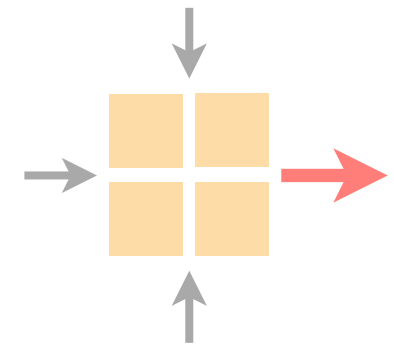


# Communication Networks

Spring 2021



Thomas Holterbach

Rüdiger Birkner

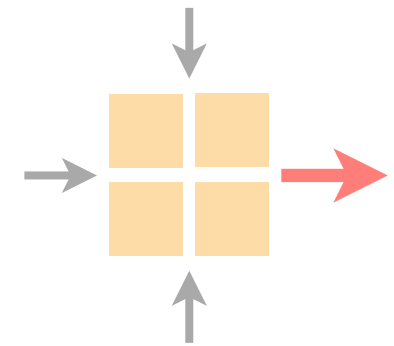
<https://comm-net.ethz.ch/>

ETH Zürich

April 15 2021

# Communication Networks

## Exercise 6



Student survey

Routing project

Overview current assignment

Solutions will be published next week

# Student survey results

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We release the solutions on Mondays...

...and the slides on Wednesday evening (if possible)

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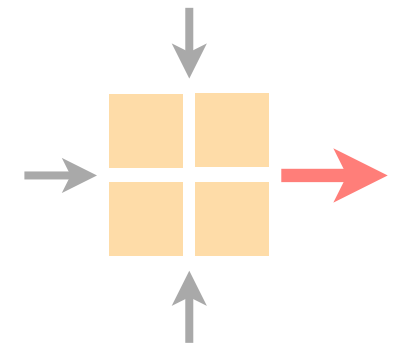
If you have requests, let us know beforehand

We will also discuss lecture concepts

related to the projects in more detail

# Communication Networks

## Exercise 6



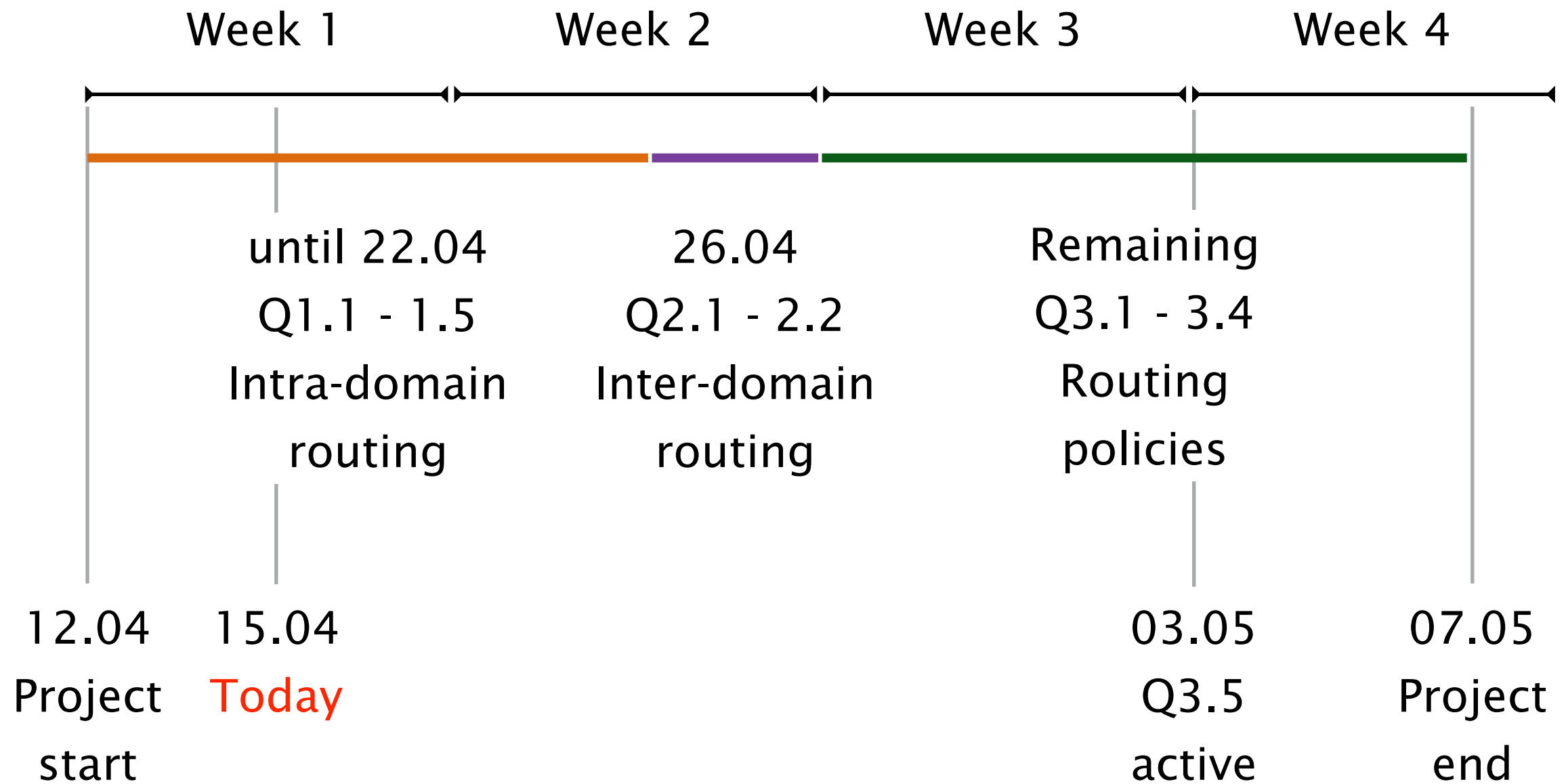
Student survey

**Routing project**

Overview current assignment

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# Routing project timetable





# How to get help?

## Exercise and Q&A sessions

several TAs will help you via Slack and/or call



**Simple Poll** APP 2:28 PM

When do you prefer to have a Q&A Session on Tuesday, April 20?

1 10am-12pm

2 4pm-6pm

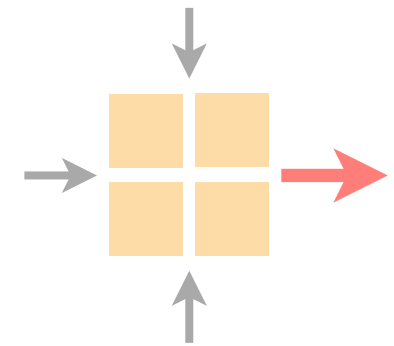


#routing\_project on Slack, [comm-net@ethz.ch](mailto:comm-net@ethz.ch)

we provide best-effort service

# Communication Networks

## Exercise 6



Student survey

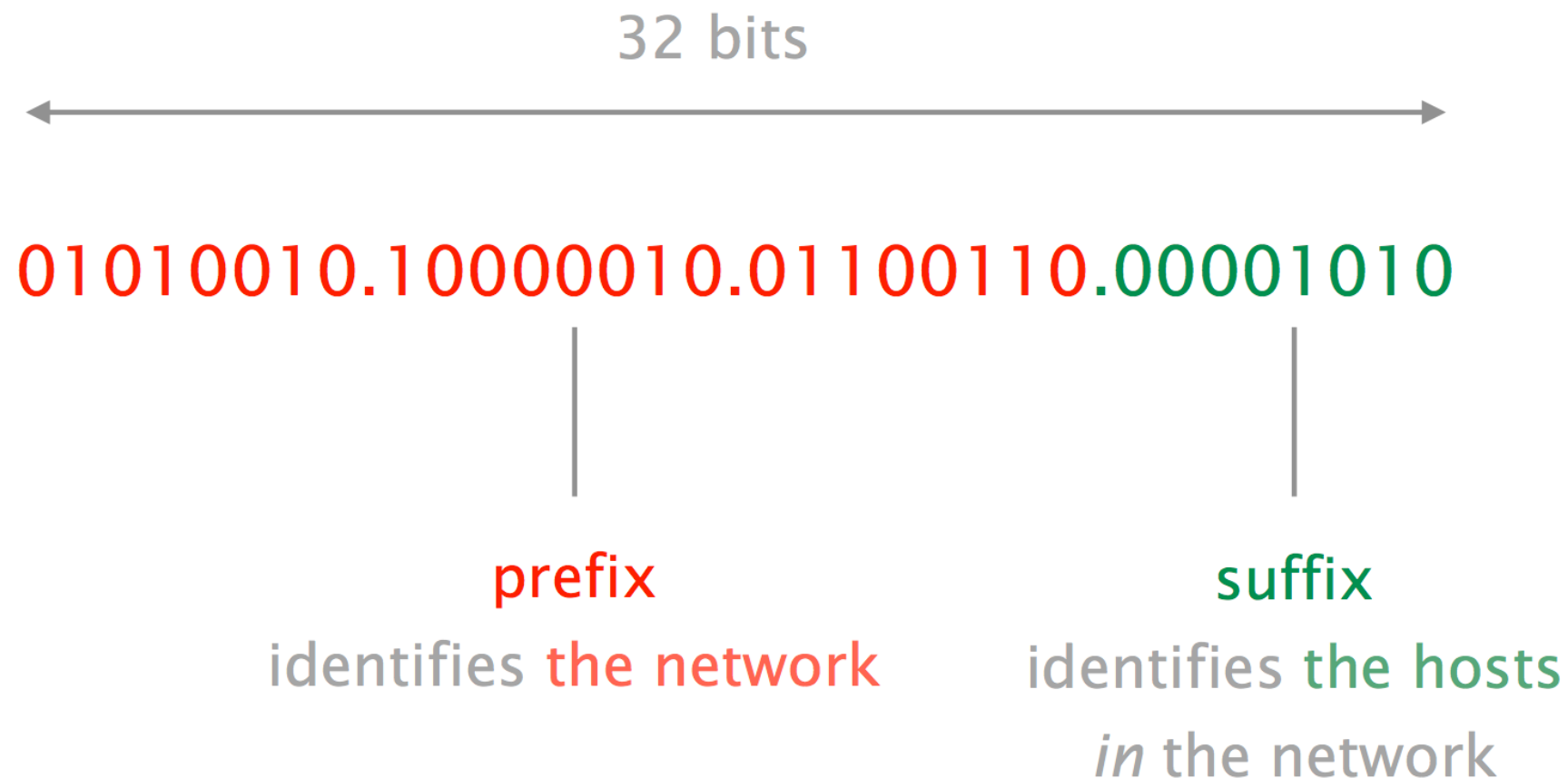
Routing project

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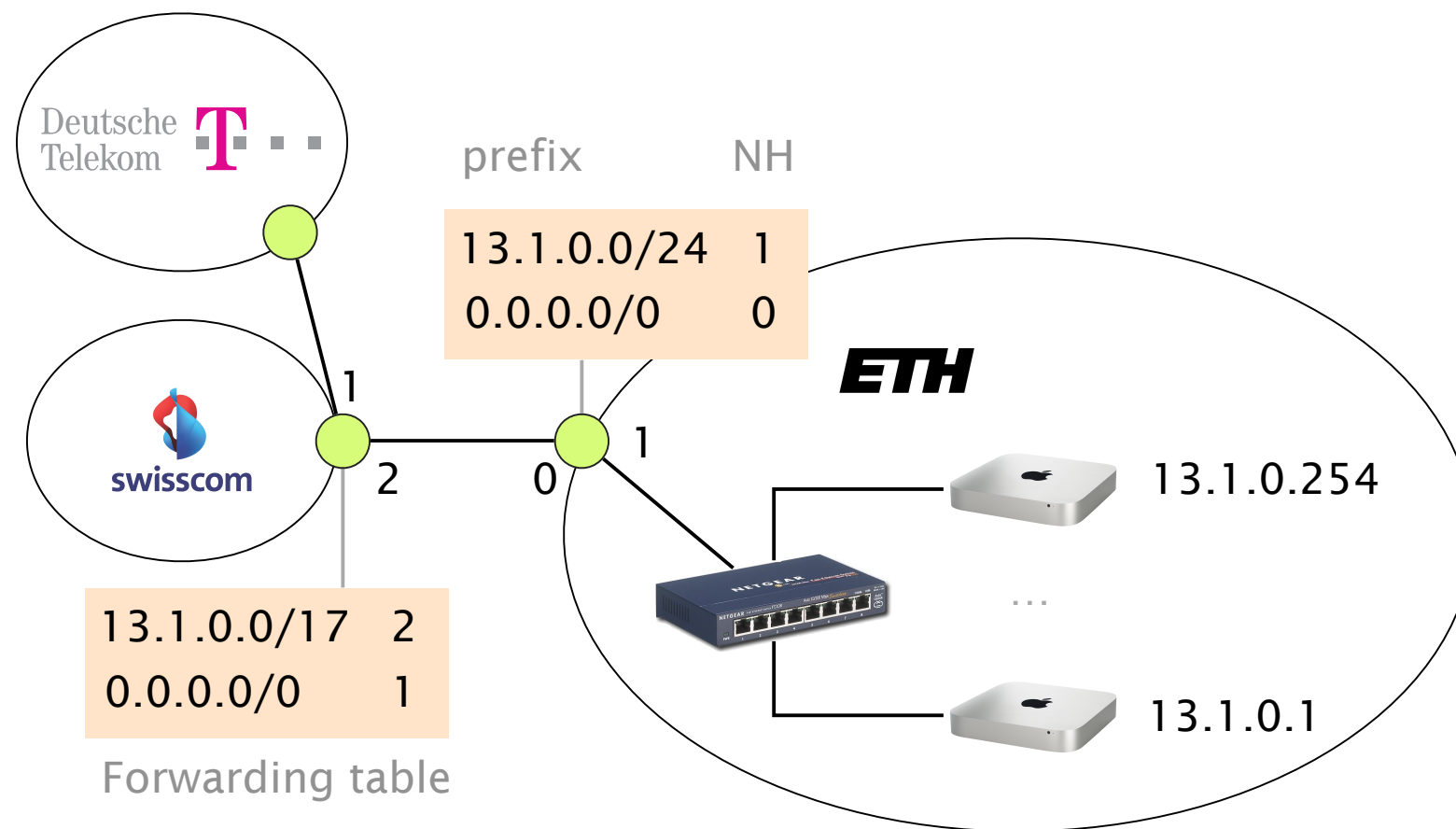
# Task 1, 2 & 3: IPv4 vs. IPv6

More details: Slides 43-79 and 124-128 (week 6)



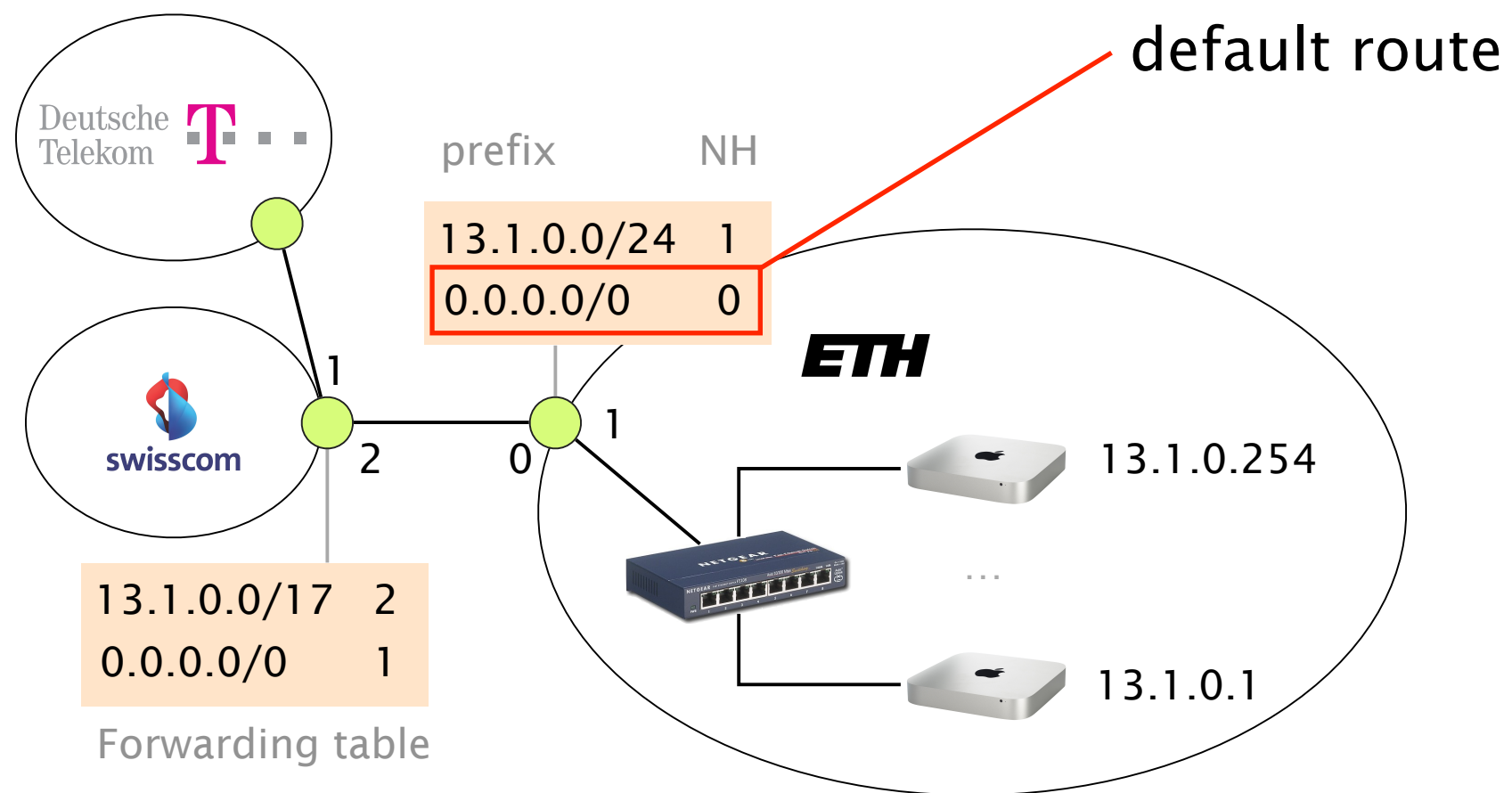
# Task 4: The Art of Defaulting Properly

More details: Slides 81-100 (week 6)



# Task 4: The Art of Defaulting Properly

More details: Slides 81-100 (week 6)



# Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

A child prefix can be filtered from the table whenever it shares the same output interface as its parent

Routing Table

IP prefix

Output Interface

...

129.0.0.0/8

IF#2

129.132.1.0/24

IF#2

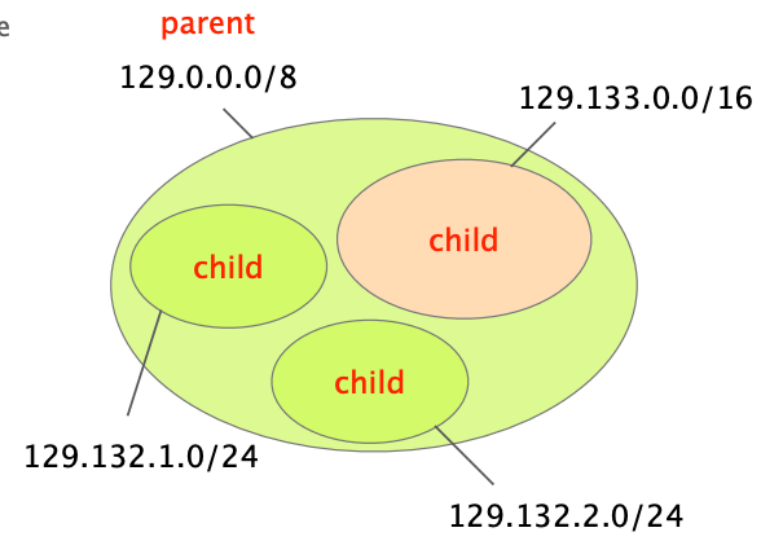
129.132.2.0/24

IF#2

129.133.0.0/16

IF#3

...



## Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

99.0.144.0/20      IF#2

99.0.128.0/20      IF#2

## Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

99.0.144.0/20      IF#2

99.0.128.0/20      IF#2



# Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

99.0.144.0/20 IF#2

99.0.128.0/20 IF#2

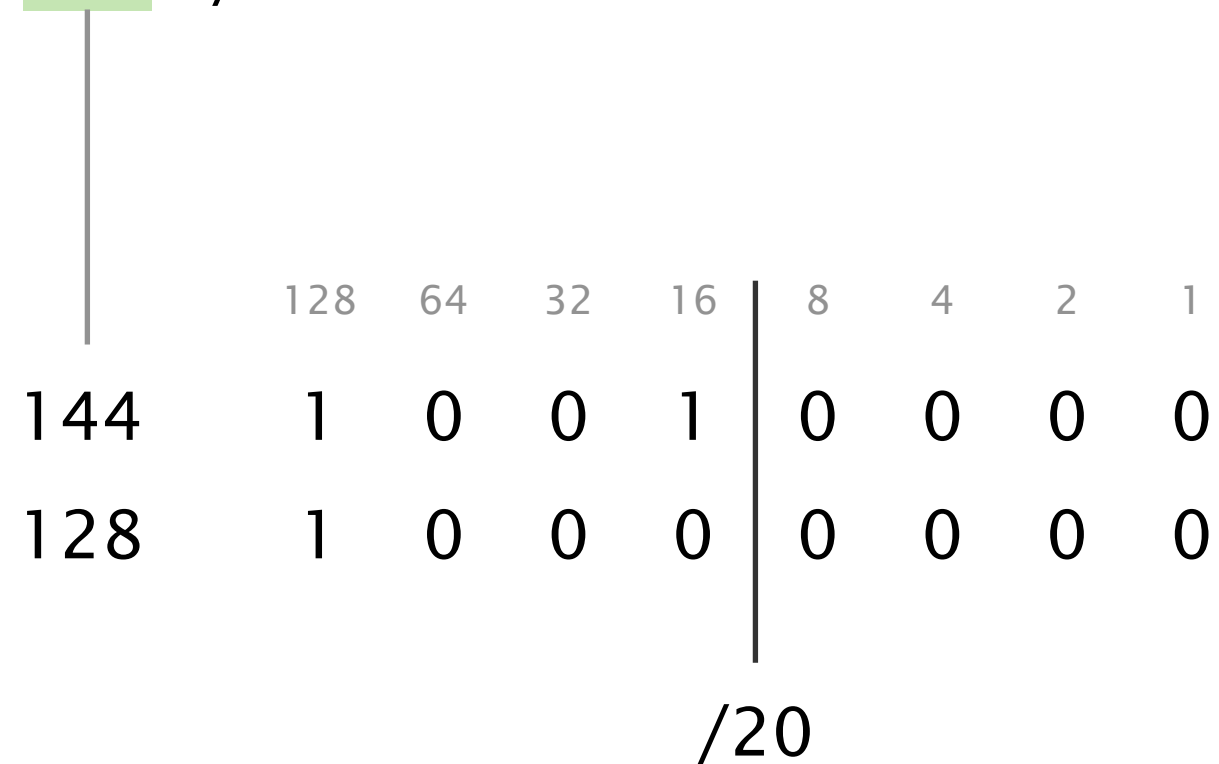
	128	64	32	16	8	4	2	1
144	1	0	0	1	0	0	0	0
128	1	0	0	0	0	0	0	0

## Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

99.0.144.0/20      IF#2

99.0.128.0/20      IF#2



# Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

99.0.144.0/20 IF#2

99.0.128.0/20 IF#2

	128	64	32	16	8	4	2	1
144	1	0	0	1	*	*	*	*
128	1	0	0	0	*	*	*	*
					/20			

# Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

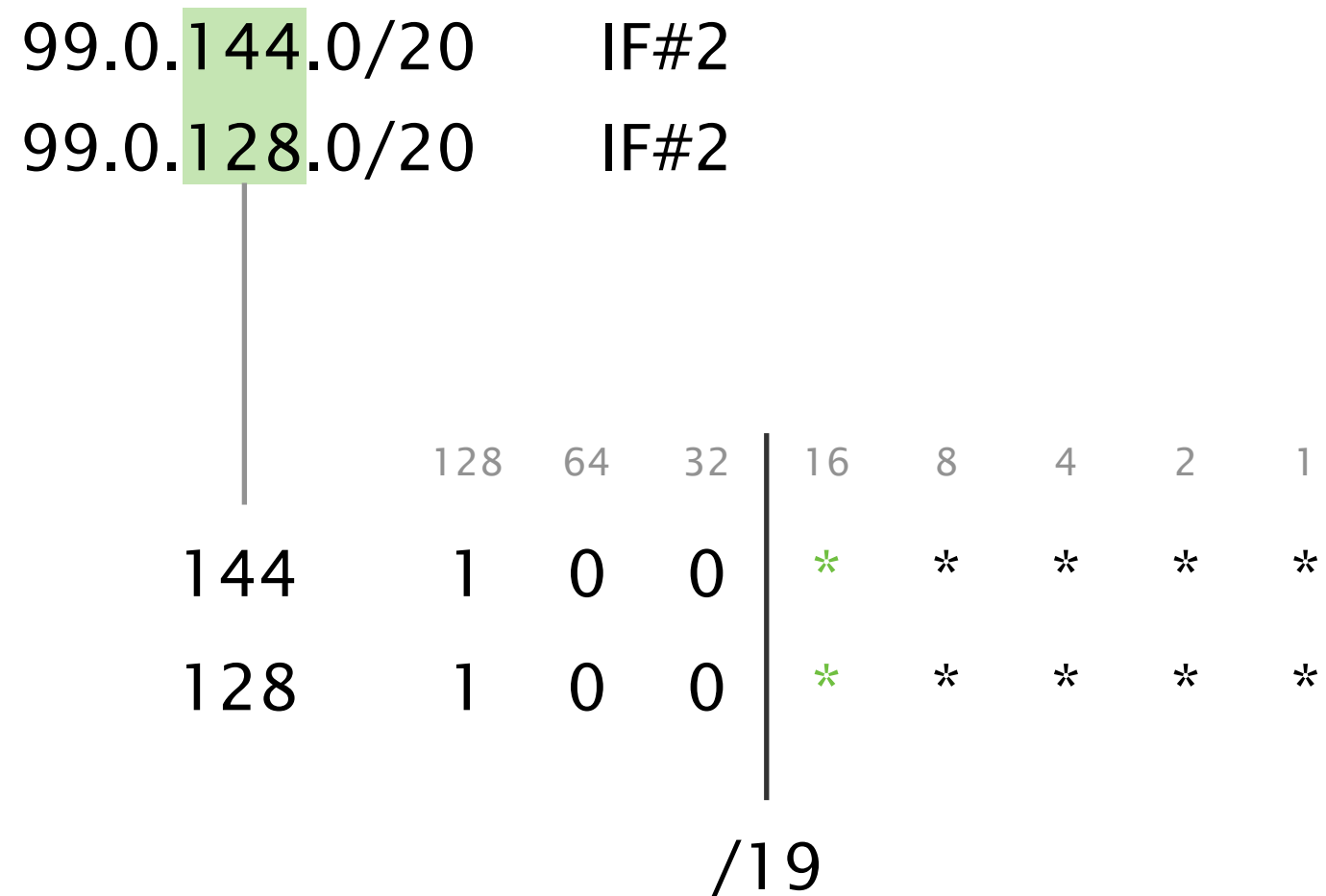
99.0.144.0/20 IF#2

99.0.128.0/20 IF#2

	128	64	32	16	8	4	2	1
144	1	0	0	1	*	*	*	*
128	1	0	0	0	*	*	*	*
					/20			

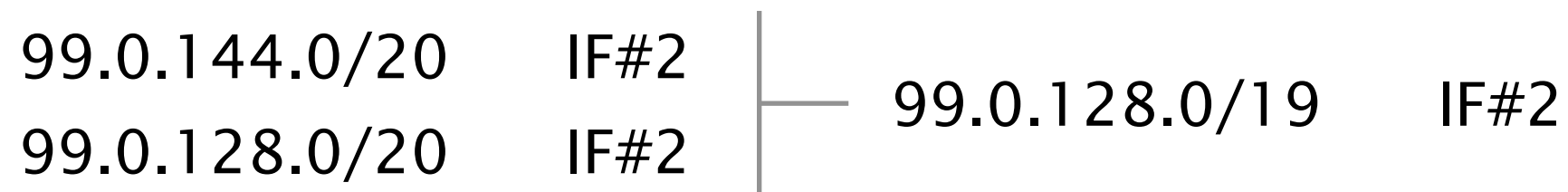
## Task 5: Summer Pruning

More details: Slides 81-100 (week 6)



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	128	64	32	16	8	4	2	1
144	1	0	0	*	*	*	*	*
128	1	0	0	*	*	*	*	*
				/19				



# Task 5: Summer Pruning

More details: Slides 81-100 (week 6)

P: 99.0.192.1

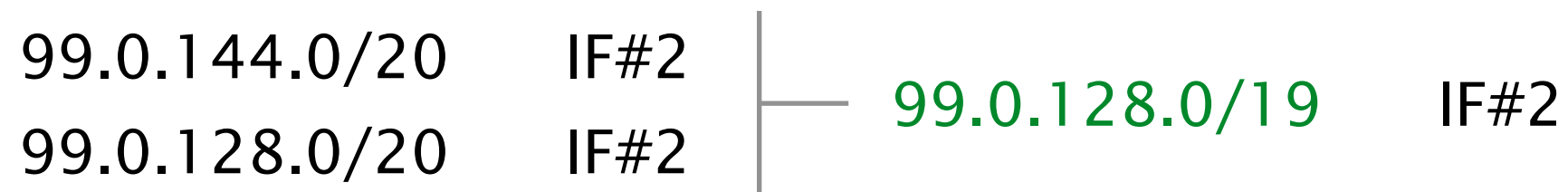
99.0.144.0/20	IF#2		99.0.128.0/17	IF#2
99.0.128.0/20	IF#2			

	128	64	32	16	8	4	2	1
144	1	0	0	*	*	*	*	*
128	1	0	0	*	*	*	*	*
/17								



# Task 5: Summer Pruning

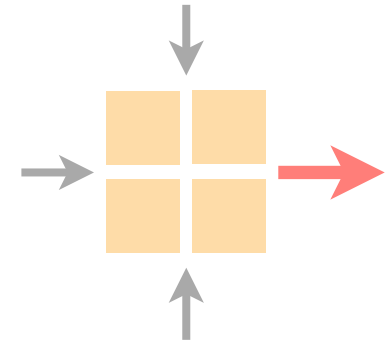
More details: Slides 81-100 (week 6)



	128	64	32	16	8	4	2	1
144	1	0	0	*	*	*	*	*
128	1	0	0	*	*	*	*	*
				/19				

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