

ASPA Update

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Plan For Today

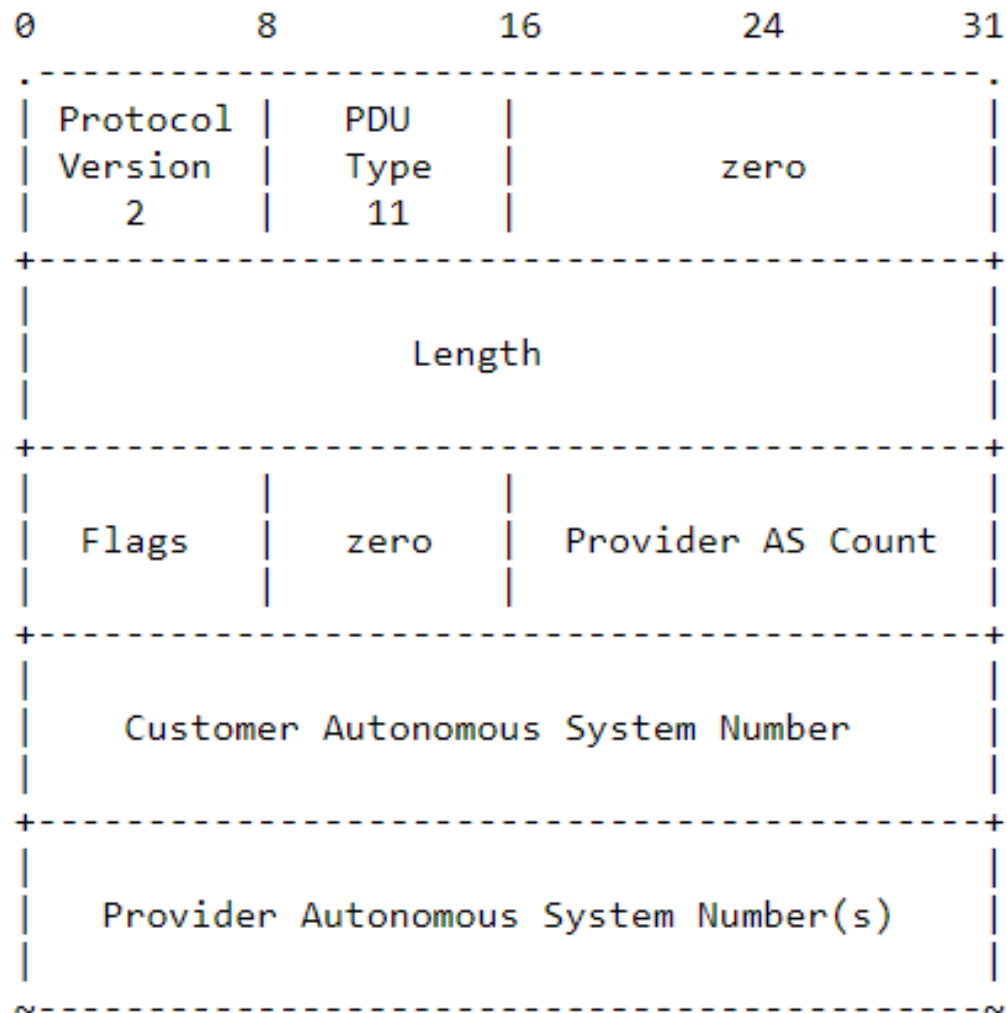
- Draft updates;
- Open questions;
- ASPA evaluation;
- Status, moving forward?

ASPA: a Single Record

- To guarantee atomicity of changes/updates we switched to single object for selected AS:

```
ASProviderAttestation ::= SEQUENCE {  
    version [0] ASPAVersion DEFAULT v0,  
    AFI AddressFamilyIdentifier,  
    customerASID ASID,  
    providerASSET SEQUENCE (SIZE(1..MAX)) OF ASID }
```

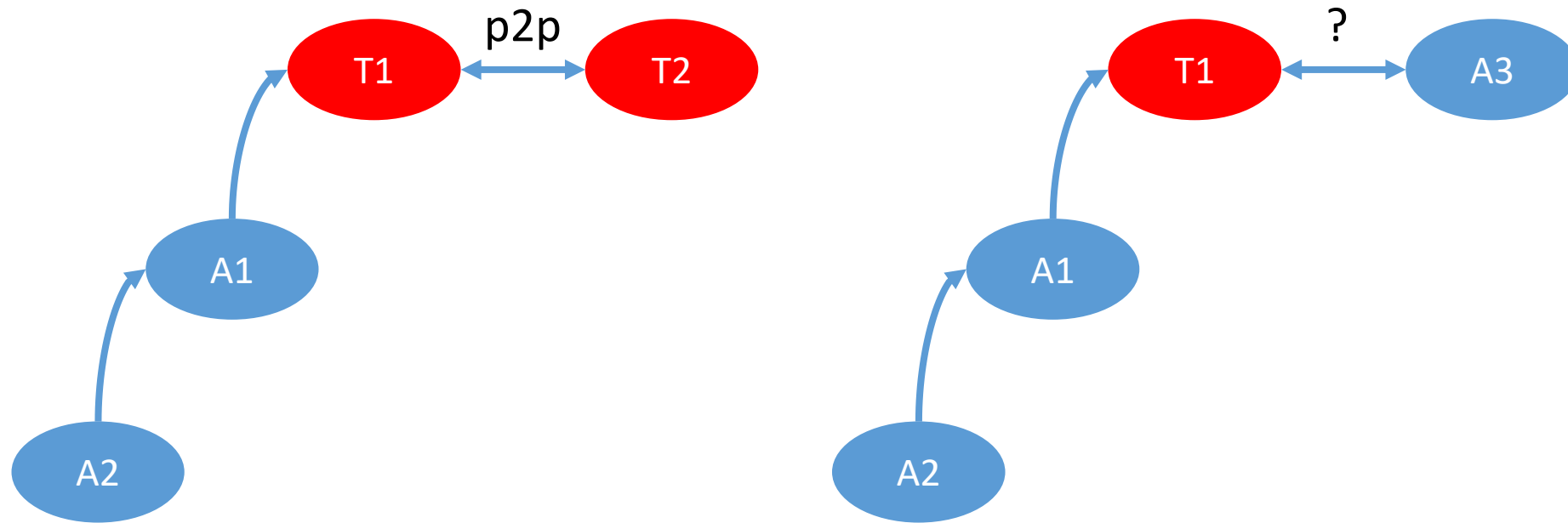
ASPA: RTR



Open questions:

- Should we use {0} or {} for T1/IXes?
- Should we have different ASPAs for v4/v6?

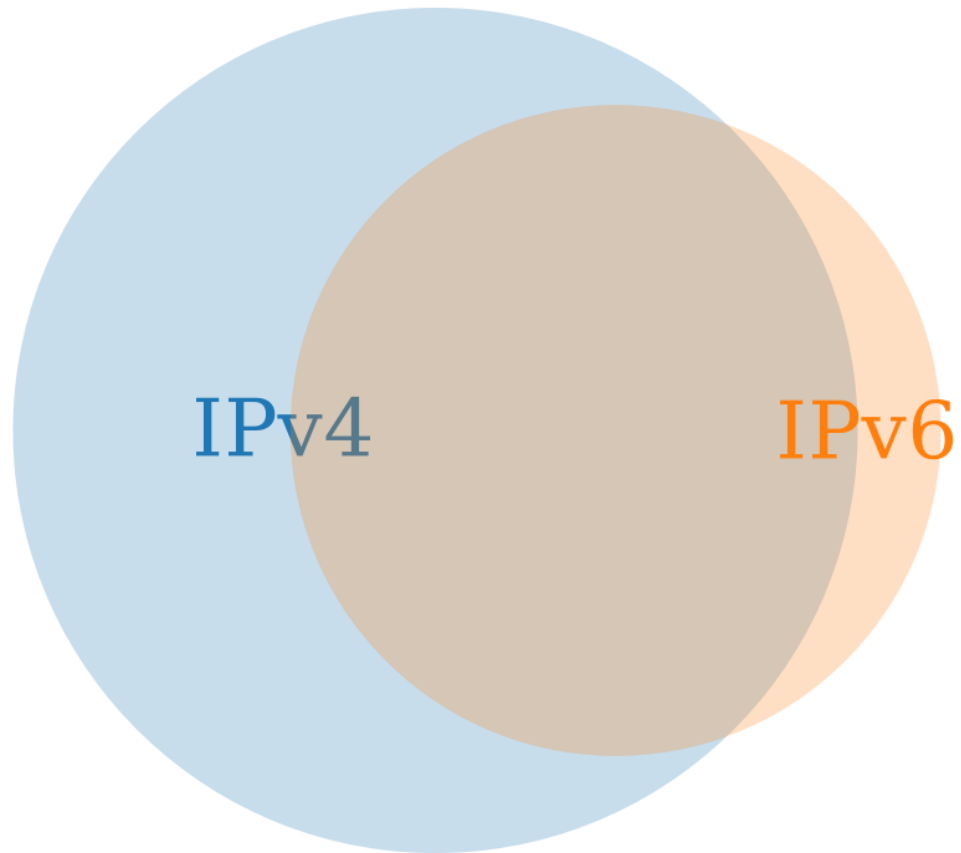
IPv4 vs IPv6: Retrieving Upflow Paths



Upflow Subpath: A2 → A1 → T1

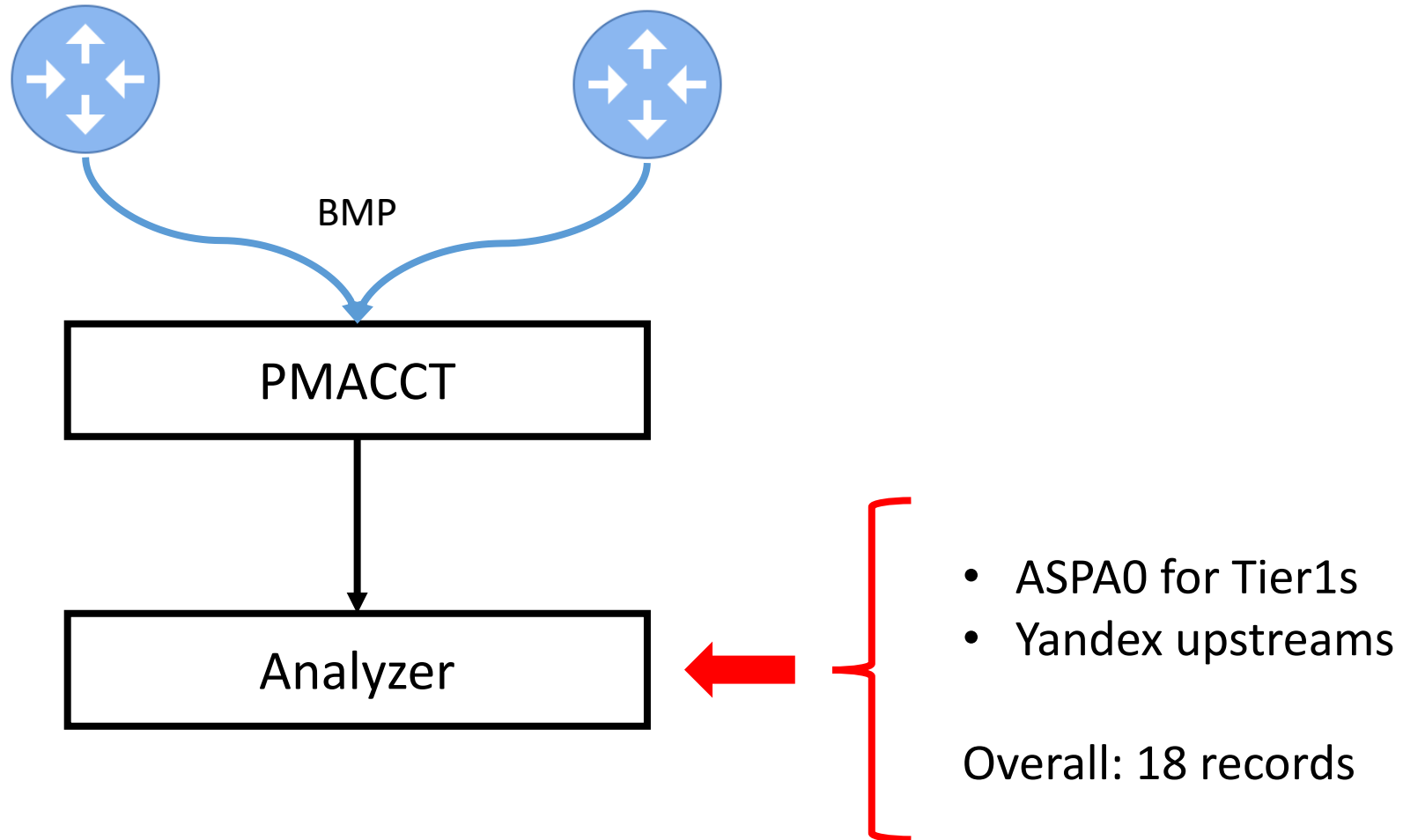
Upflow Subpath: A2 → A1

IPv4 vs IPv6: Comparison

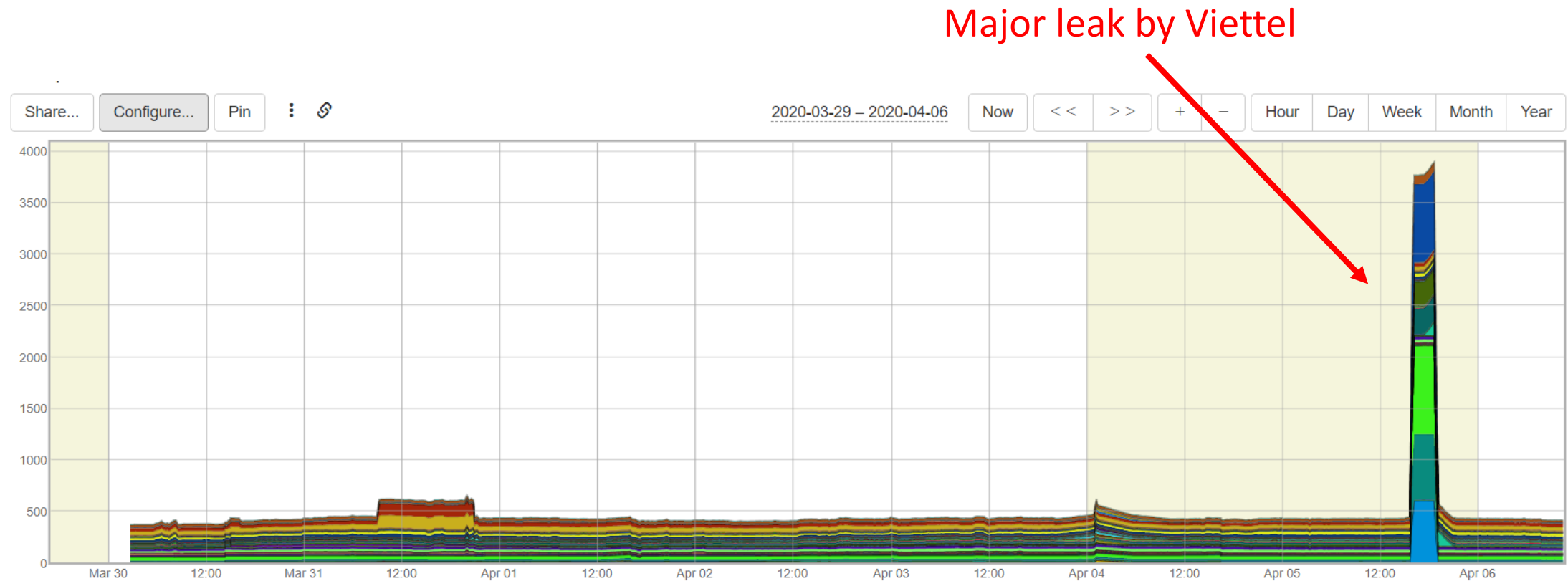


| | Possible c2p links |
|-------------|--------------------|
| IPv4 | 49513 |
| IPv6 | 29365 |
| IPv4 ^ IPv6 | 25825 |

Evaluation: Setup



Evaluation: It Works!



Leaks of Yandex address space:

- 174 3356 **20485** 200400 44267 8359 13238
- 174 **31133** 13238

Status

Documents

| | |
|-------------------|---------|
| ASPA Object | Adopted |
| ASPA Verification | Adopted |
| ASPA RTR | Adopted |

Still Pending??

Pre-launch checks

| | |
|----------------|--------------------|
| Implementation | BIRD |
| Evaluation | Done on top of BMP |