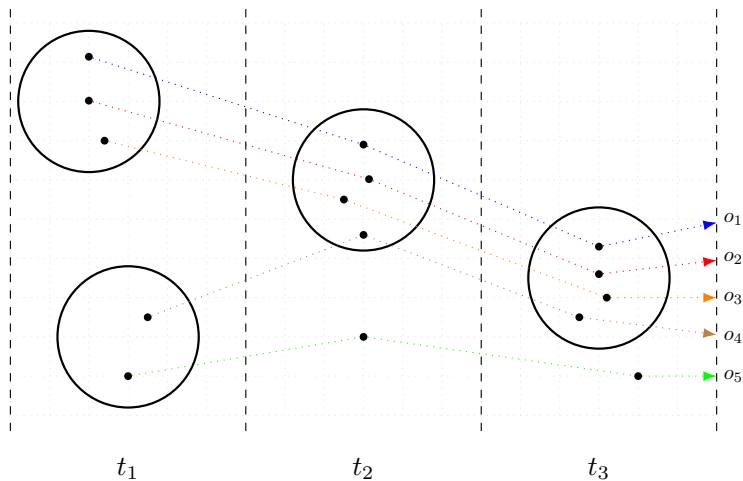# PFLOCK Report

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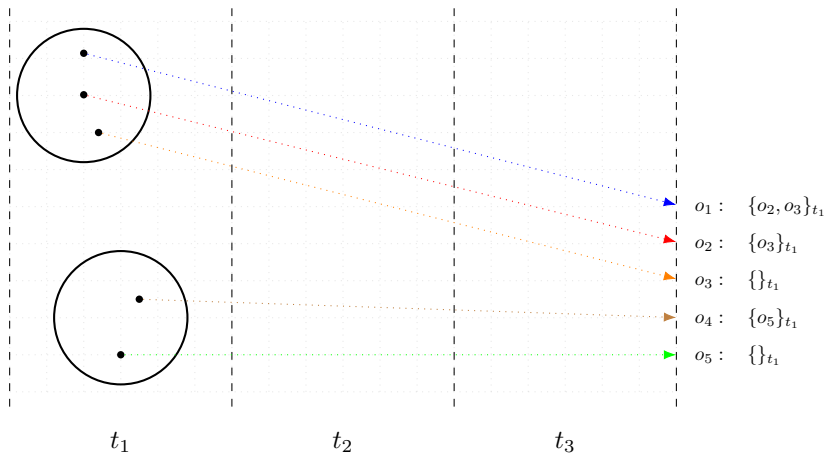
Pattern enumerator

Example 1 ($\delta = 3, \mu = 2$)
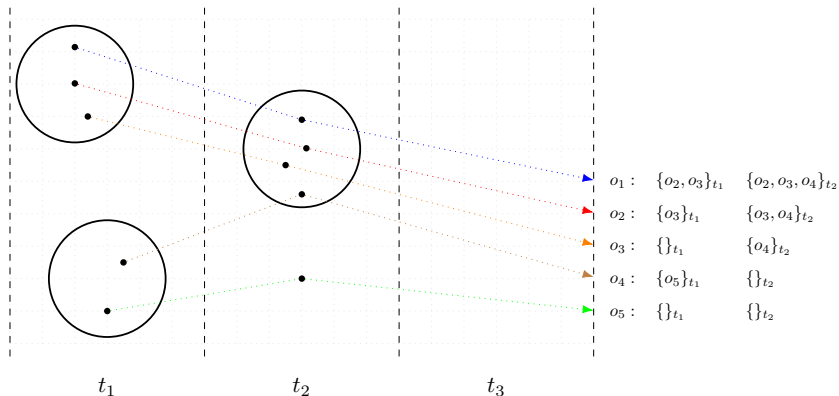
Pattern enumerator
Example 1 ($\delta = 3, \mu = 2$)

Pattern enumerator
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Pattern enumerator
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$$o_1 : \quad \{o_2, o_3\}_{t_1} \quad \{o_2, o_3, o_4\}_{t_2} \quad \{o_2, o_3, o_4\}_{t_3}$$
$$o_2 : \quad \{o_3\}_{t_1} \quad \{o_3, o_4\}_{t_2} \quad \{o_3, o_4\}_{t_3}$$
$$o_3 : \quad \{\}_{t_1} \quad \{o_4\}_{t_2} \quad \{o_4\}_{t_3}$$
$$o_4 : \quad \{o_5\}_{t_1} \quad \{\}_{t_2} \quad \{\}_{t_3}$$
$$o_5 : \quad \{\}_{t_1} \quad \{\}_{t_2} \quad \{\}_{t_3}$$
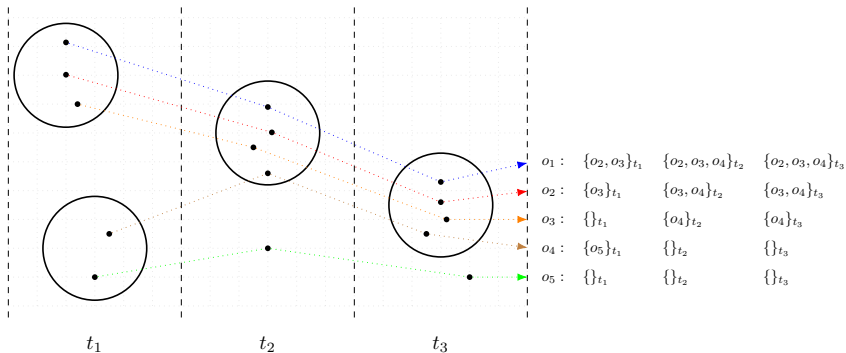
Pattern enumerator
Example 1 ($\delta = 3, \mu = 2$): Redundant flocks

$o_1:$	$\{o_2, o_3\}_{t_1}$	$\{o_2, o_3, o_4\}_{t_2}$	$\{o_2, o_3, o_4\}_{t_3}$	$o_2:$	1	1	1	$\checkmark$
				$o_3:$	1	1	1	$\checkmark$
				$o_2, o_3:$	1	1	1	$\checkmark$
$o_2:$	$\{o_3\}_{t_1}$	$\{o_3, o_4\}_{t_2}$	$\{o_3, o_4\}_{t_3}$	$o_3:$	1	1	1	$\checkmark$
$o_3:$	$\{\}_{t_1}$	$\{o_4\}_{t_2}$	$\{o_4\}_{t_3}$					
$o_4:$	$\{o_5\}_{t_1}$	$\{\}_{t_2}$	$\{\}_{t_3}$	$o_5:$	1	0	0	$\times$
$o_5:$	$\{\}_{t_1}$	$\{\}_{t_2}$	$\{\}_{t_3}$					

Pattern enumerator
Example 2 ($\delta = 3, \mu = 3$)

t_1

t_2

t_3
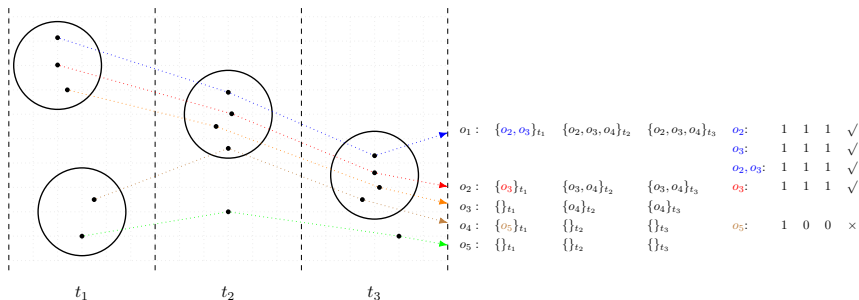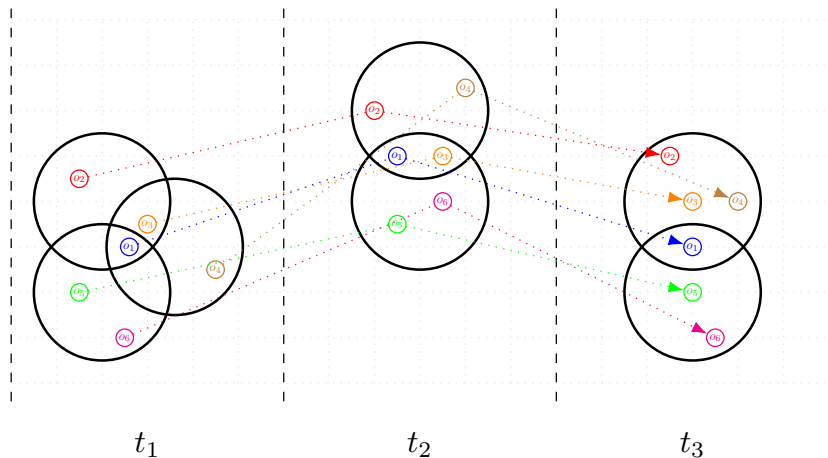
Pattern enumerator

Example 2 ($\delta = 3, \mu = 3$): Overlapping

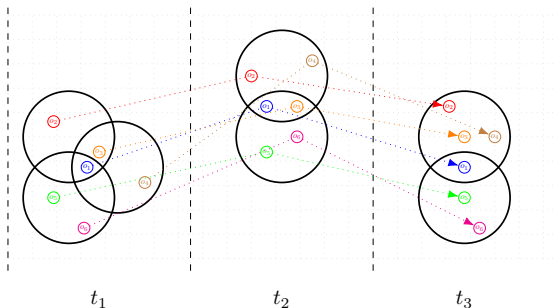| $o_1:$	$\{o_2, o_3\}_{t_1}$	$\{o_2, o_3, o_4\}_{t_2}$	$\{o_2, o_3, o_4\}_{t_3}$
	$\{o_3, o_4\}_{t_1}$	$\{o_3, o_5, o_6\}_{t_2}$	$\{o_5, o_6\}_{t_3}$
	$\{o_5, o_6\}_{t_1}$		
$o_2:$	$\{o_3\}_{t_1}$	$\{o_3, o_4\}_{t_2}$	$\{o_3, o_4\}_{t_3}$
$o_3:$	$\{\}_{t_1}$	$\{o_4\}_{t_2}$	$\{o_4\}_{t_3}$
	$\{o_4\}_{t_1}$	$\{o_5, o_6\}_{t_2}$	
o_4	$\{\}_{t_1}$	$\{\}_{t_2}$	$\{\}_{t_3}$
o_5	$\{o_6\}_{t_1}$	$\{o_6\}_{t_2}$	$\{o_6\}_{t_3}$
o_6	$\{\}_{t_1}$	$\{\}_{t_2}$	$\{\}_{t_3}$

Pattern enumerator

Combinations

$o_1:$	$\{o_2, o_3\}_{t_1}$		$\{o_2, o_3, o_4\}_{t_2}$		$\{o_2, o_3, o_4\}_{t_3}$
	$\{o_3, o_4\}_{t_1}$	$\times$	$\{o_3, o_5, o_6\}_{t_2}$	$\times$	$\{o_5, o_6\}_{t_3}$
	$\{o_5, o_6\}_{t_1}$				
$o_2:$	$\{o_3\}_{t_1}$		$\{o_3, o_4\}_{t_2}$		$\{o_3, o_4\}_{t_3}$
$o_3:$	$\{\}_{t_1}$		$\{o_4\}_{t_2}$		$\{o_4\}_{t_3}$
	$\{o_4\}_{t_1}$	$\times$	$\{o_5, o_6\}_{t_2}$	$\times$	
$o_4:$	$\{\}_{t_1}$		$\{\}_{t_2}$		$\{\}_{t_3}$
$o_5:$	$\{o_6\}_{t_1}$		$\{o_6\}_{t_2}$		$\{o_6\}_{t_3}$
$o_6:$	$\{\}_{t_1}$		$\{\}_{t_2}$		$\{\}_{t_3}$

Pattern enumerator
Maximal patterns

o_1:	$\{o_2, o_3\}_{t_1}$	$\{o_2, o_3, o_4\}_{t_2}$	$\{o_2, o_3, o_4\}_{t_3}$
	$\{o_3, o_4\}_{t_1}$	$\{o_3, o_5, o_6\}_{t_2}$	$\{o_5, o_6\}_{t_3}$
	$\{o_5, o_6\}_{t_1}$		
o_2:	$\{o_3\}_{t_1}$	$\{o_3, o_4\}_{t_2}$	$\{o_3, o_4\}_{t_3}$
o_3:	$\{\}_{t_1}$	$\{o_4\}_{t_2}$	$\{o_4\}_{t_3}$
	$\{o_4\}_{t_1}$	$\{o_5, o_6\}_{t_2}$	
o_4	$\{\}_{t_1}$	$\{\}_{t_2}$	$\{\}_{t_3}$
o_5	$\{o_6\}_{t_1}$	$\{o_6\}_{t_2}$	$\{o_6\}_{t_3}$
o_6	$\{\}_{t_1}$	$\{\}_{t_2}$	$\{\}_{t_3}$

Partition	Maximal Pattern	Support (μ)
o_1	$\{o_2, o_3\}$	3
	$\{o_3, o_4\}$	3
	$\{o_5, o_6\}$	3
o_2	$\{o_3\}$	3
o_5	$\{o_6\}$	3

What is next?

- ▶ Explore volumes.
- ▶ Extent pattern enumeration with one of the alternatives.
- ▶ Perform tests.