

Access Control

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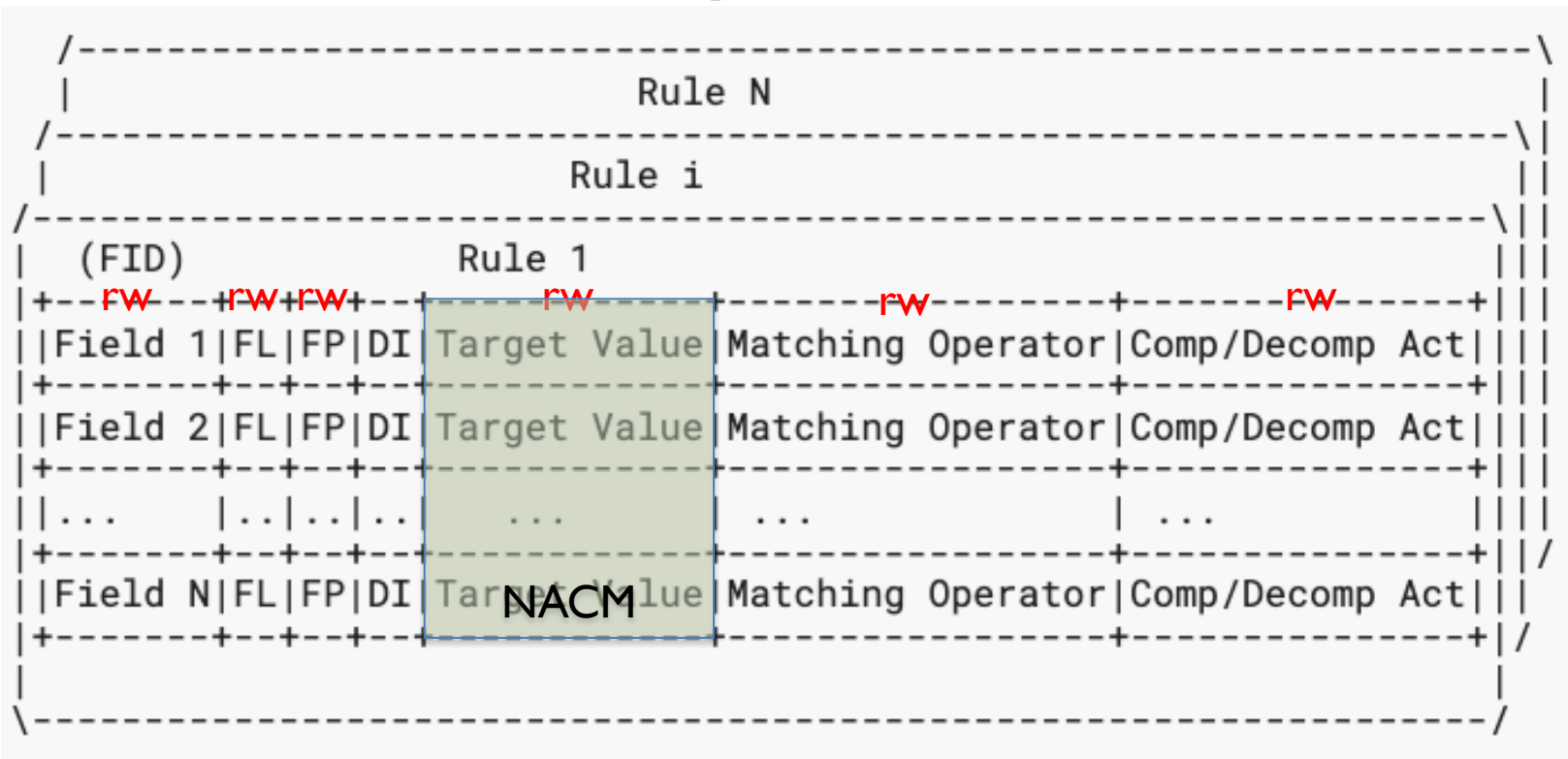
```

/------\
|                                     | Rule N                             |
|------\
|                                     | Rule i                           |
/------\
| (FID)                               Rule 1                                || | | | | | | | |
|+--rw--+rw+r--+---rw--+---rw--+---rw--+---+||
||Field 1|FL|FP|DI|Target Value|Matching Operator|Comp/Decomp Act| ||
|+-----++-+-+---+-----+-----+-----+||
||Field 2|FL|FP|DI|Target Value|Matching Operator|Comp/Decomp Act| ||
|+-----++-+-+---+-----+-----+-----+||
||...   |..|..|..|    ...       | ...               | ...     ||
|+-----++-+-+---+-----+-----+-----+|| /
||Field N|FL|FP|DI|Target Value|Matching Operator|Comp/Decomp Act| ||
|+-----++-+-+---+-----+-----+-----+|| /
|                                           |
\-----/

```

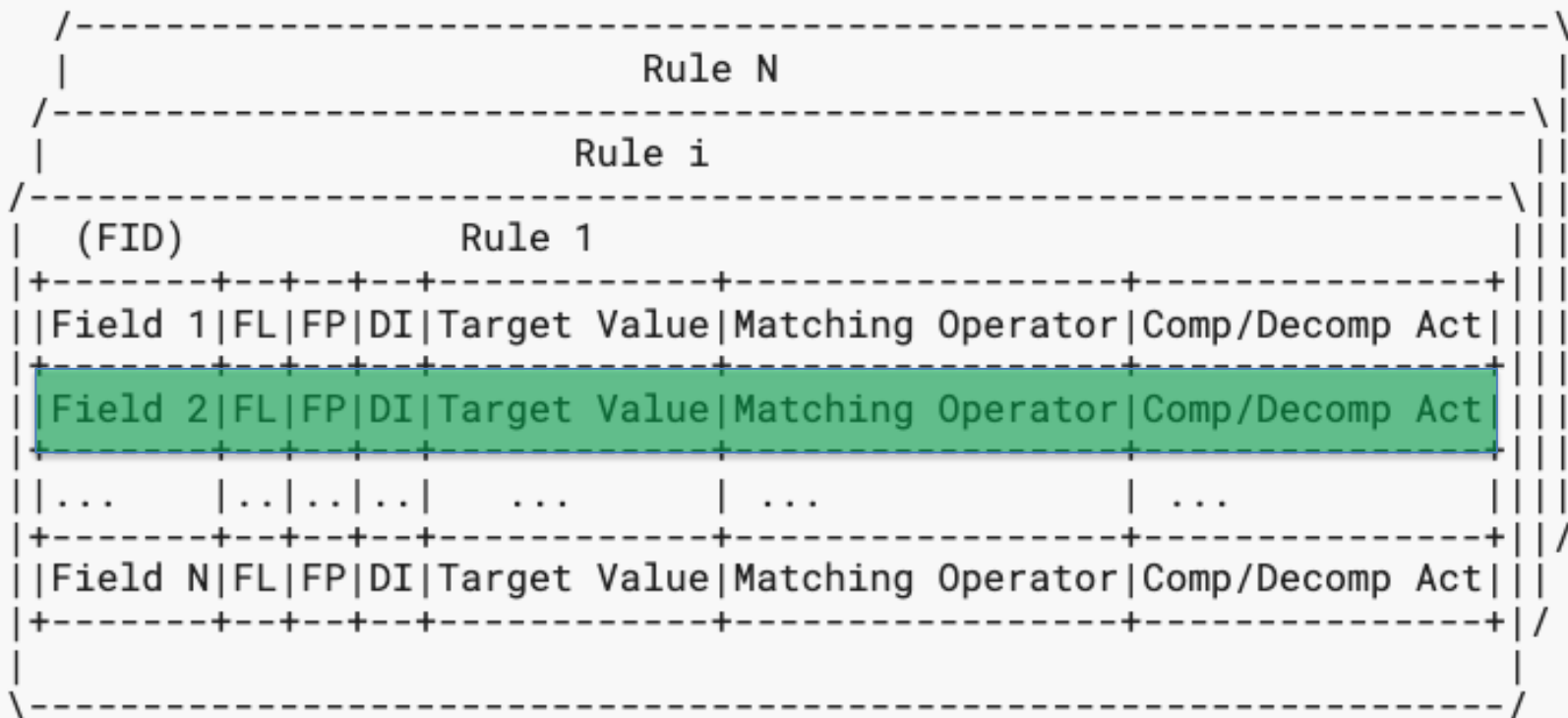
SCHC Compression Rule

((LPWAN))



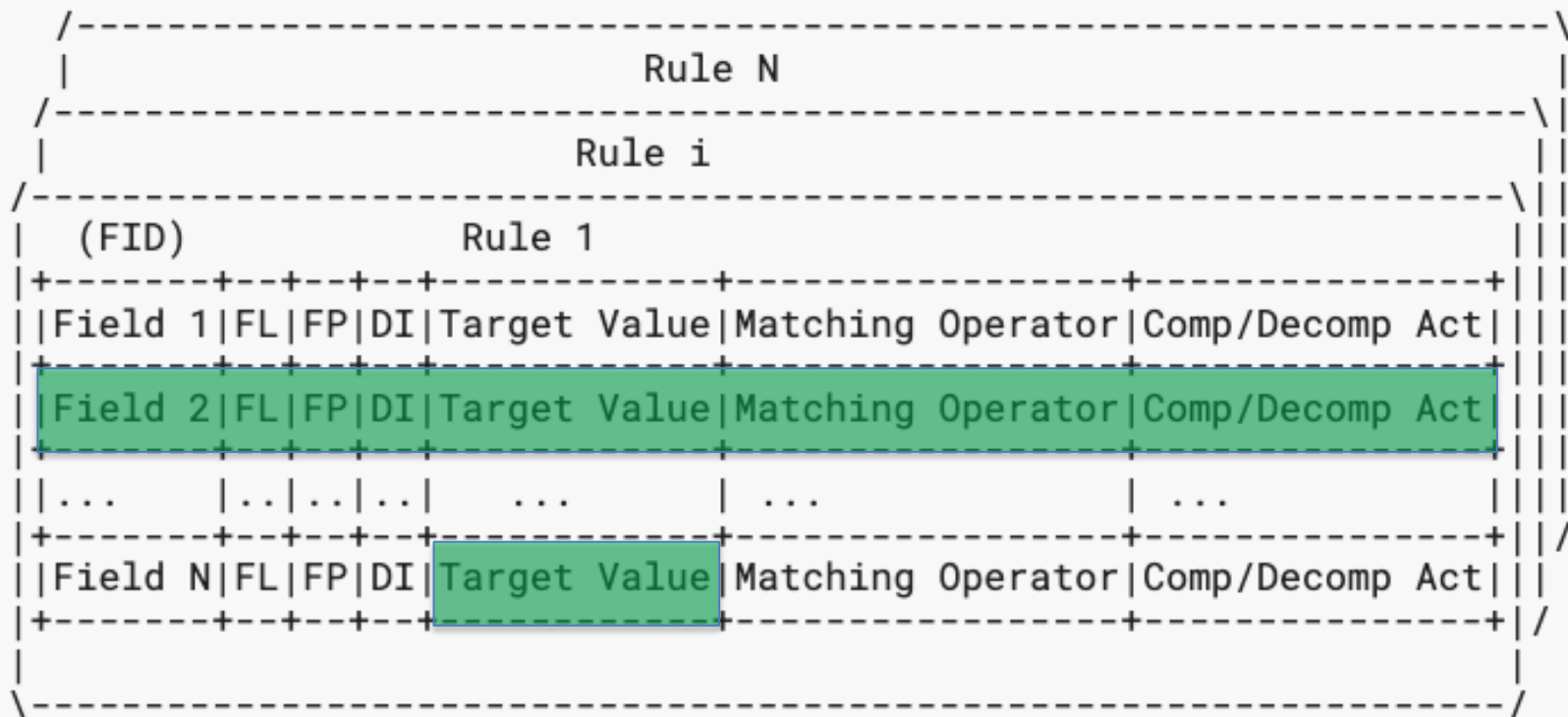
SCHC Compression Rule

((LPWAN))



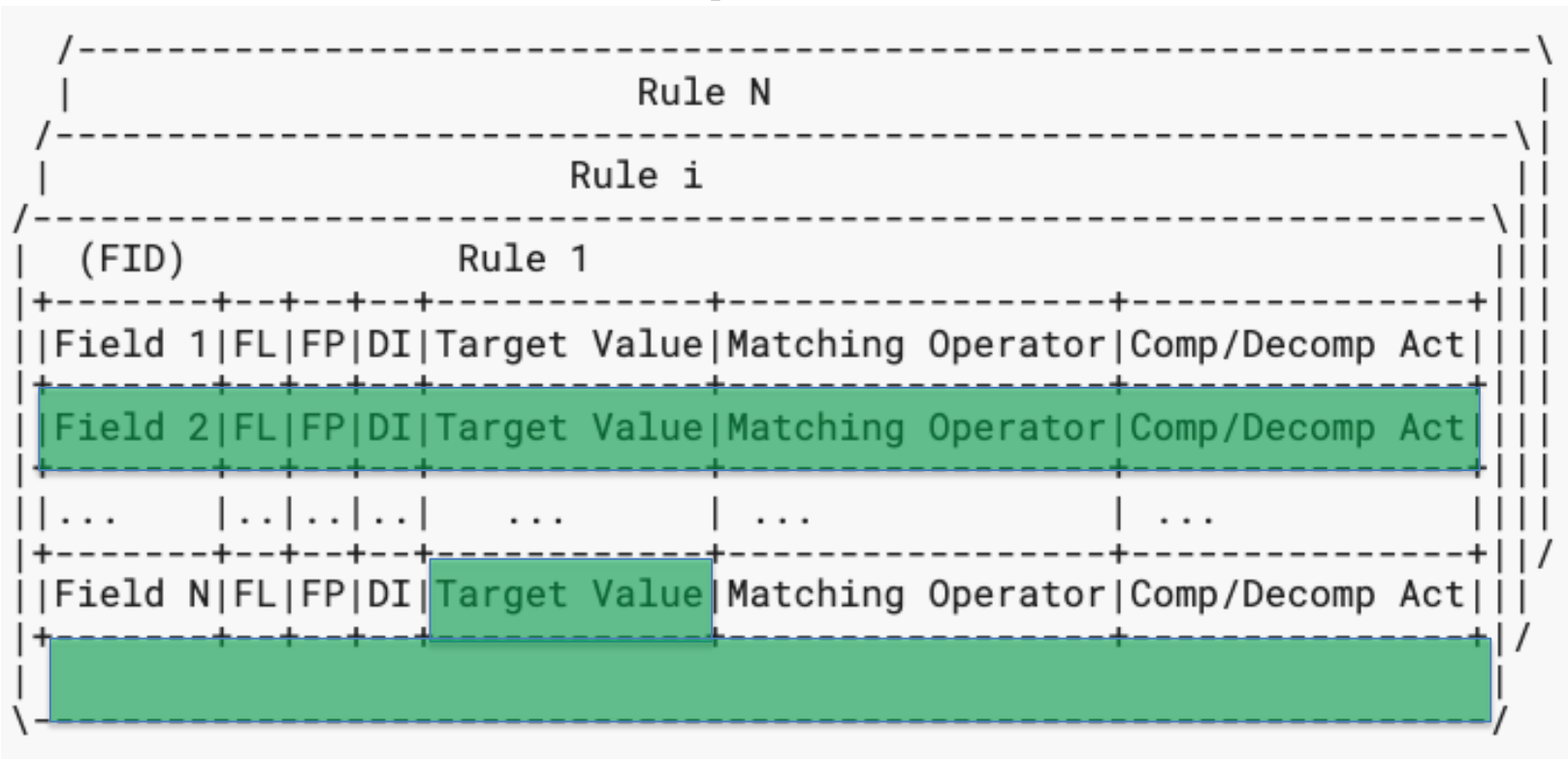
SCHC Compression Rule

((LPWAN))



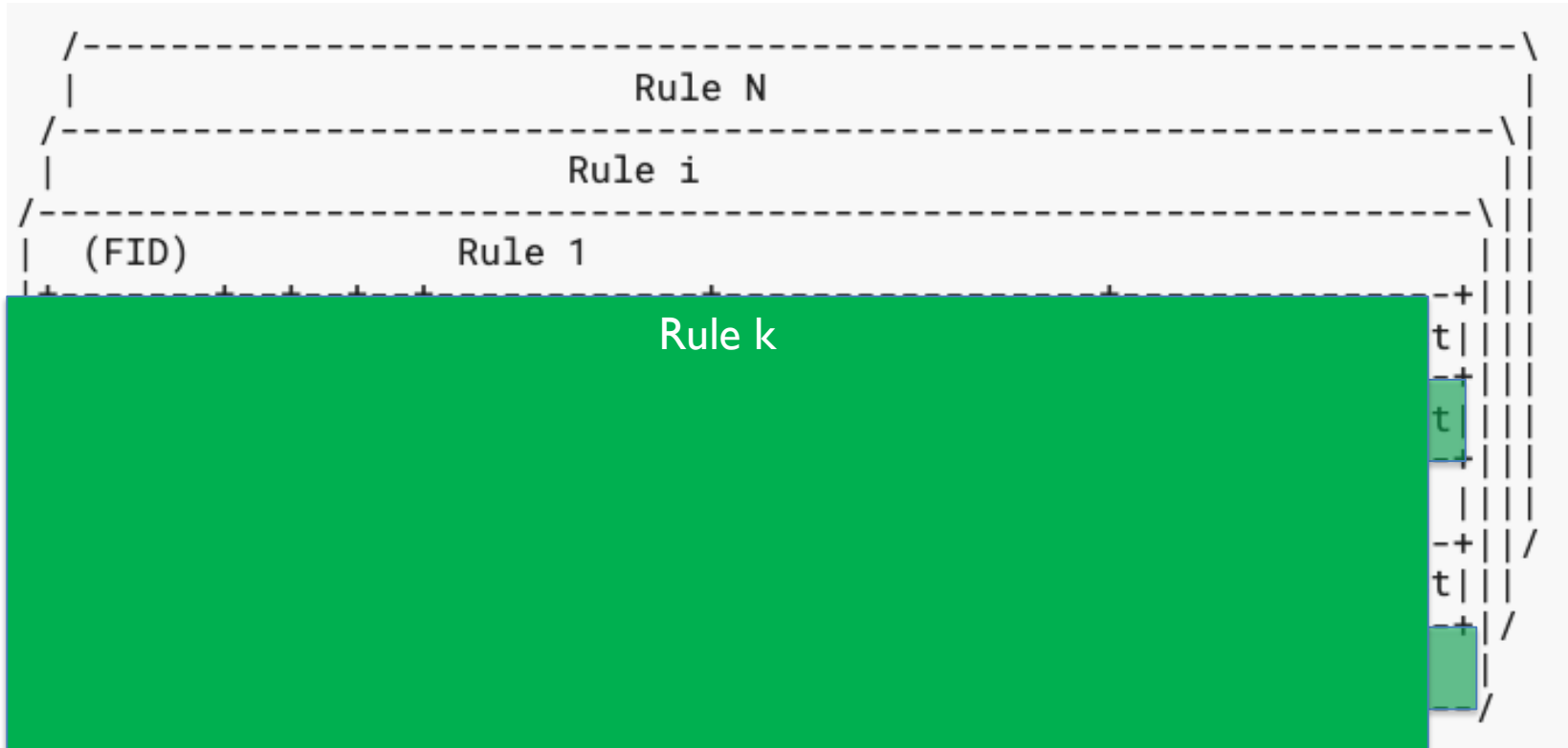
SCHC Compression Rule

((LPWAN))



SCHC Compression Rule

((LPWAN))



YANG Data Model

```
module: ietf-schc-access-control
```

```
augment /schc:schc/schc:rule:  
  +--ro ac-modify-set-of-rules?   rule-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:compression:  
  +--ro ac-modify-compression-rule? rule-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:compression/schc:entry:  
  +--ro ac-modify-field?   field-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:fragmentation:  
  +--ro ac-modify-timers?   boolean
```

YANG Data Model

```
module: ietf-schc-access-control
```

```
augment /schc:schc/schc:rule:  
  +--ro ac-modify-set-of-rules?    rule-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:compression:  
  +--ro ac-modify-compression-rule? rule-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:compression/schc:entry:  
  +--ro ac-modify-field?    field-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:fragmentation:  
  +--ro ac-modify-timers?    boolean
```

YANG Data Model

```
module: ietf-schc-access-control
```

```
augment /schc:schc/schc:rule:
  +--ro ac-modify-set-of-rules? rule-access-right
augment /schc:schc/schc:rule/schc:nature/schc:compression:
  +--ro ac-modify-compression-rule? rule-access-right
augment /schc:schc/schc:rule/schc:nature/schc:compression/sc
  +--ro ac-modify-field? field-access-right
augment /schc:schc/schc:rule/schc:nature/schc:fragmentation:
  +--ro ac-modify-timers? boolean
```

```
typedef rule-access-right {
  type enumeration {
    enum no-changes {
      value 0;
      description
        "No change are allowed.";
    }
    enum modify-existing-element {
      value 1;
      description
        "can modify content inside an element.";
    }
    enum add-remove-element {
      value 2;
      description
        "Allows to add or remove or modify an element.";
    }
  }
}
```

YANG Data Model

```
module: ietf-schc-access-control
```

```
augment /schc:schc/schc:rule:
  +--ro ac-modify-set-of-rules?  rule-access-right
augment /schc:schc/schc:rule/schc:nature/schc:compression:
  +--ro ac-modify-compression-rule?  rule-access-right
augment /schc:schc/schc:rule/schc:nature/schc:compression/schc:entry:
  +--ro ac-modify-field?  field-access-right
augment /schc:schc/schc:rule/schc:nature/schc:fragmentation:
  +--ro ac-modify-timers?  boolean
```

```
typedef field-access-right {
  type enumeration {
    enum no-change {
      value 0;
      description
        "Reserved slot number.";
    }
    enum change-tv {
      value 1;
      description
        "Reserved slot number.";
    }
    enum change-mo-cda-tv {
      value 2;
      description
        "Reserved slot number.";
    }
  }
}
```

YANG Data Model

```
module: ietf-schc-access-control
```

```
augment /schc:schc/schc:rule:  
  +--ro ac-modify-set-of-rules?  rule-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:compression:  
  +--ro ac-modify-compression-rule?  rule-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:compression/schc:entry:  
  +--ro ac-modify-field?  field-access-right  
augment /schc:schc/schc:rule/schc:nature/schc:fragmentation:  
  +--ro ac-modify-timers?  boolean
```

- Change timer value
- Don't change mode: create new rule
- Modify max-* ?
 - max-ack-requests
 - max-interleaved-frames
 - maximum-packet-size

Architecture

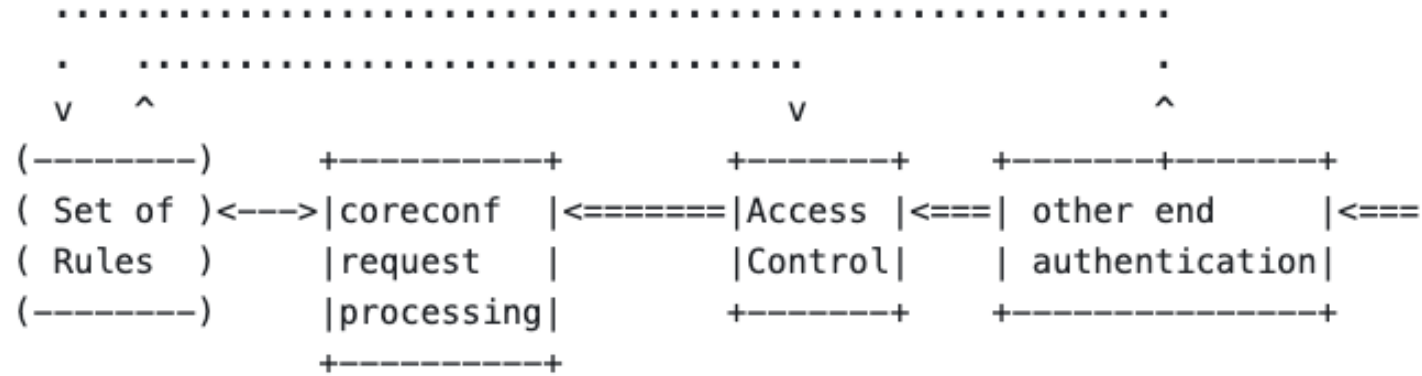


Figure 1: Overview of management architecture.