 03b - Setting up eBGP
- 04 - Becoming multi-homed
- 05 - BGP Best Path Selection

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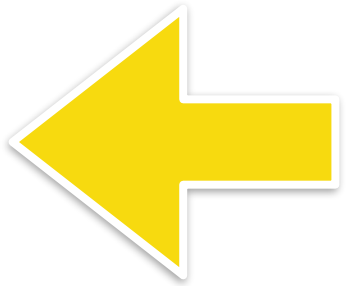

DE CIX

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- →so no need to re-implement features TCP already provides, like
  - →reliable transport
  - →flow control
  - →framing
- →as long as the TCP session is up, BGP assumes its neighbors are up
  - →and have all the information sent to them

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→learns prefixes

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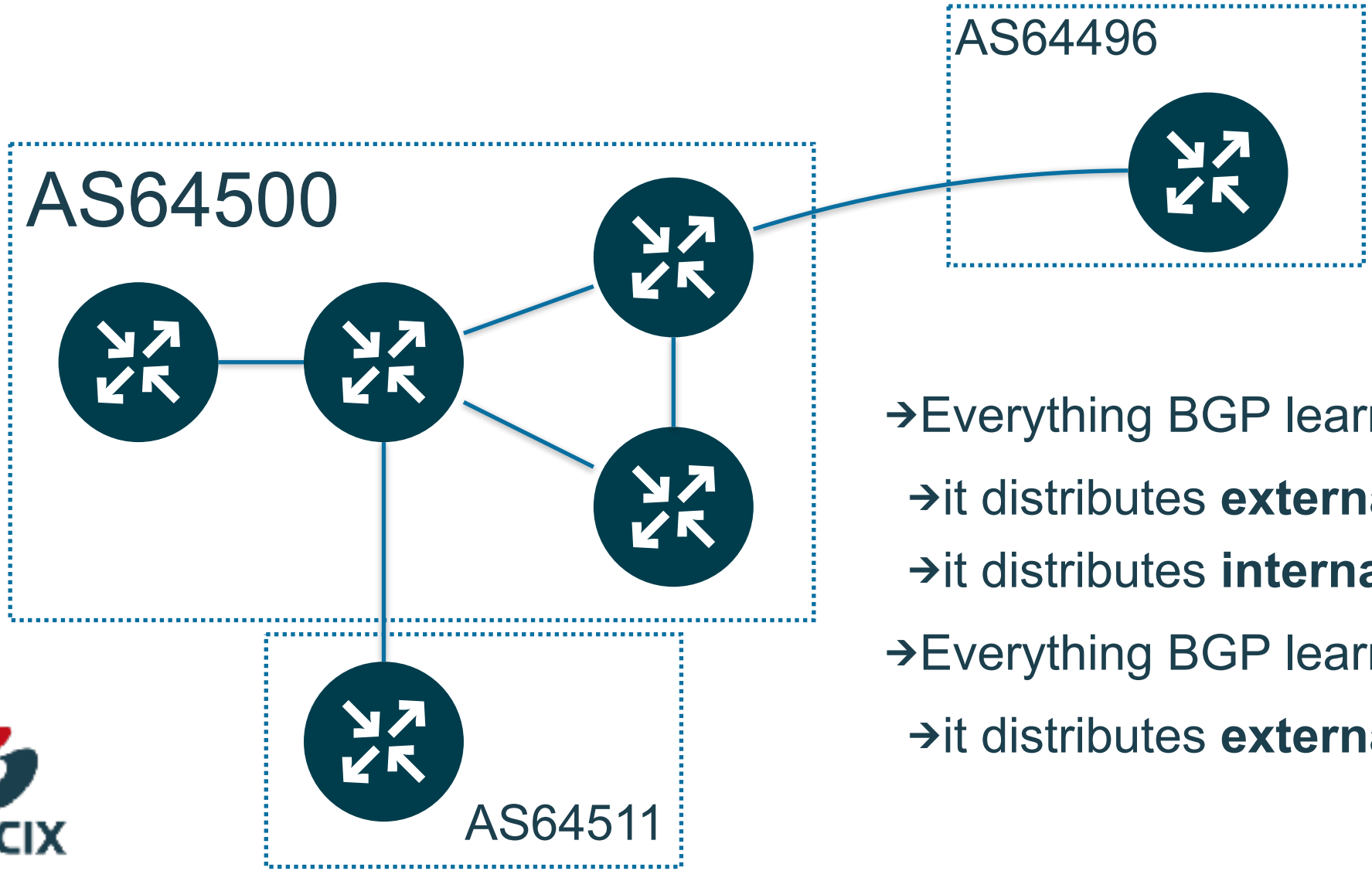

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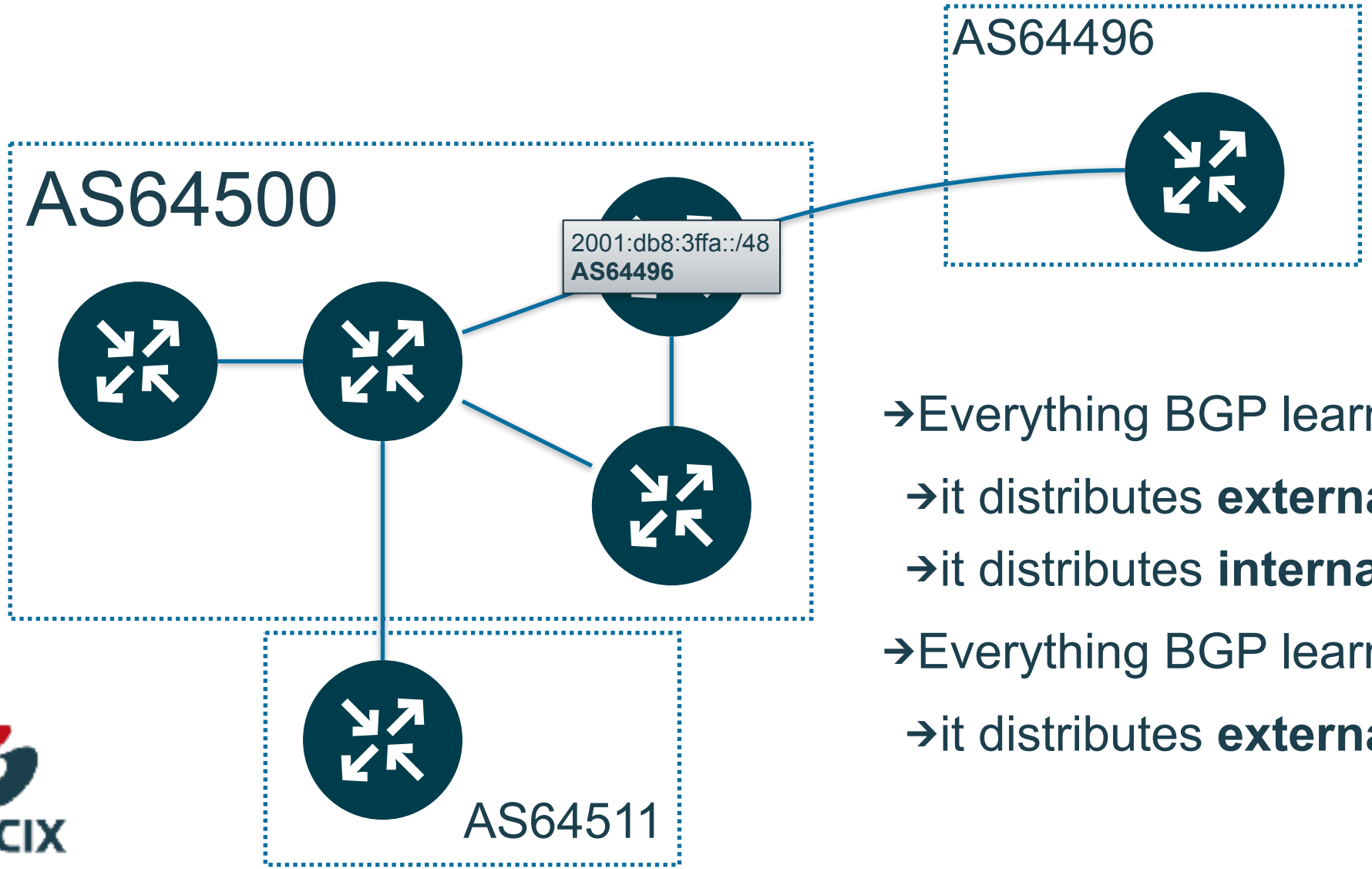

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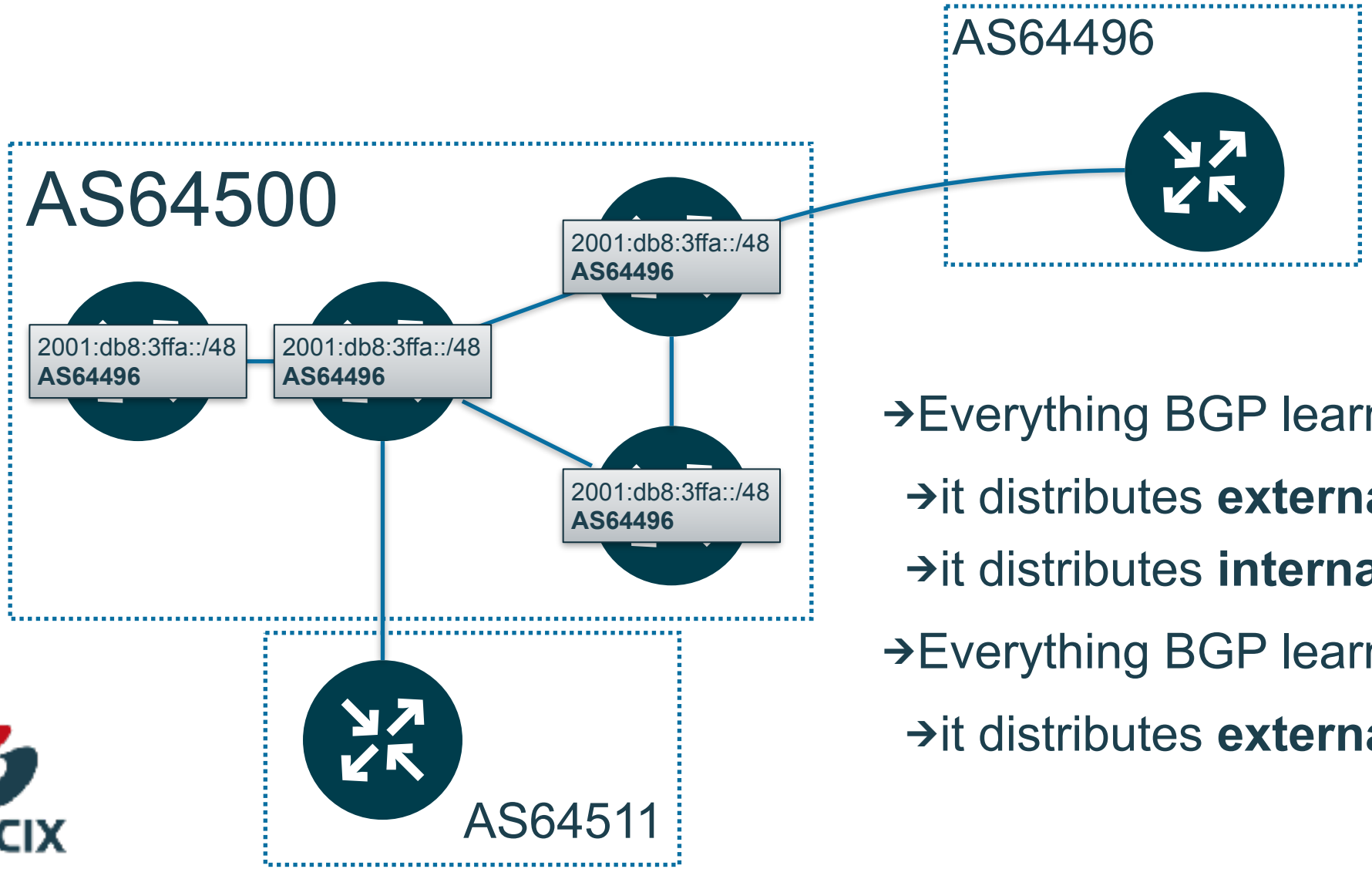

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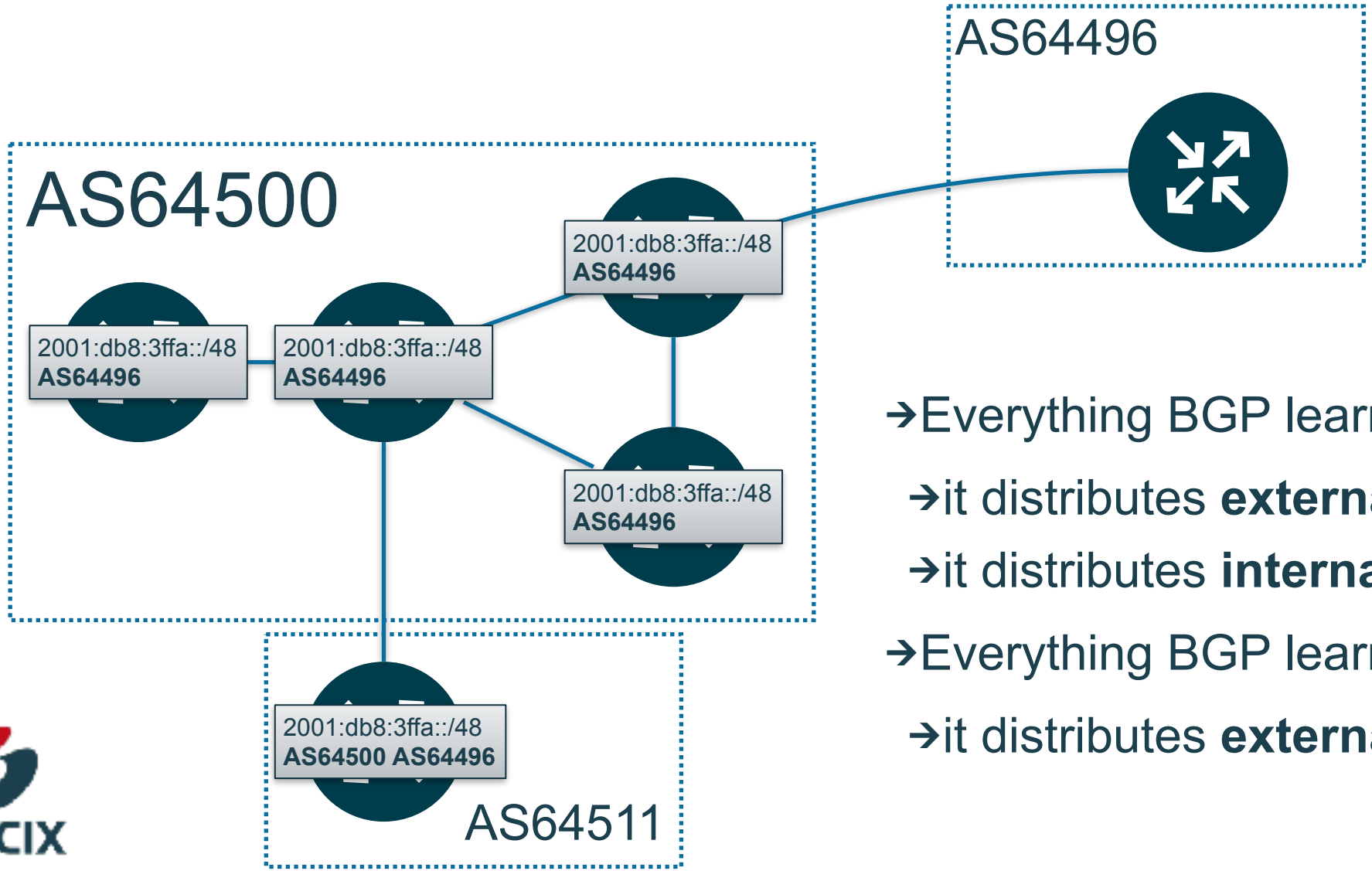

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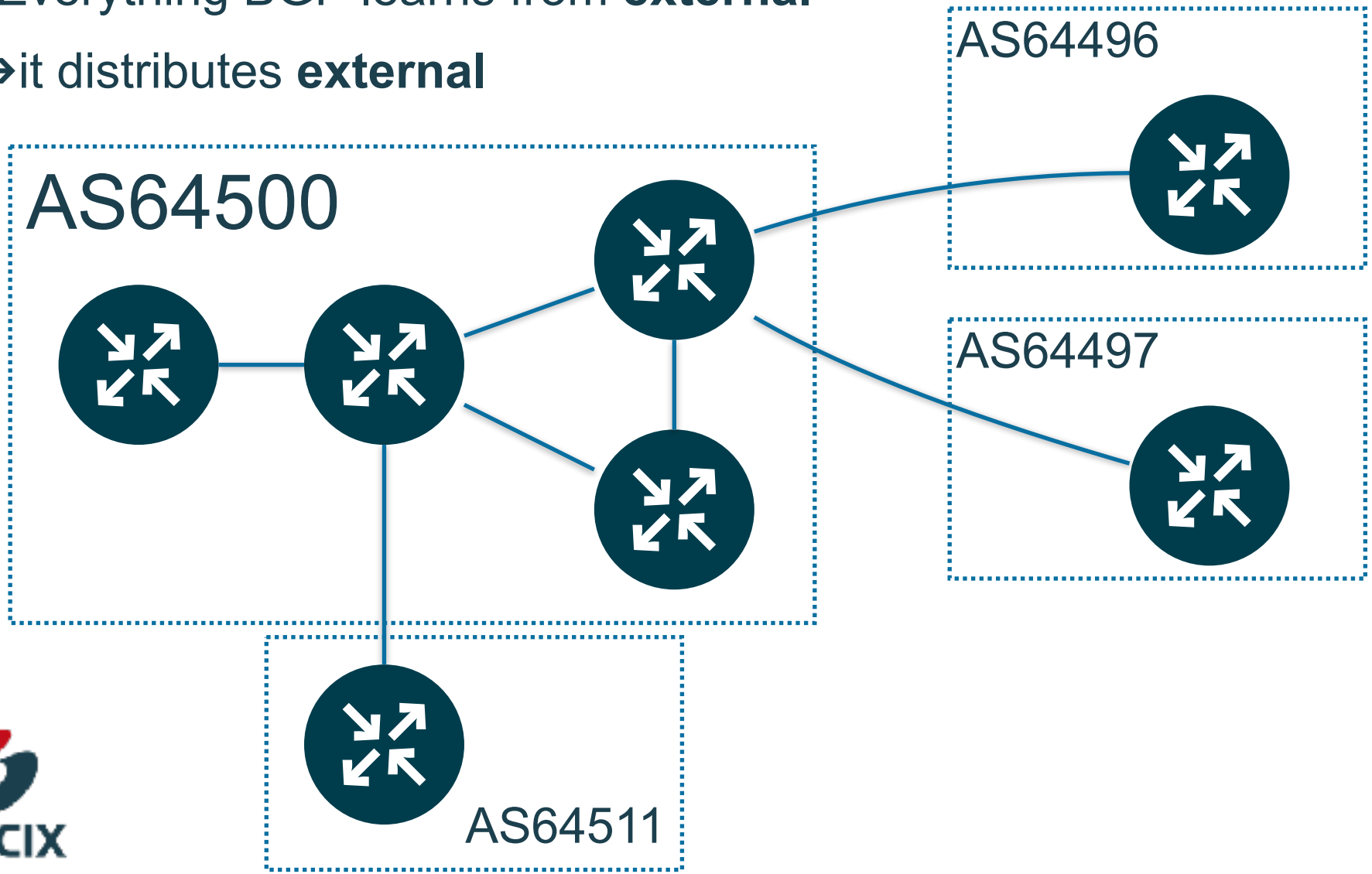

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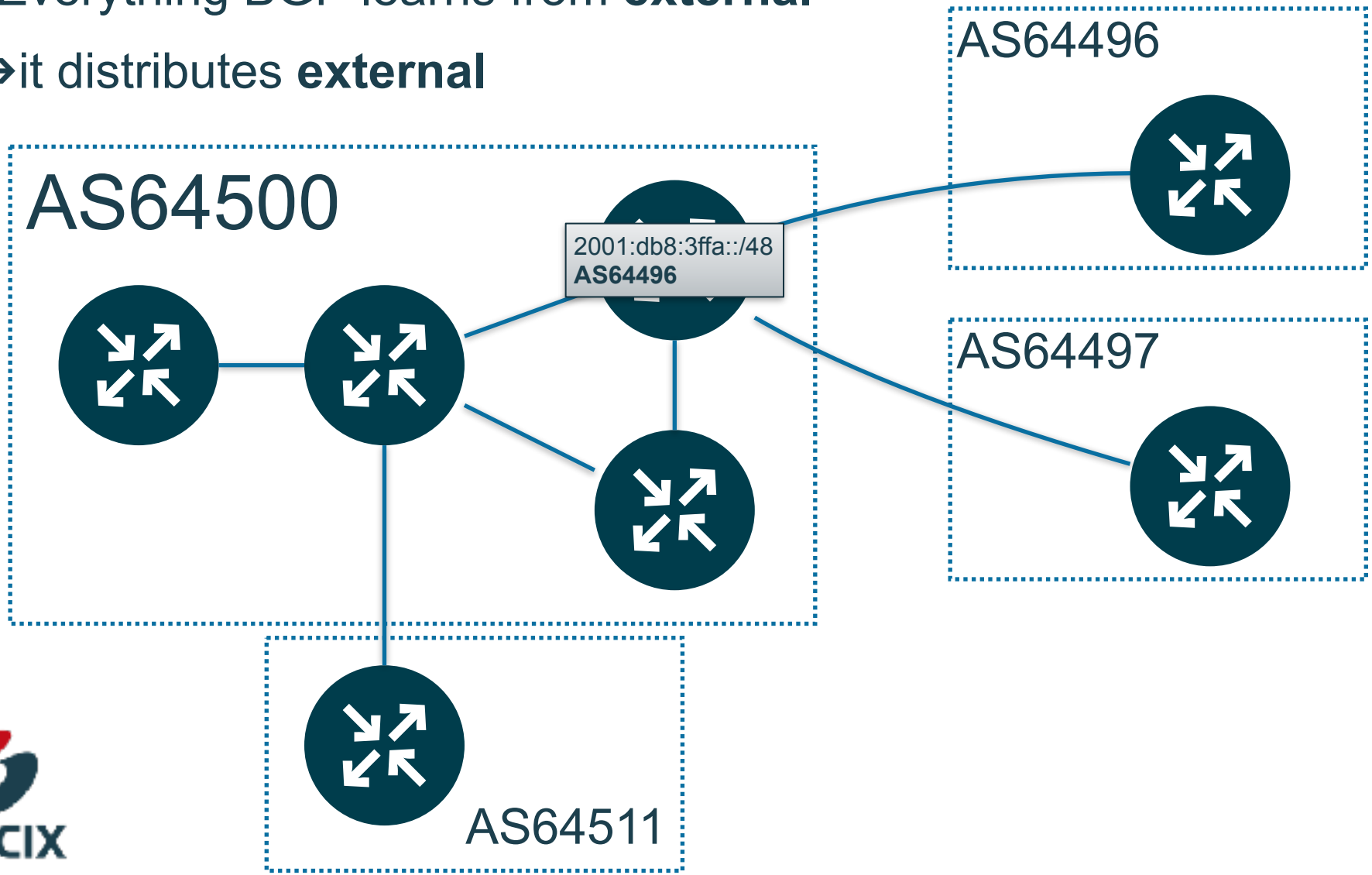

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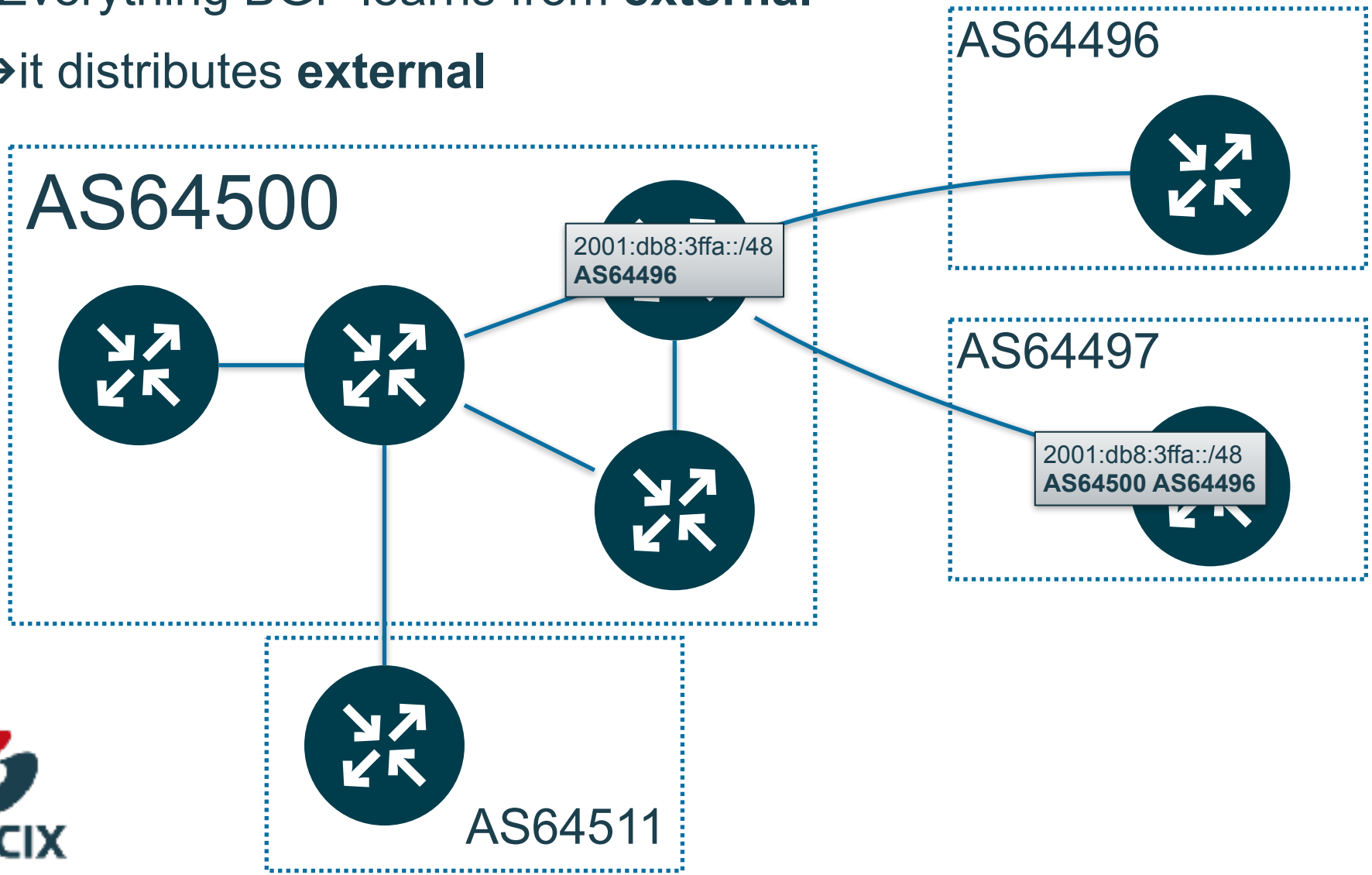

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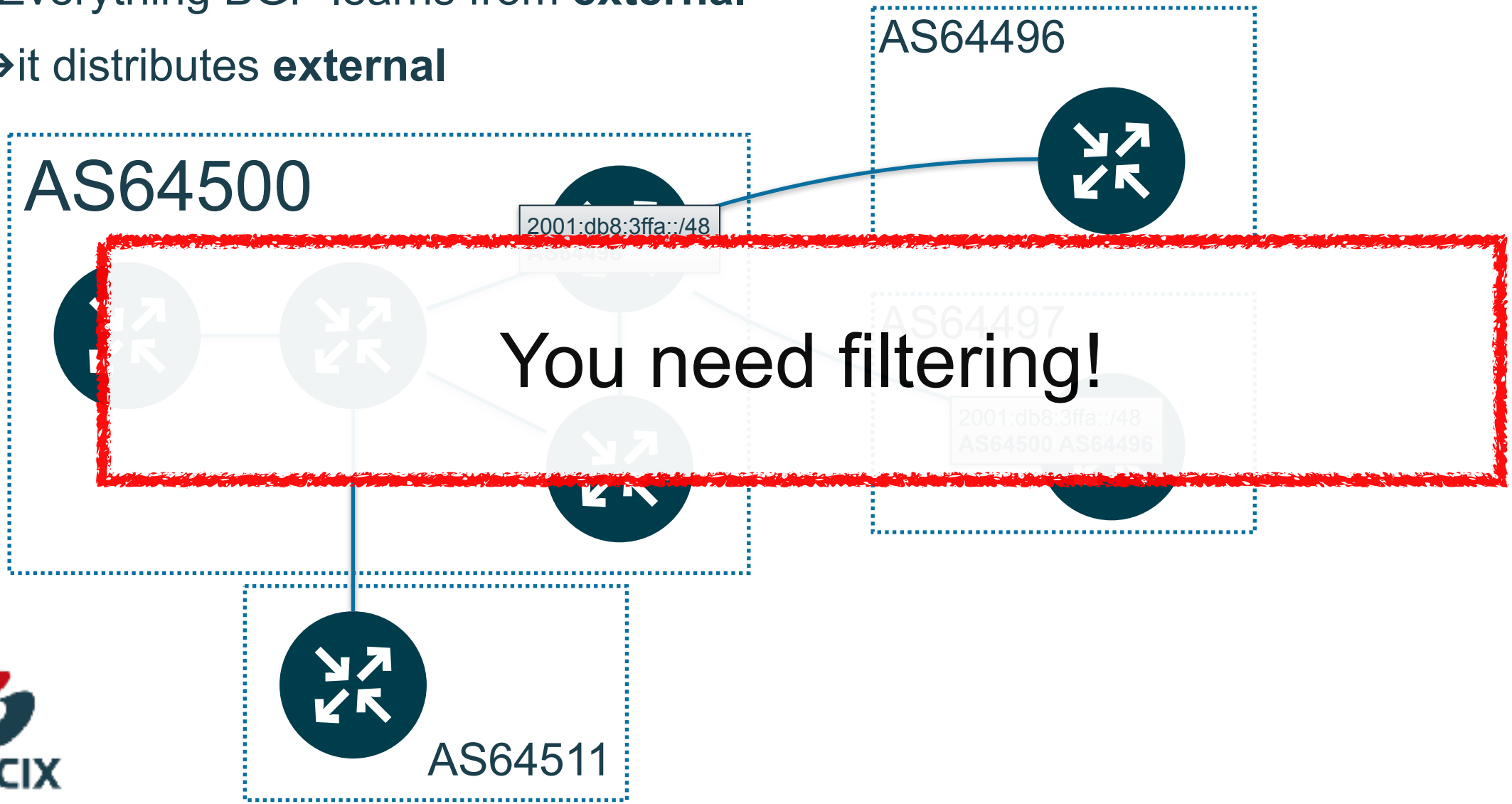

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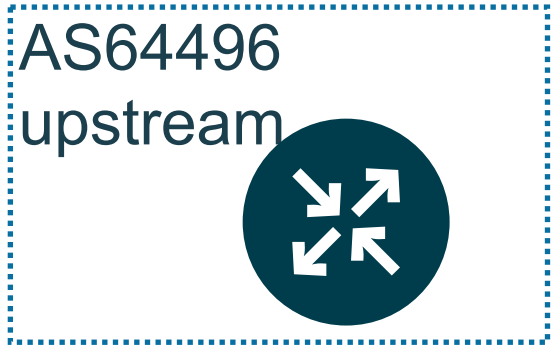

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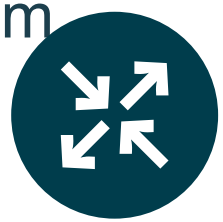
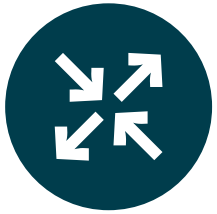
AS64496
upstream





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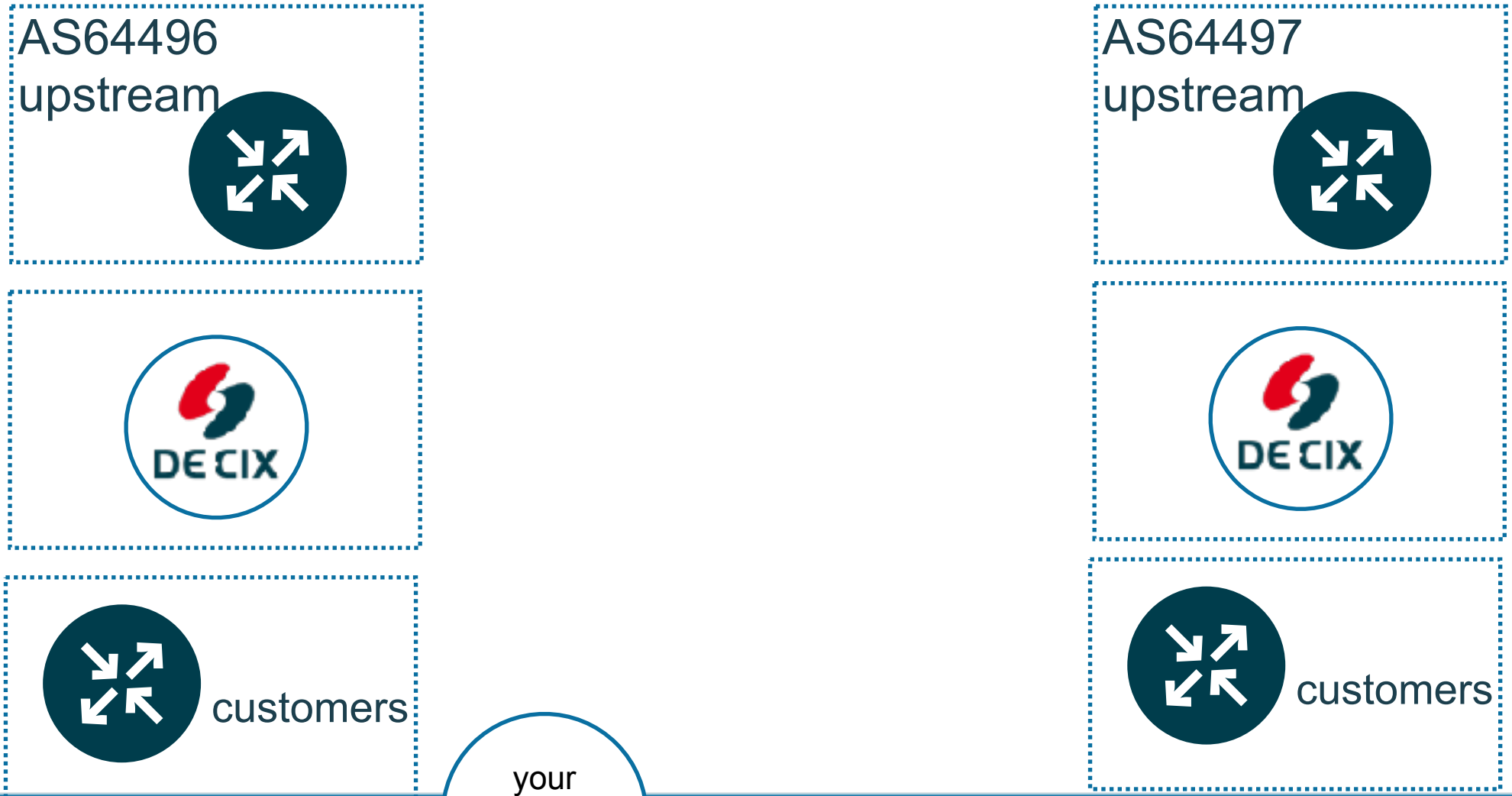

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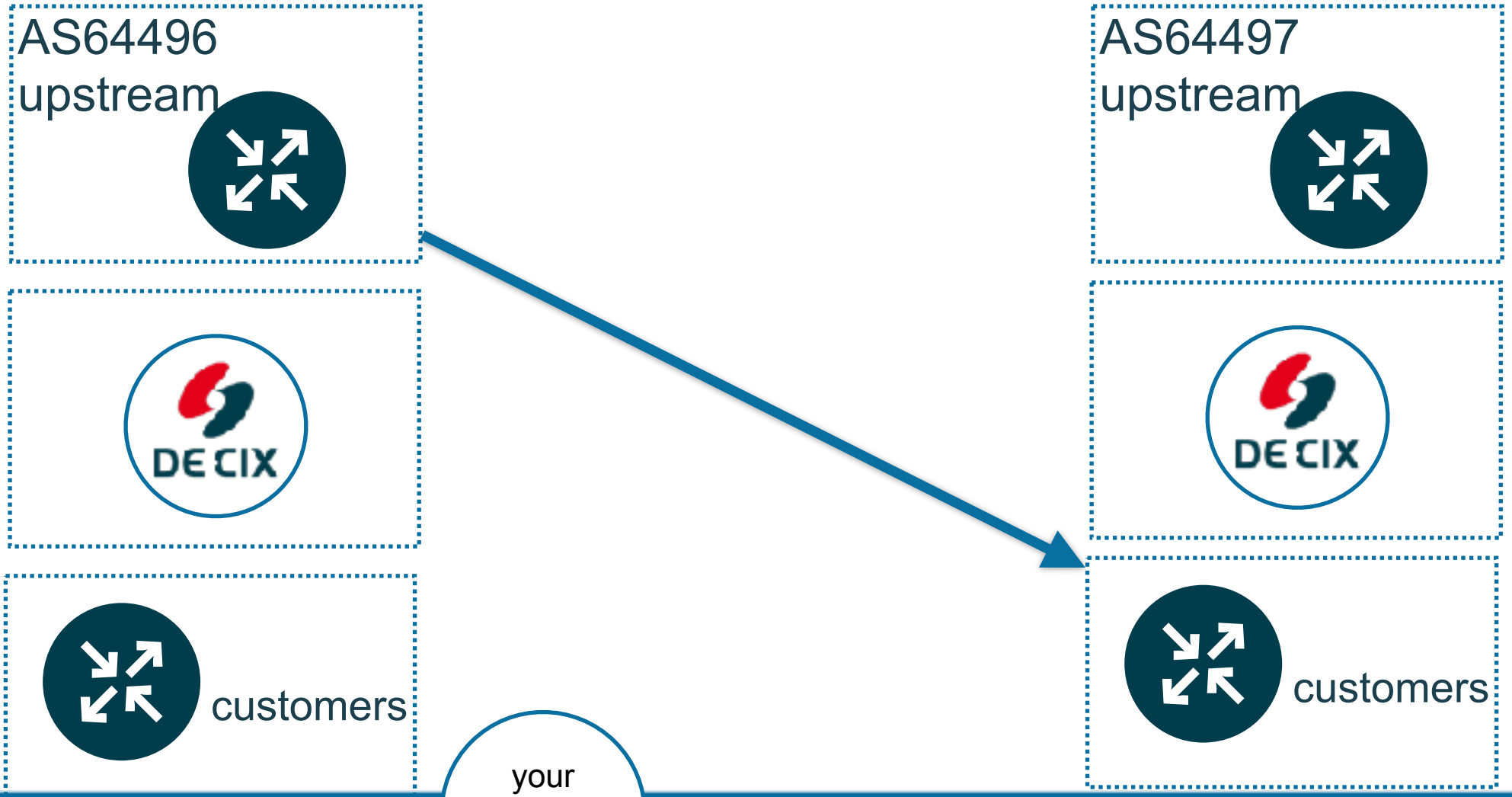

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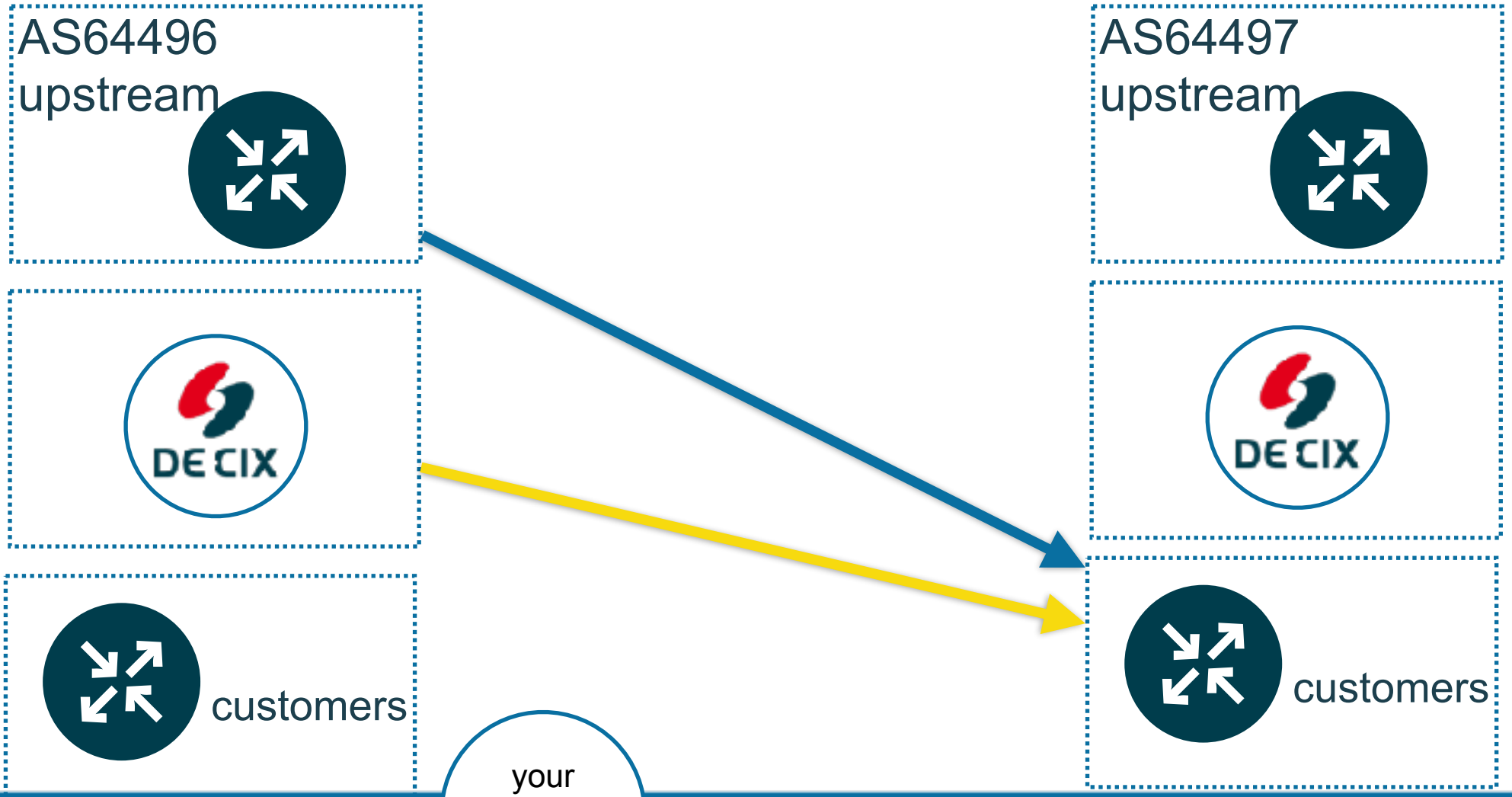

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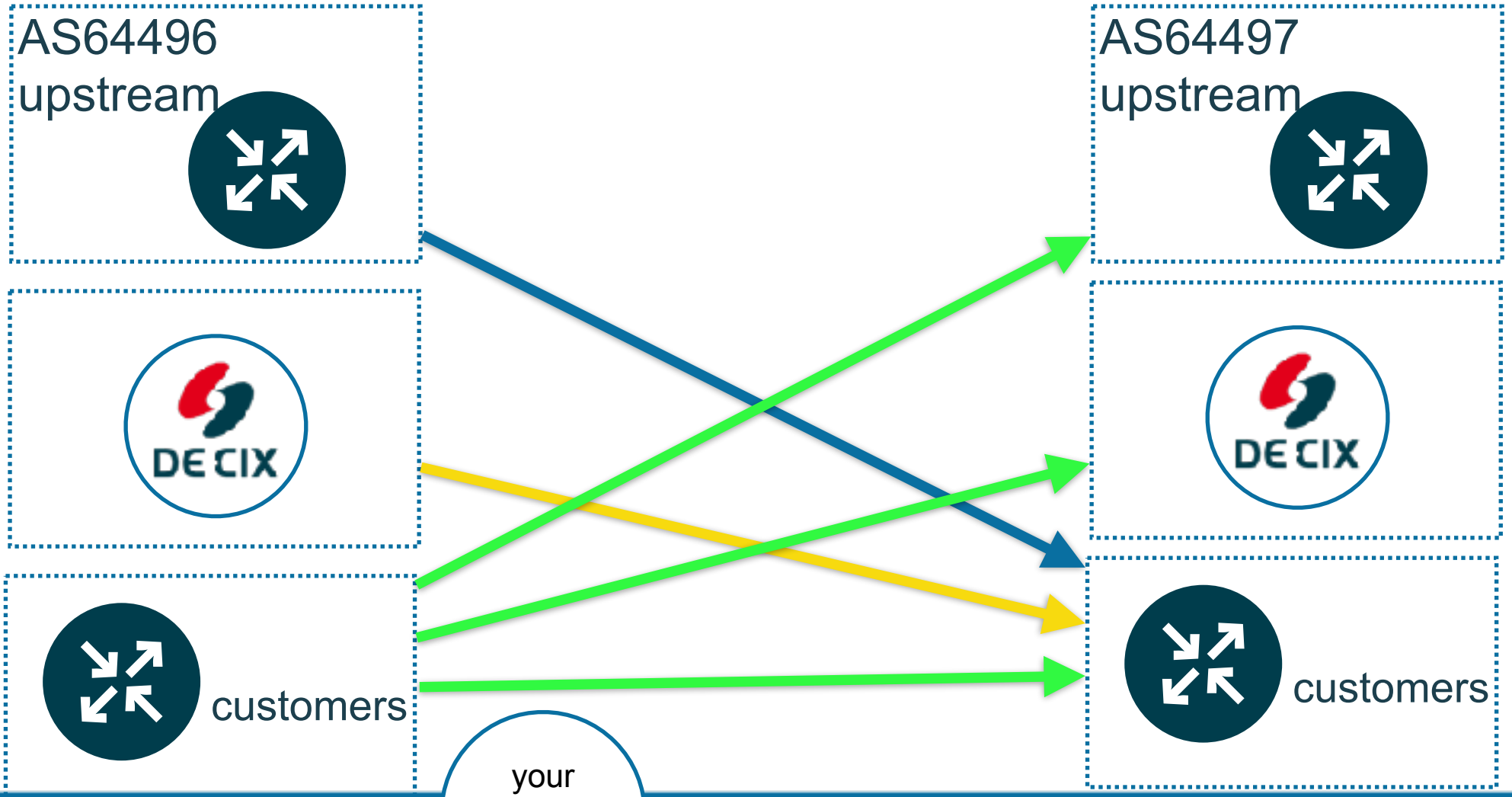

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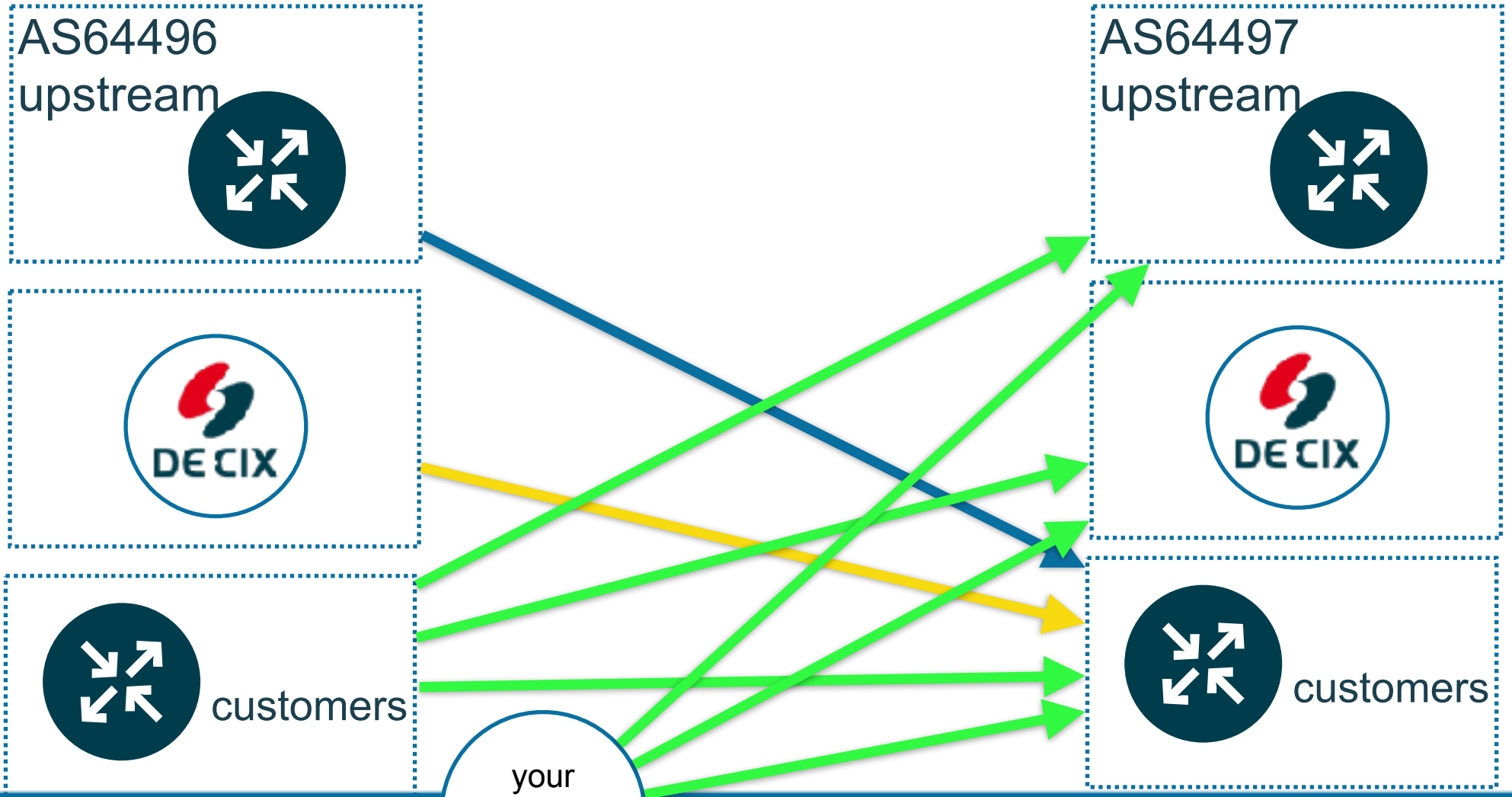

Easy filtering for beginners

➔Deny everything outgoing

➔Allow everything incoming

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```
route-map upstream-out deny 100
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```
ip prefix-list my-networks permit 198.51.100.0/24
!
route-map upstream-out permit 50
 match ip address prefix-list my-networks
!
route-map upstream-out deny 100
```

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  - →some mechanism for **keepalive**
- →a **state model** and timers

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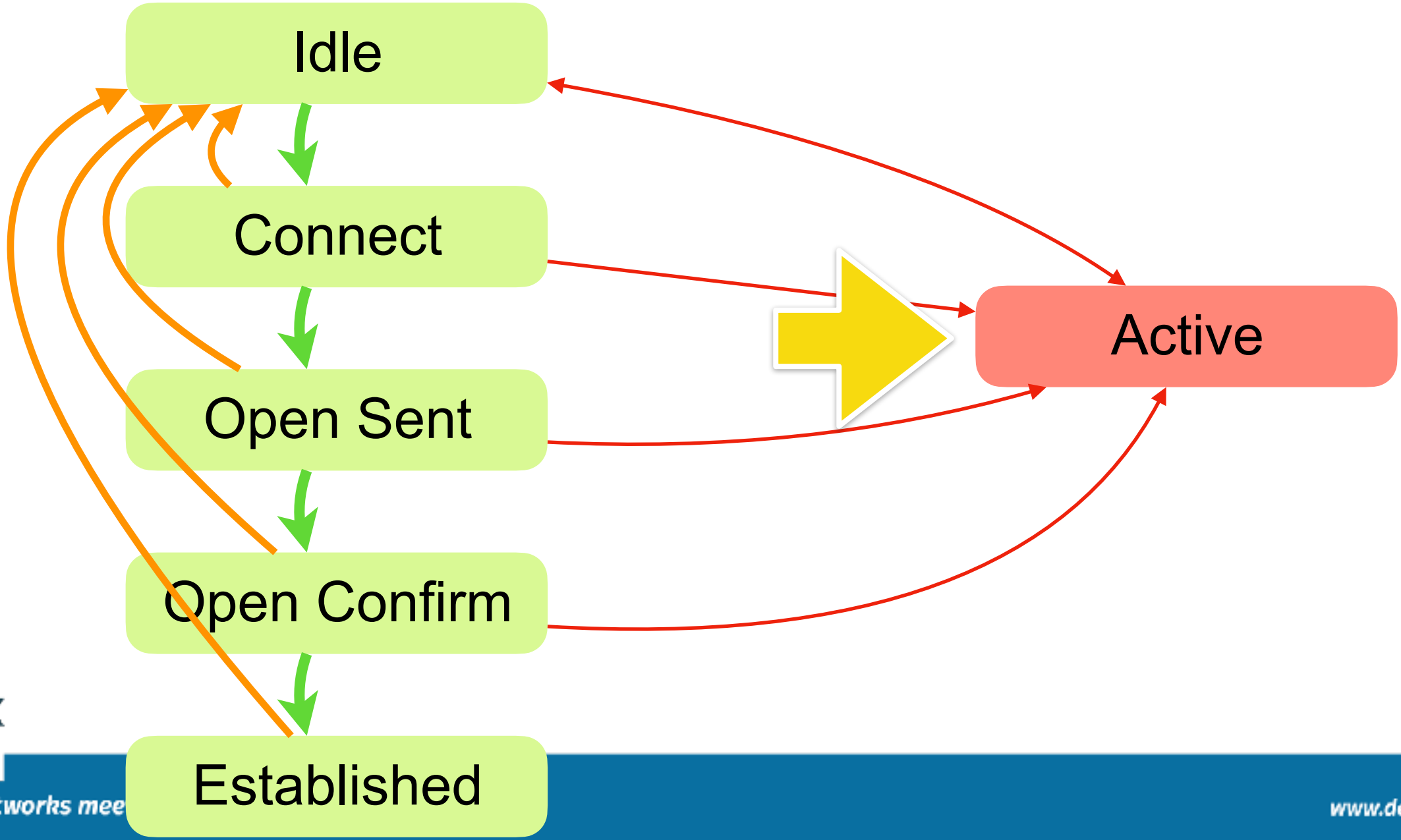

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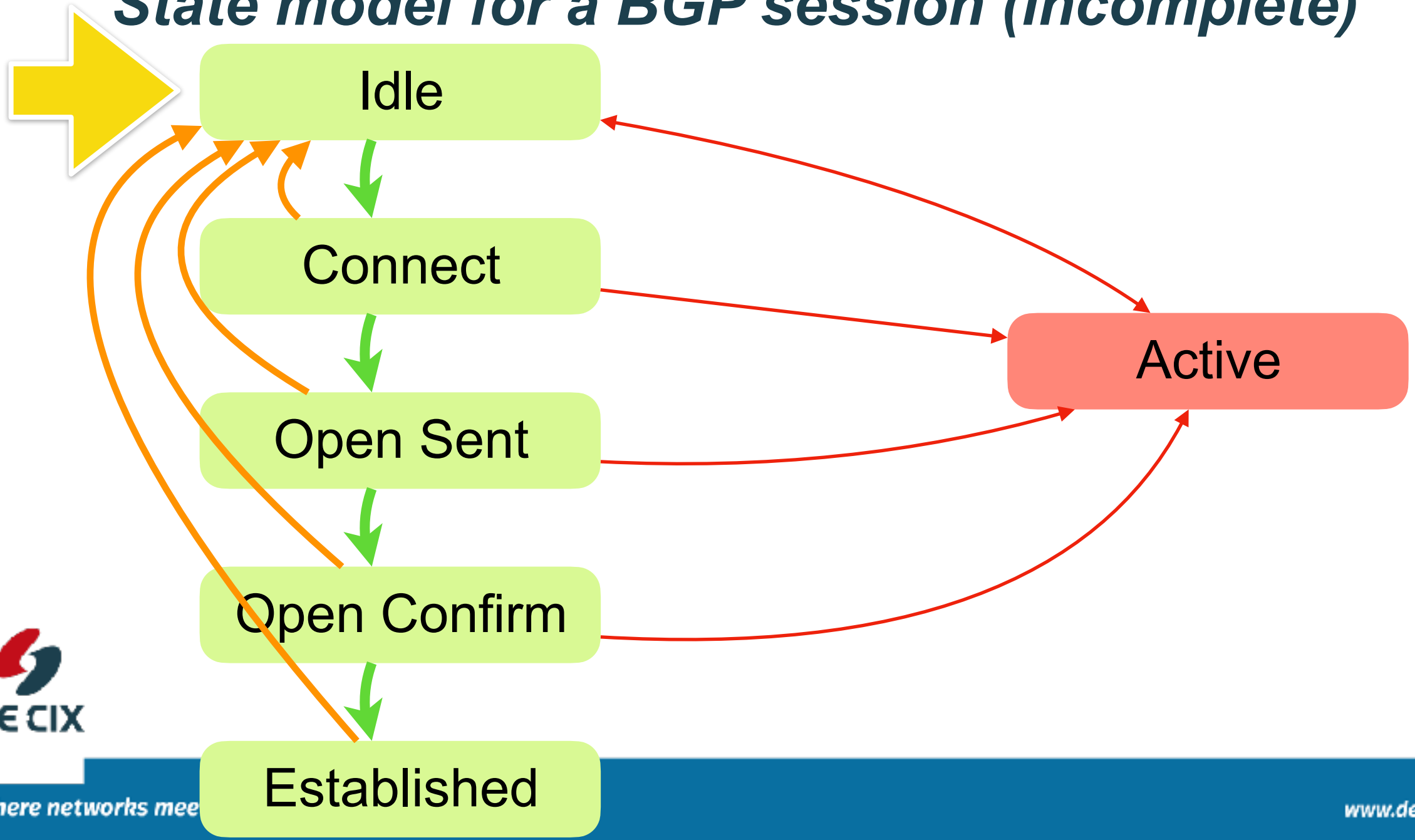

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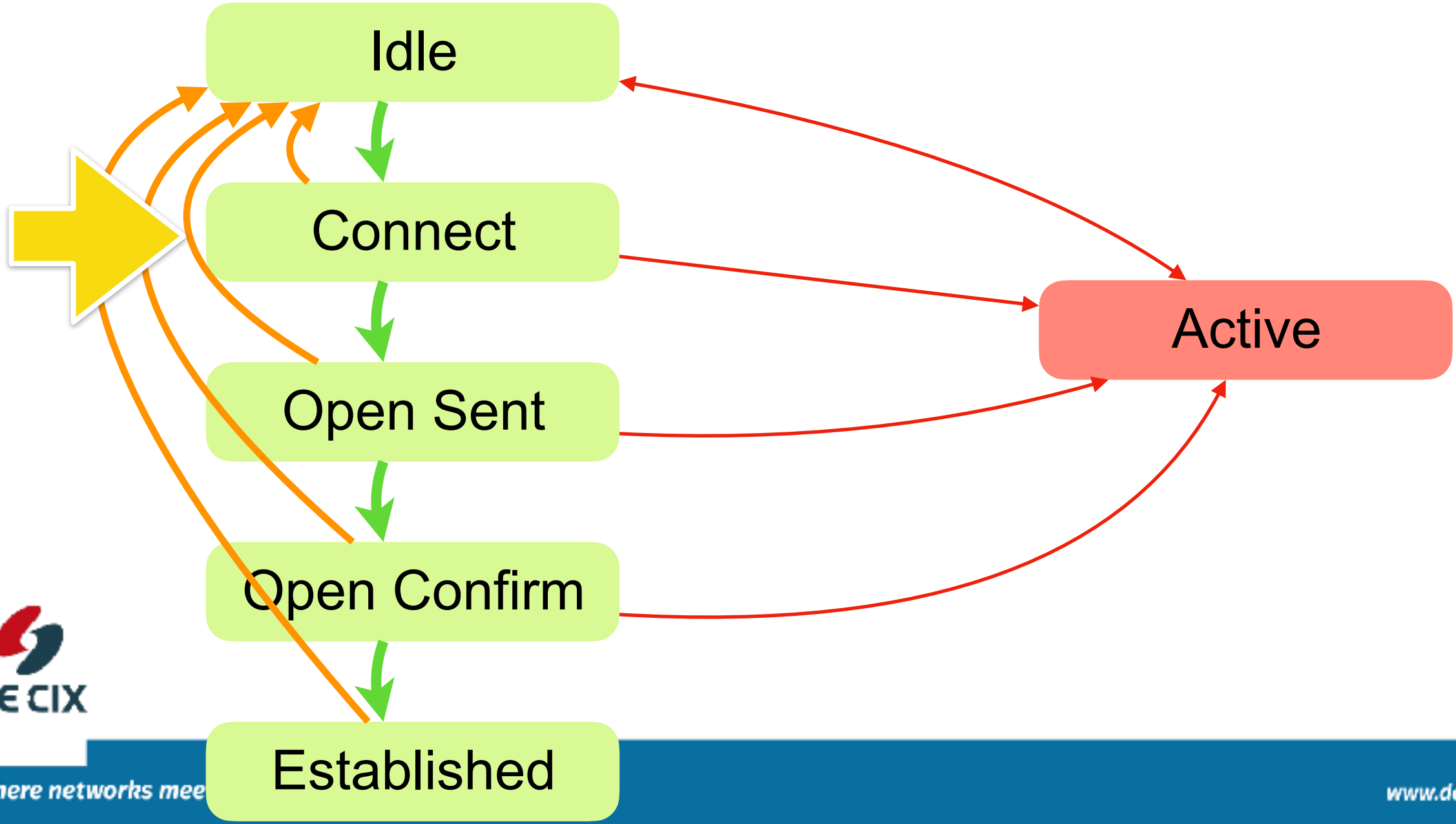

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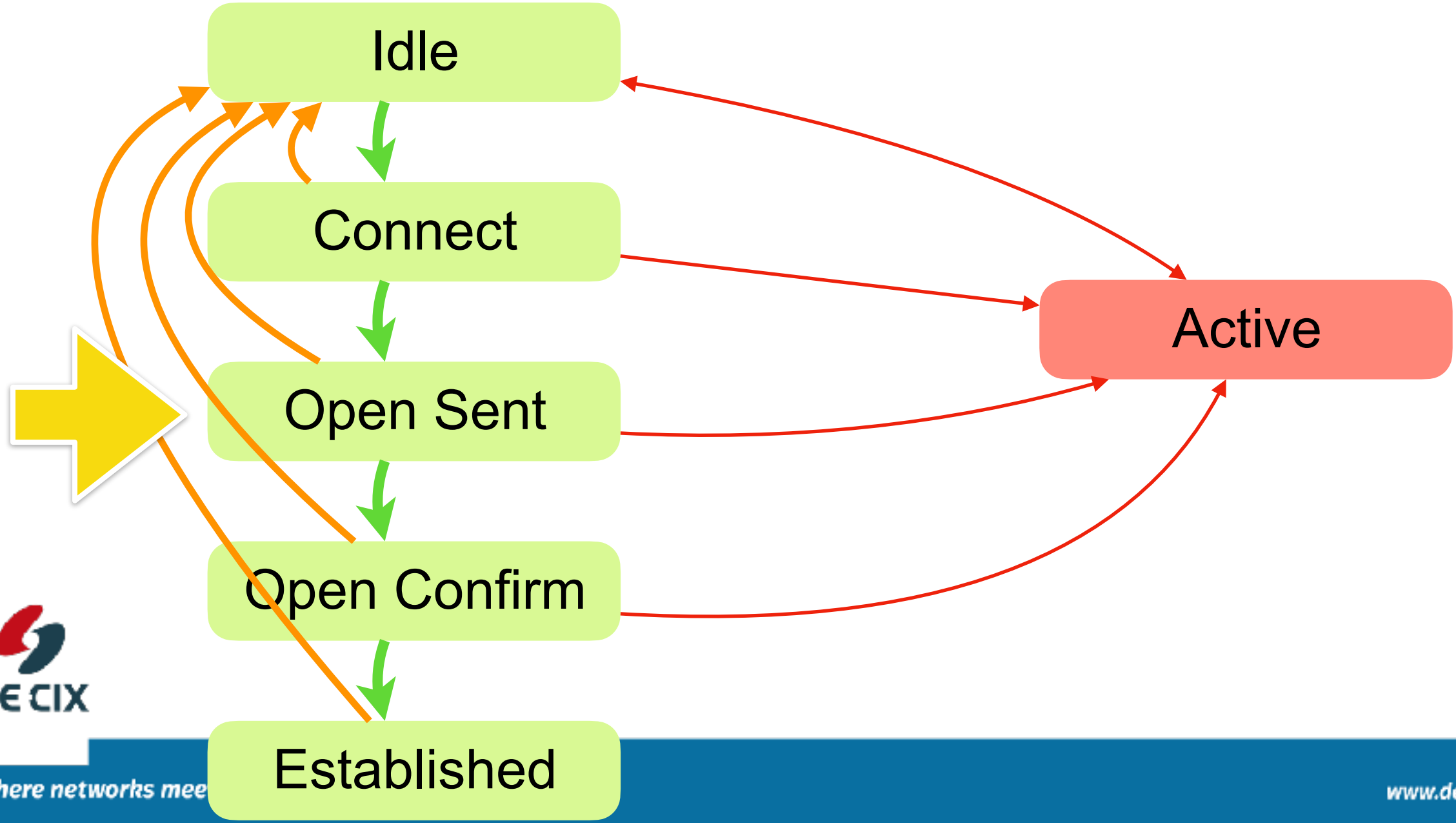

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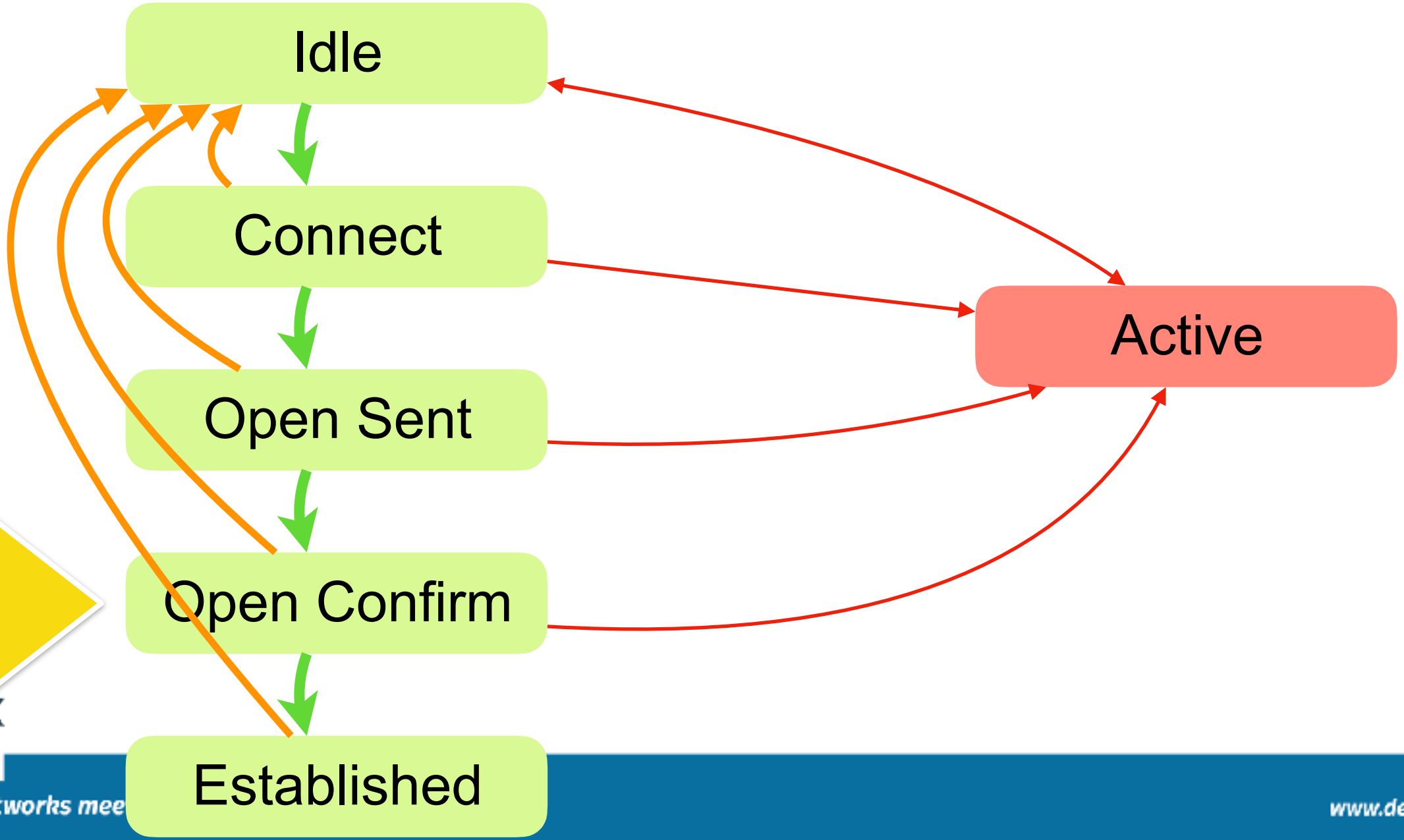

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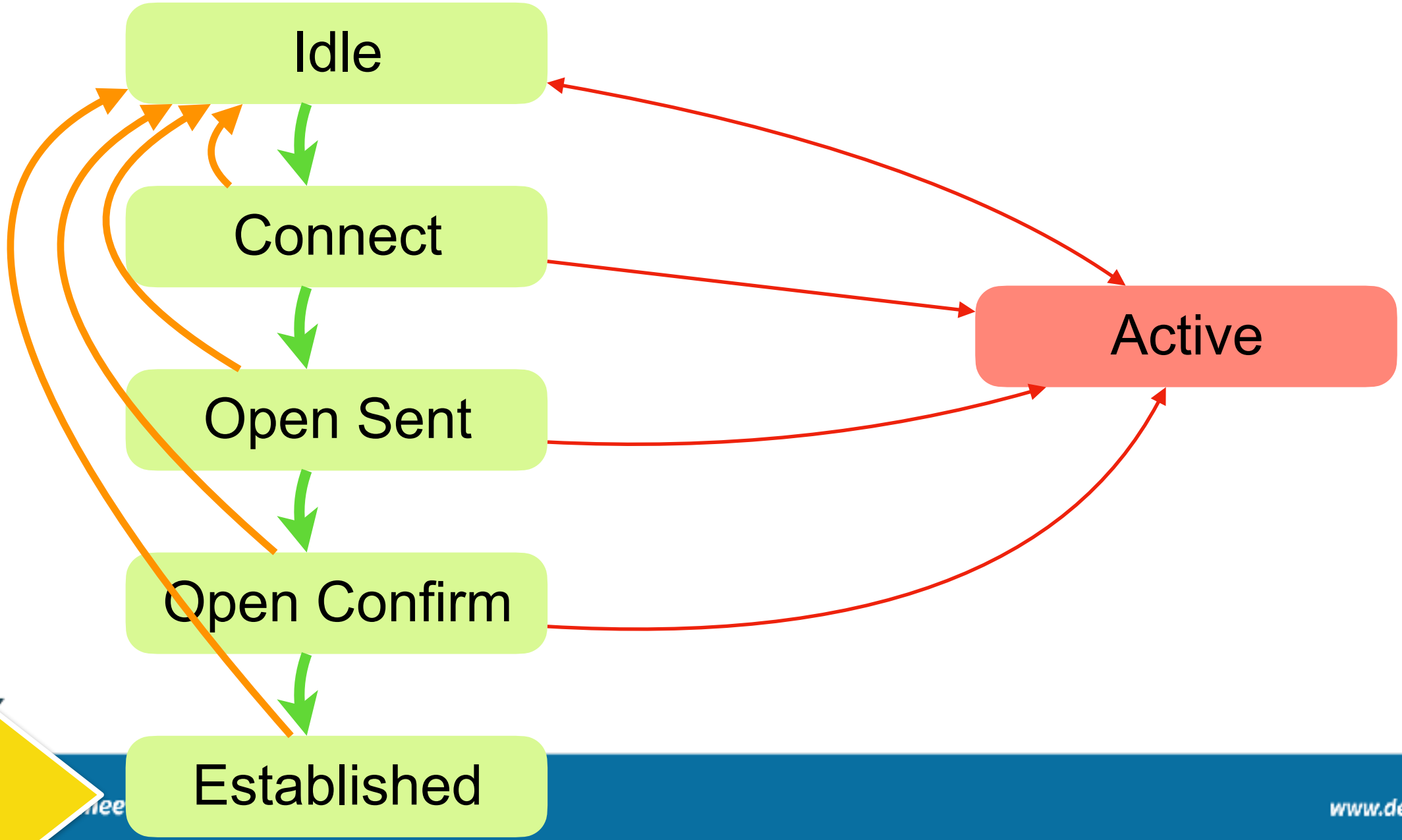

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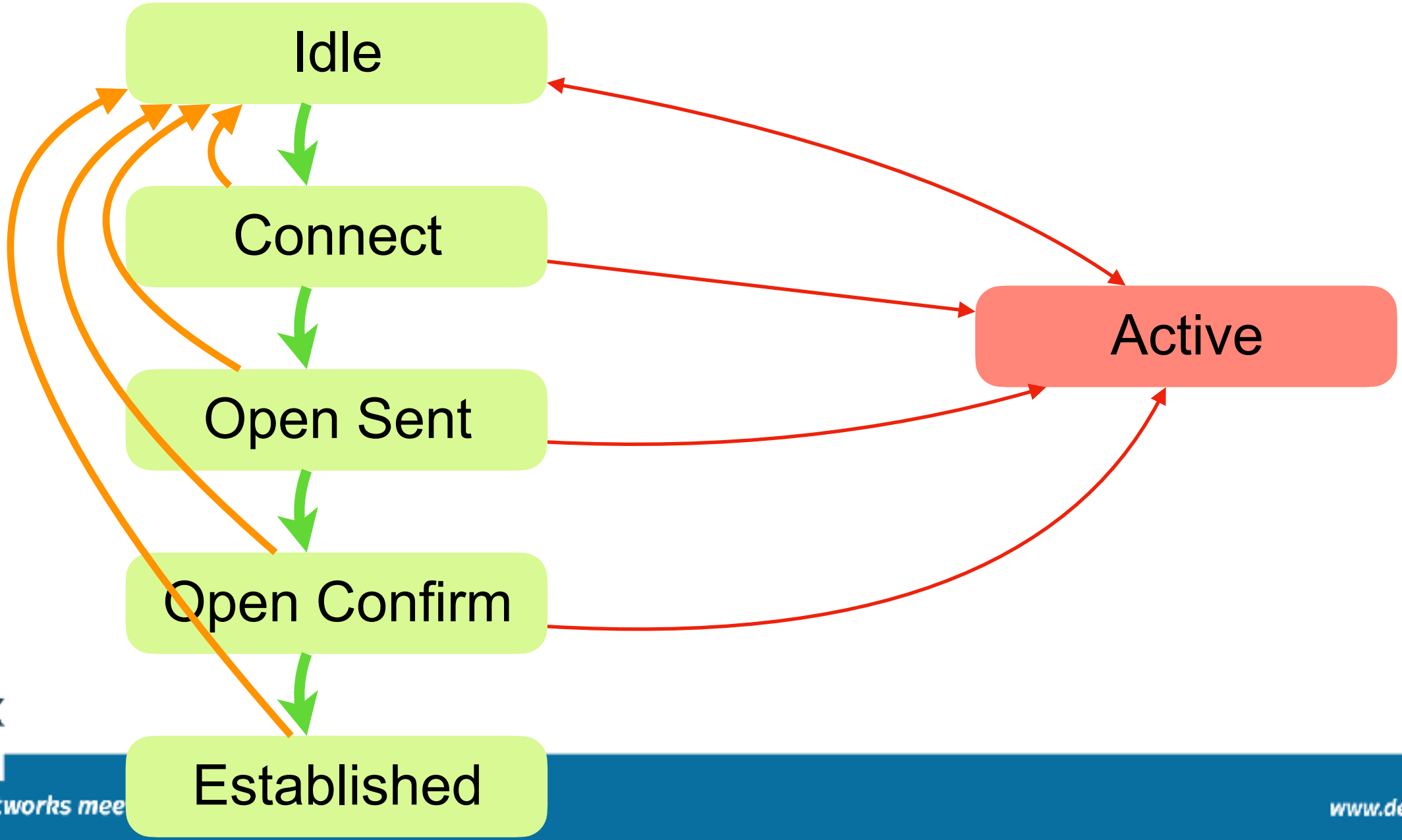

Experiment: Setup eBGP

experiment 02a + ./2c-02-solution-announce-prefix

Summary

- →BGP uses TCP
- →eBGP is BGP between Autonomous Systems
- →BGP distributes prefixes
  - →from external to internal
  - →from internal to external
  - →from external to external
    - →Filtering!

DE-CIX Management GmbH | Lindleystr. 12 | 60314 Frankfurt | Germany
Phone + 49 69 1730 902 0 | sales@de-cix.net | www.de-cix.net

Thank you!

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