

# Configuring opFlow data unit size and precision

Flow records report data size in octets so internally opFlow is using octets everywhere. Octets may not be the most useful unit to view flow data sizes so opFlow has configuration options to customize this.

The default setting in opFlow looks like this:

```
'opFlow' => {  
  'opflow_byte_unit' => 'MB',  
  'opflow_byte_unit_size' => '1048576', # size of a "unit"  
  'opflow_byte_unit_precision' => '3' # number of decimal places  
}
```

This configuration will summarize flows by MB where a MB is byte / (1024\*1024) and it will report the values with 3 decimal places. Keep in mind that the base unit all of these calculations are working off of is an octet (or byte, so 8 bits), so opflow\_byte\_unit\_size is used like this:

```
reported size = octets / 'opflow_byte_unit_size'
```

If you would like to have opFlow report in kbits you could do something like this:

```
'opFlow' => {  
  'opflow_byte_unit' => 'kbit',  
  'opflow_byte_unit_size' => '128', # size of a "unit"  
  'opflow_byte_unit_precision' => '3' # number of decimal places  
}
```