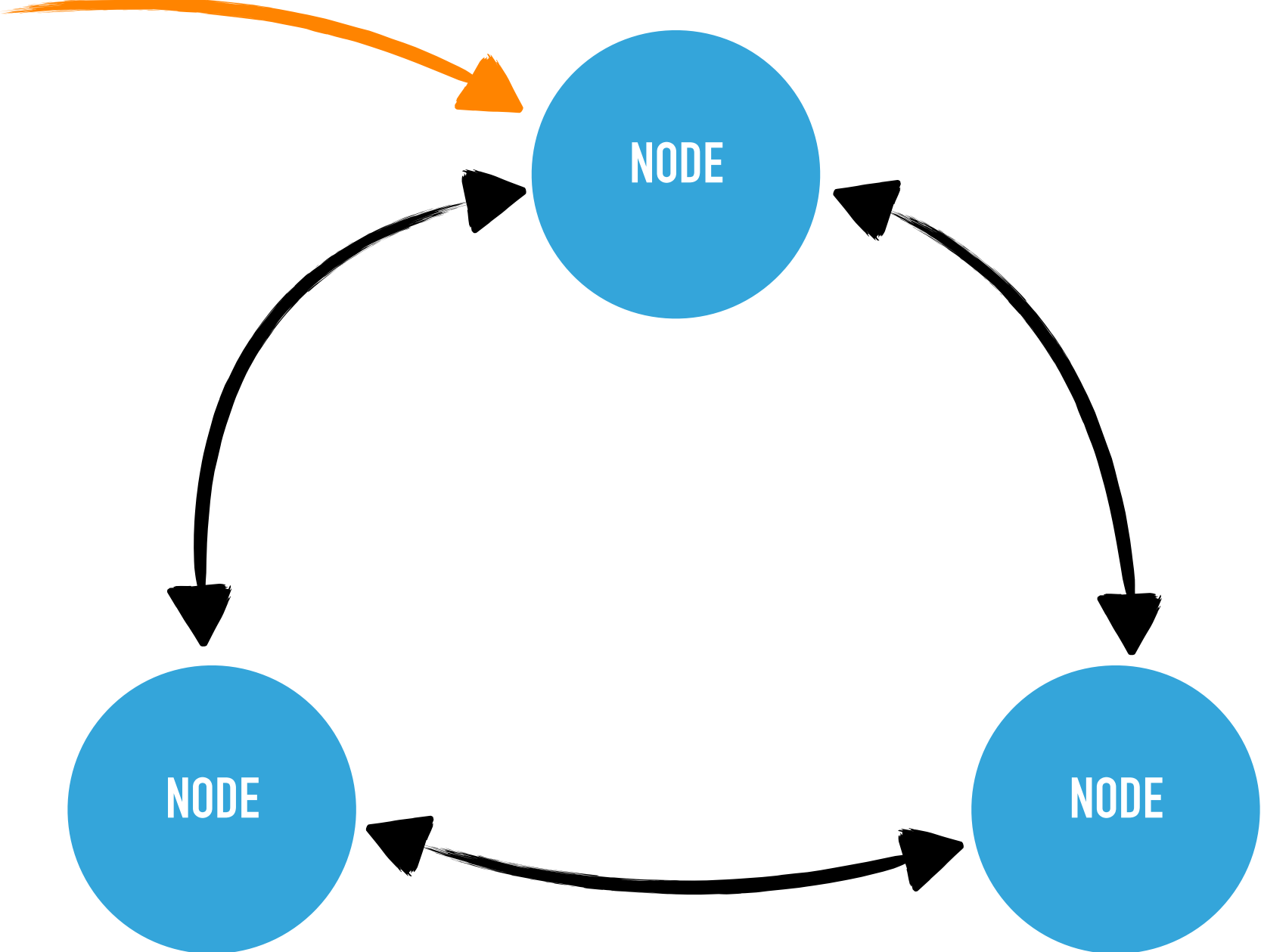


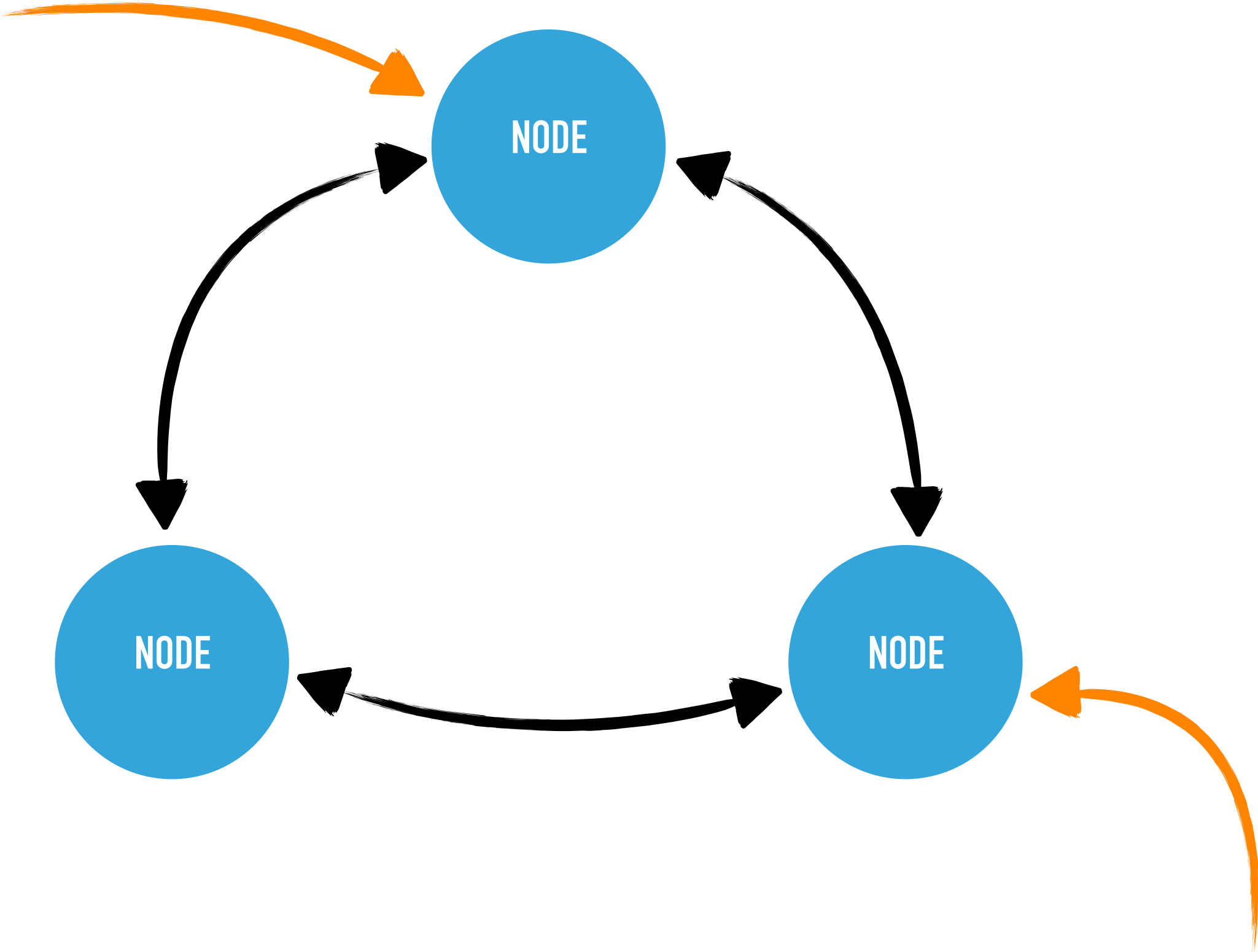
EVENTUAL CONSISTENCY

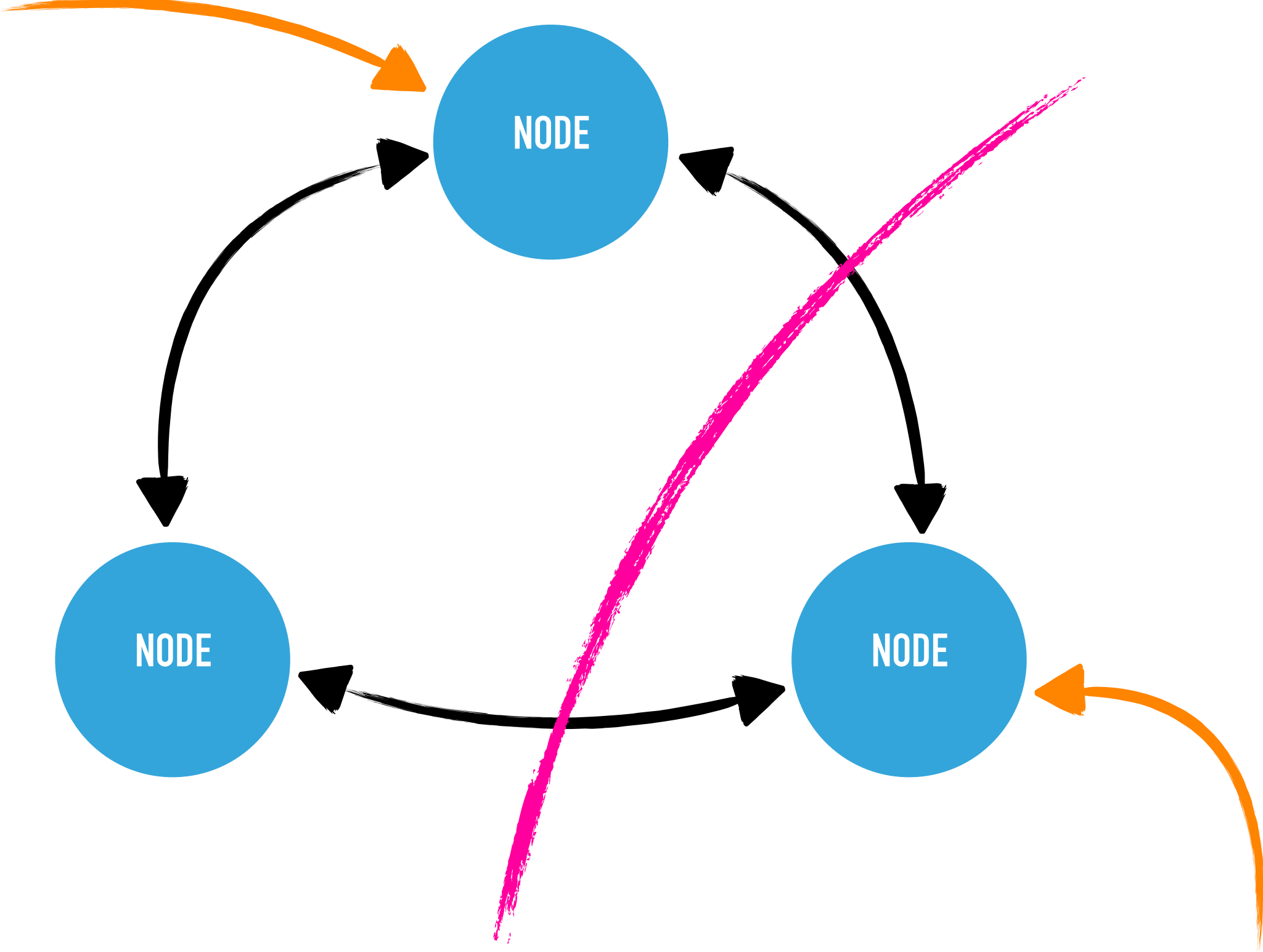
EVENTUAL CONSISTENCY

=

INCONSISTENCY





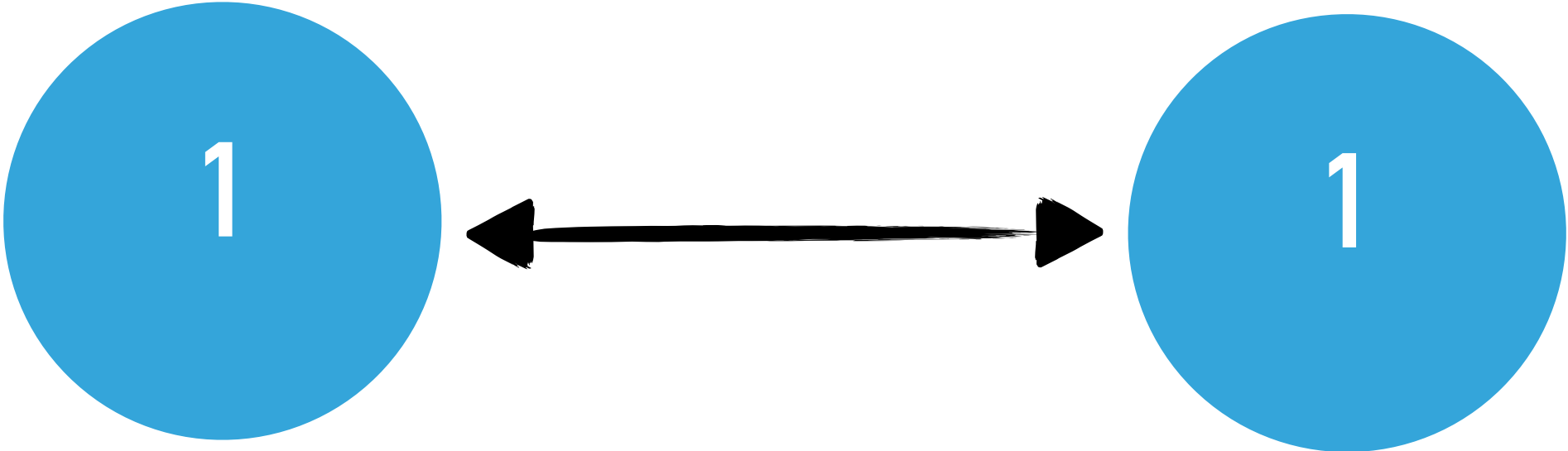


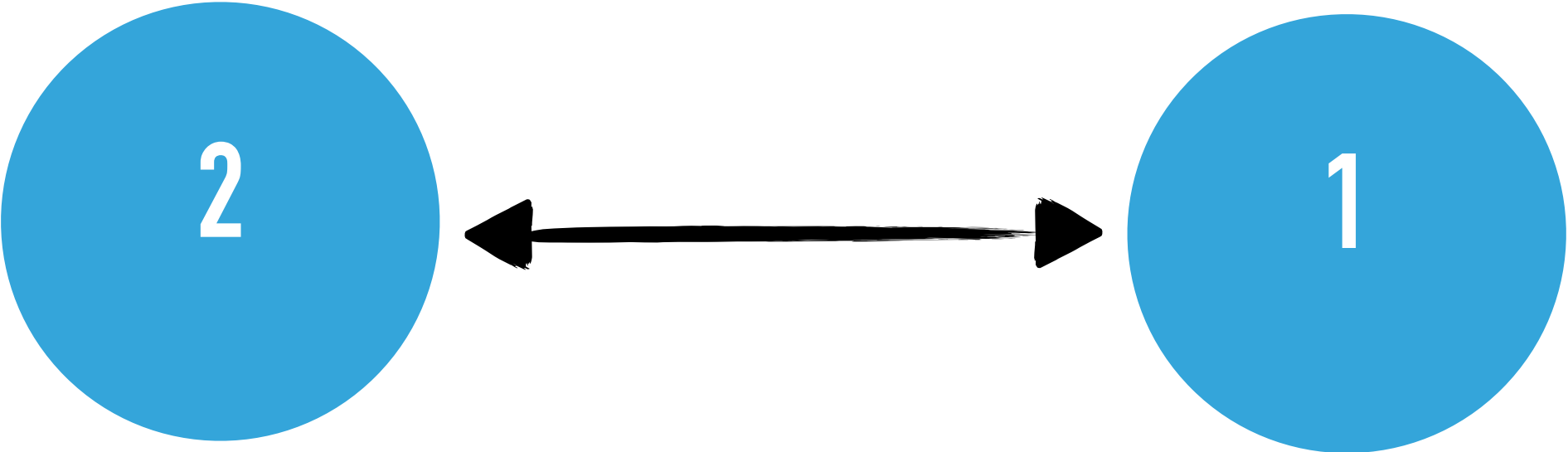
CRDT

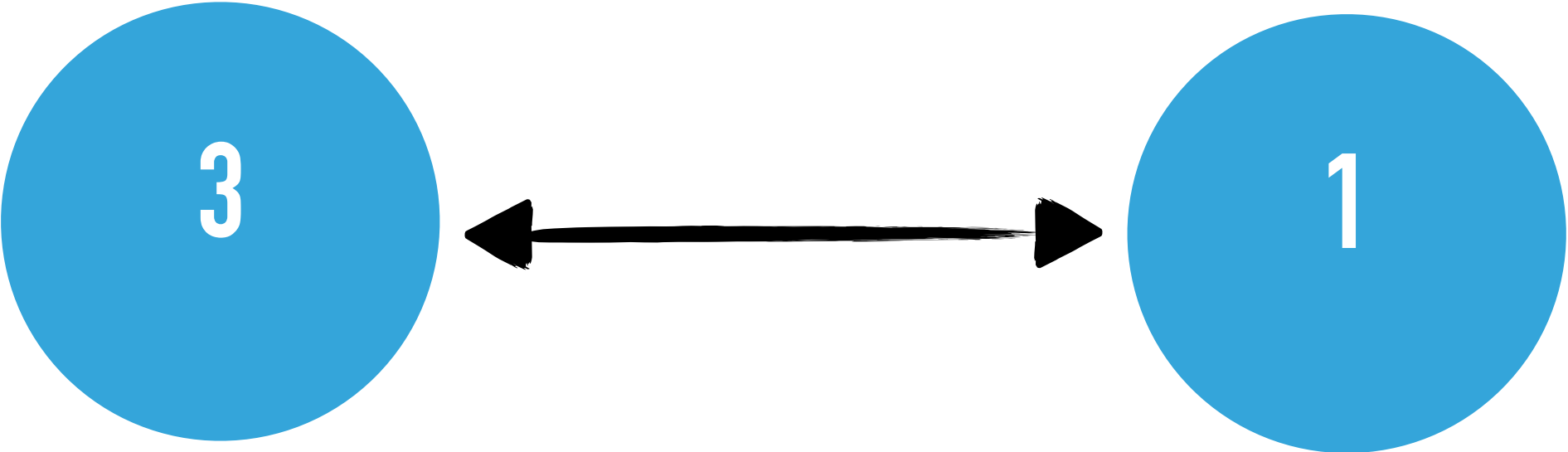
COMMUTATIVE REPLICATED DATA TYPE

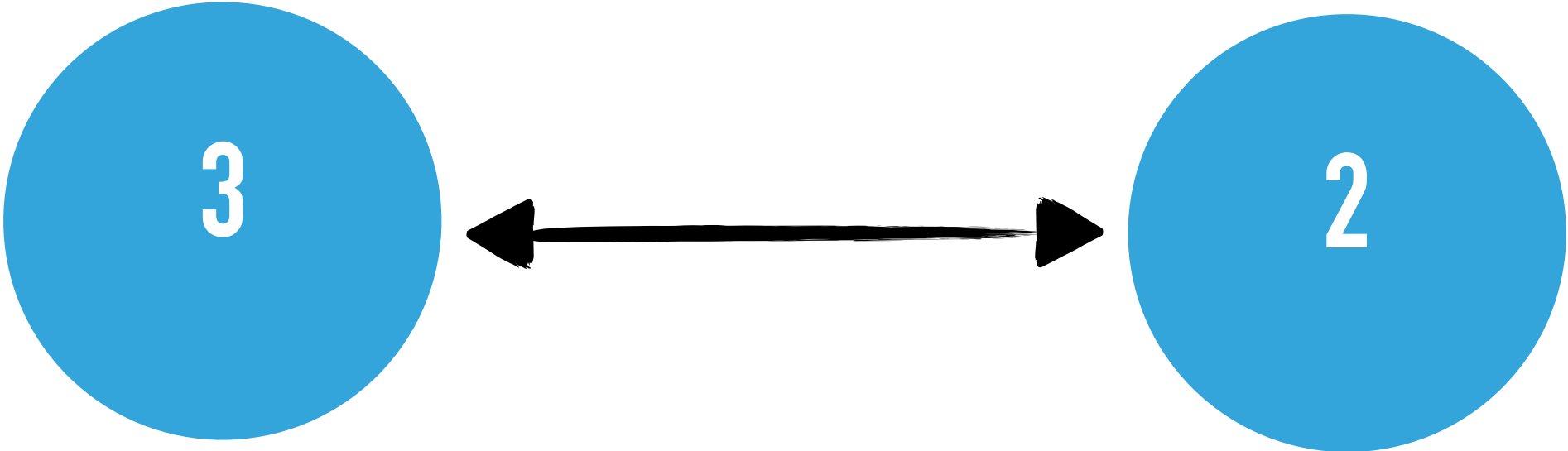
CONFLICT-FREE REPLICATED DATA TYPE

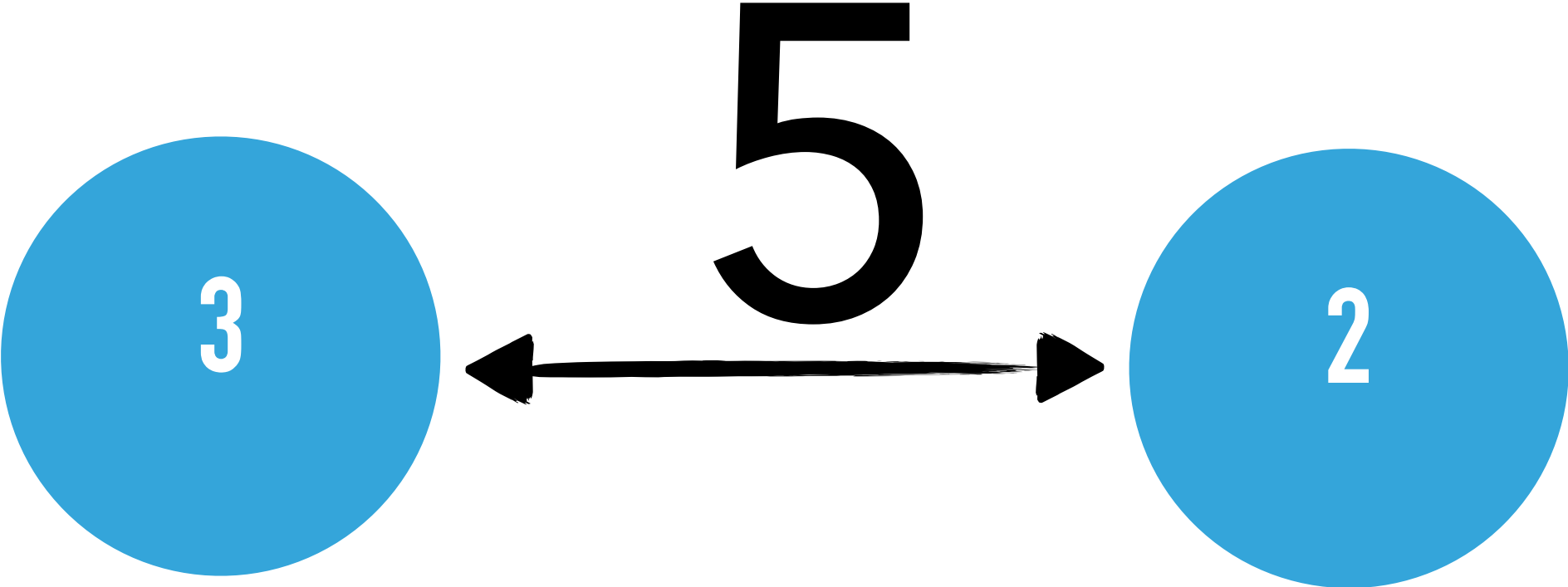
CONSISTENT REPLICATED DATA TYPE











LASP

<https://github.com/keathley/drax>


```
Drax.GCounter.new
```

```
|> Drax.GCounter.increment(:foo@localhost)
```

```
|> Drax.GCounter.increment(:bar@localhost)
```

```
|> Drax.GCounter.increment(:baz@localhost)
```

```
|> to_i
```

```
# => 3
```

```
c1 =  
  Drax.GCounter.new()  
|> Drax.GCounter.increment()  
|> Drax.GCounter.increment()
```

```
c2 =  
  Drax.GCounter.new()  
|> Drax.GCounter.increment()
```

```
Drax.GCounter.merge(c1, c2)  
|> Drax.GCounter.to_i  
# => 3
```

```
:net_kernel.monitor_nodes(true)
```

```
{:nodeup, node()}
```

```
{:nodedown, node()}
```

AGGREGATES

- ▶ Keep track of the number of times someone uses the short link
- ▶ Replicate counters across all nodes
- ▶ Aggregates endpoint should return the number of redirects for that short link.