

CPU/core limitations

Achieving *very* high capture rates

Single core: ≤ 16 Gbps

- per packet interrupt handling
- memory speed limit

TOW 2021

CPU/core limitations

Achieving *very* high capture rates (#4 multiple separate streams)

Create separate ≤ 16 Gbps streams:

- different IP destination address
- different UDP destination port
- or both

TOW 2023

CPU/core limitations

Achieving very high capture rates (#4 multiple separate streams)

Create separate ≤ 16

- diff

Setting up + starting
not really supported



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```
net_port = [ip@]port ;  
record = on : <scan> ;
```

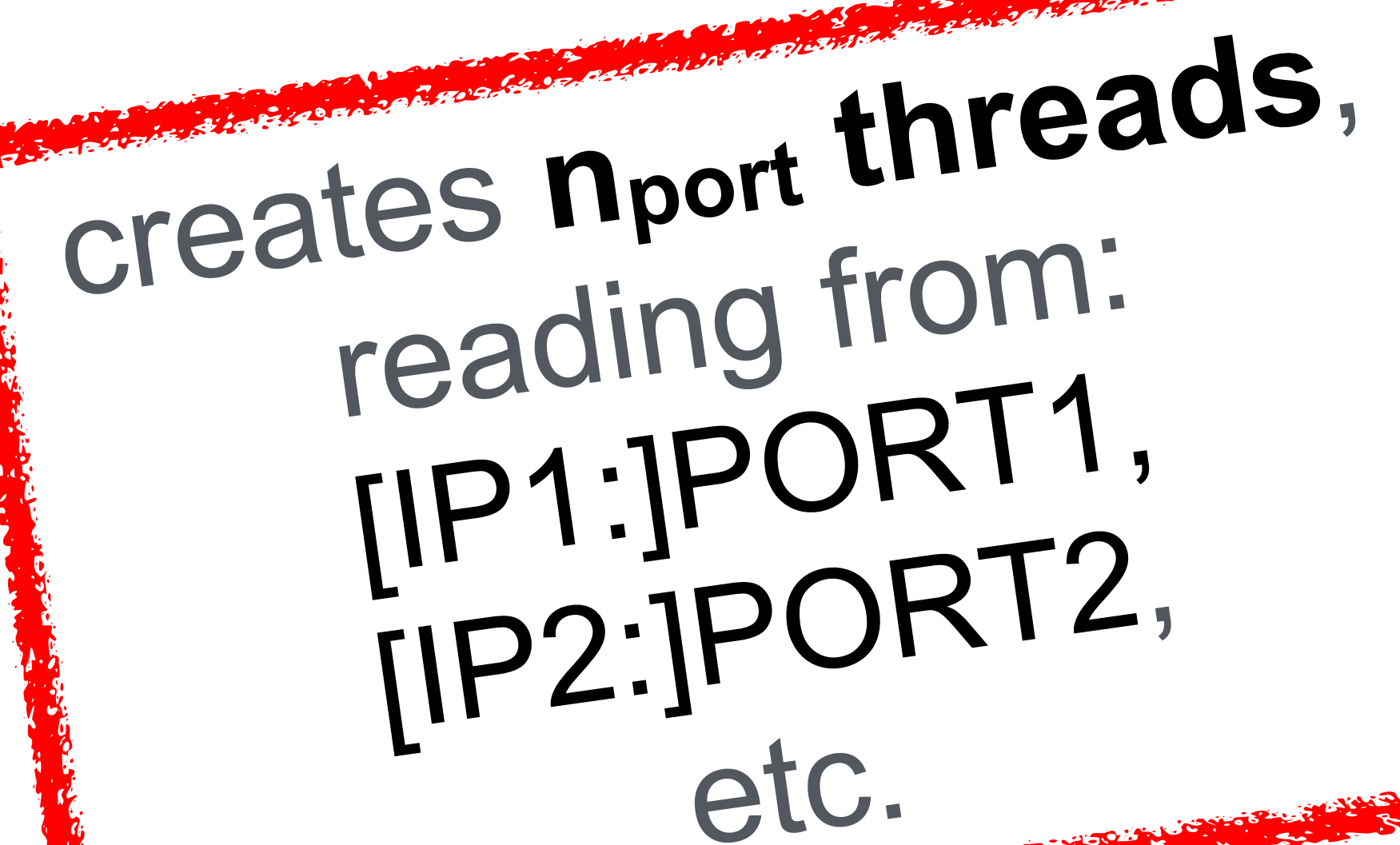


**creates one thread,
reads from [IP:]PORT**

```
net_port = [ip1@]port1 : [ip2@]port2 : ... ;
```

```
net_port = [ip1@]port1 : [ip2@]port2 : ... ;  
record = on : <scan> ;
```

```
net_port = [ip1@]port1 : [ip2@]port2 : ... ;  
record = on : <scan> ;
```



creates **n_{port}** threads,
reading from:
[IP1:]PORT1,
[IP2:]PORT2,
etc.

Multiple
streams/
recordings?


```
datastream = add : {thread} : * ;  
record = on : <scan> ;
```

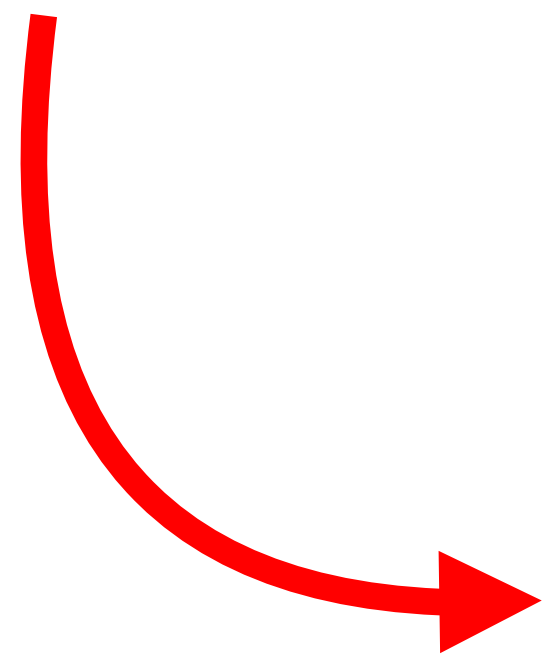


records **VDIF threads**
in separate files:
<scan>_ds0, <scan>_ds1,
etc.

```
net_port = [ip1@]port1 [=suffix1] :  
           [ip2@]port2 [=suffix2] : ... ;
```

```
net_port = [ip1@]port1 [=suffix1] :  
           [ip2@]port2 [=suffix2] : ... ;
```

```
record = on : <scan> ;
```



record all frames arriving on:
[IP1:]PORT1 into <scan>_ds<suffix1>,
[IP2:]PORT2 into <scan>_ds<suffix2>,
etc.

```
datastream = add : {thread} : * ;
```

```
net_port = [ip1@]port1 : [ip2@]port2 : ... ;
```

```
record = on : <scan> ;
```

**Read frames in multiple threads,
store VDIF threads in own recording**

```
datastream = add : {thread} : * ;
```

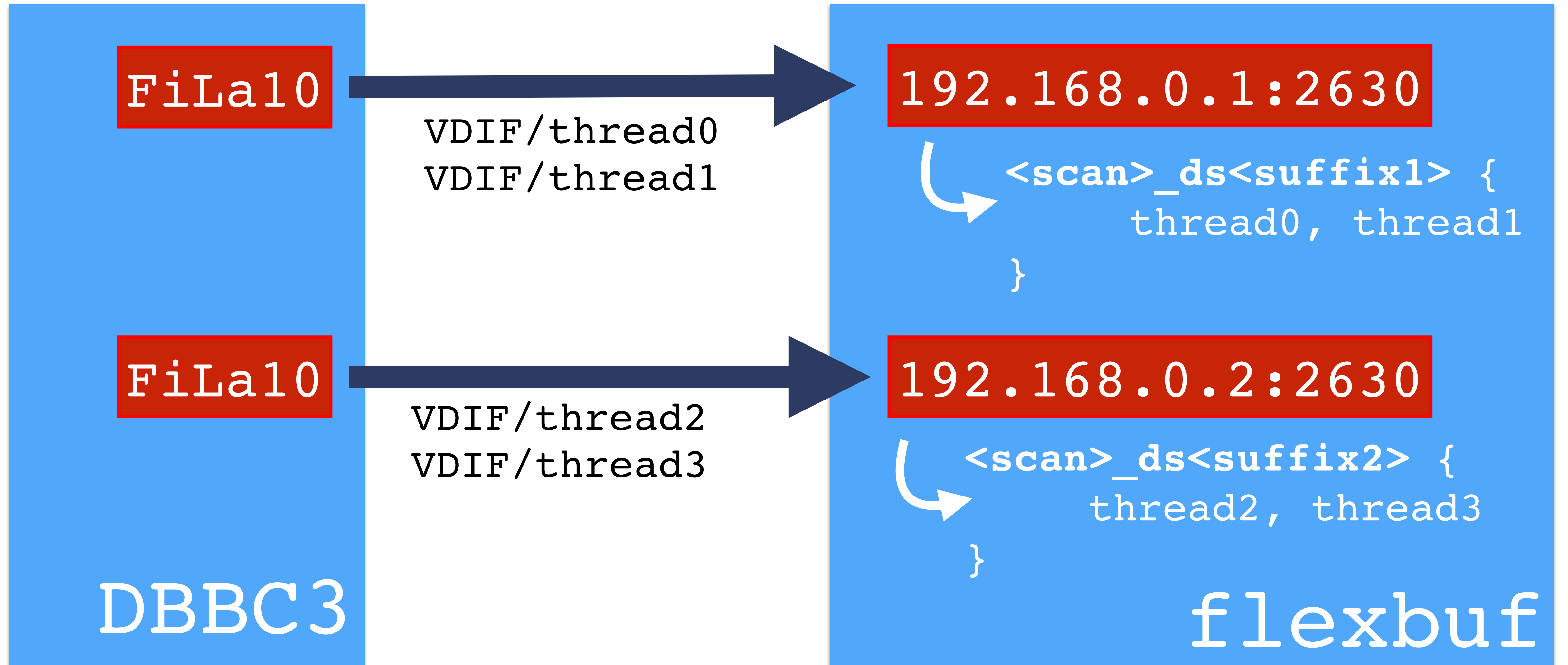
```
net_port = [ip1@]port1 : [ip2@]port2 : ... ;
```

```
record = on : <scan> ;
```



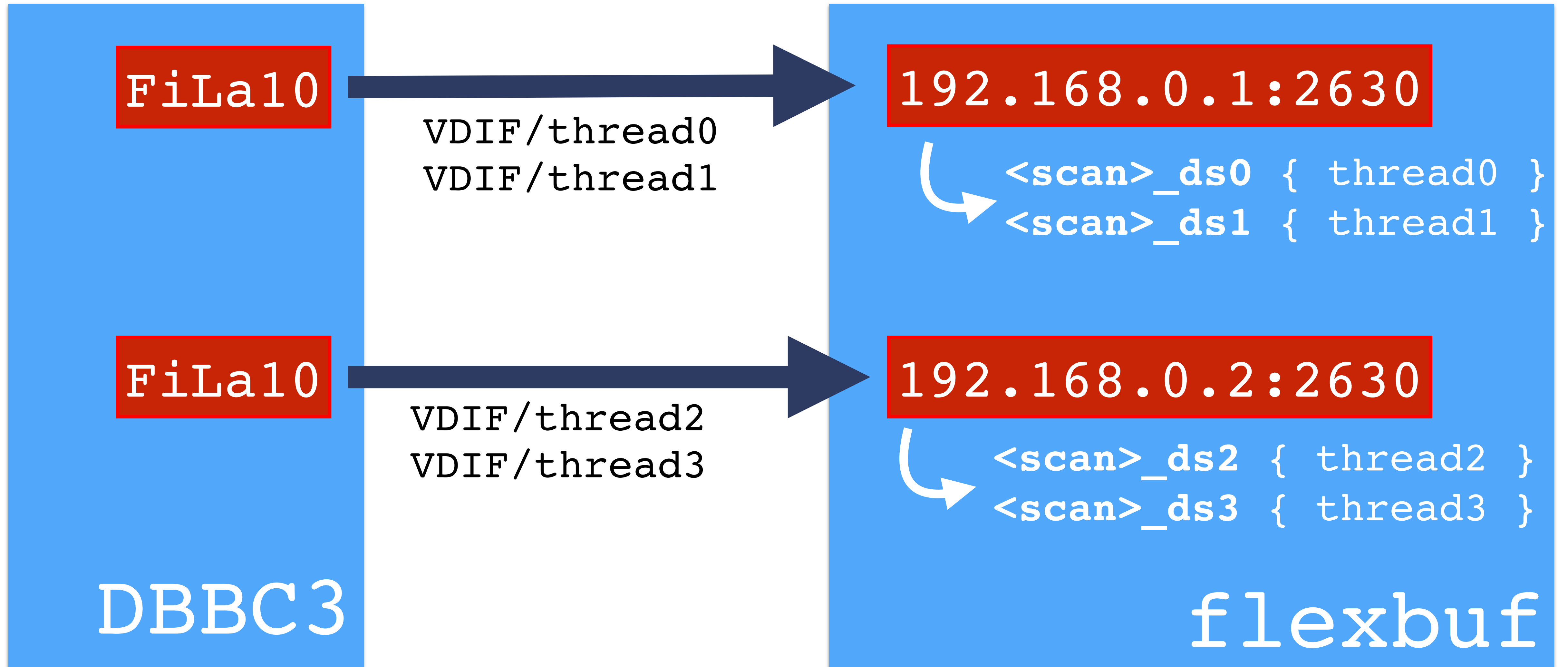
Note: NO SUFFIX when used like this

```
net_port = 192.168.0.1@2630 = suffix1 :  
          192.168.0.2@2630 = suffix2 ;
```



```
net_port = 192.168.0.1@2630 :  
          192.168.0.2@2630 ;
```

```
datastream = add : {thread} : * ;
```

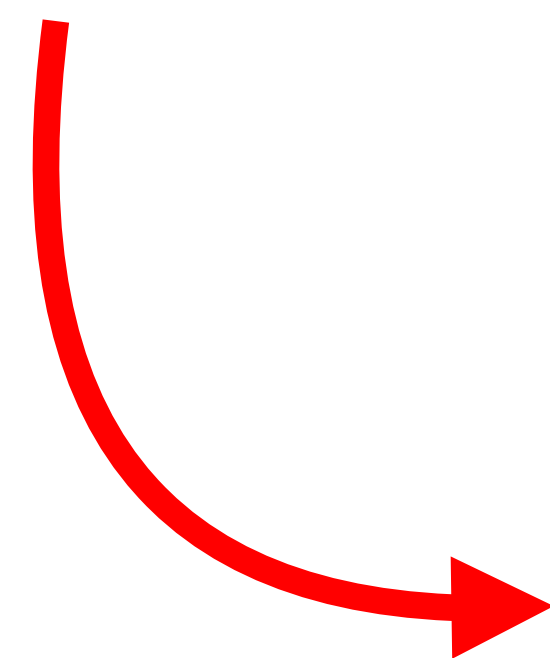


Very flexible:

can adapt to

demands easily

<https://github.com/jive-vlbi/jive5ab/tree/multi-reader>



looking for more testers before including in 3.1.0 release!

For documentation about the feature:

<https://github.com/jive-vlbi/jive5ab/commit/f3ffef67e15a6996660aa7980558ffb42994bd6a>

Danke schön!