Hello,

Thanks for such a great product.

We would like to understand the reason behind the "insert_list_fail" counter. I see it incrementing in our VXLAN setup during reassembly. But documentation doesn't mention anywhere as to what is this meant to indicate and possible guidance on this.

```
"tcp":{
    "sessions":46103,
    "ssn_memcap_drop":0,
    "pseudo":0,
    "pseudo_failed":0,
    "invalid_checksum":20,
    "no_flow":0,
    "syn":48357,
    "synack":59814,
    "rst":36695,
    "midstream_pickups":23,
    "pkt_on_wrong_thread":0,
    "segment_memcap_drop":0,
    "stream_depth_reached":0,
    "reassembly_gap":187,
    "overlap":8871,
    "overlap_diff_data":0,
    "insert_data_normal_fail":0,
    "insert_data_overlap_fail":0,
    "insert_list_fail":1045,  
  "memuse":1212416,
  "reassembly_memuse":1212416
}
```

History
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**#1 - 04/14/2022 08:25 AM - Victor Julien**
- Description updated

**#2 - 04/14/2022 08:55 AM - Victor Julien**
These are spurious retransmissions. We will classify a packet as such if it is a data packet that is entirely before our last_ack or base_seq. base_seq is the sequence number of where our window or reassembled data starts. It can only go up, so anything before it is considered invalid.

I'm working on some code to change the handling of those, see:

https://github.com/OISF/suricata/pull/7166/commits/44e6ae711b8fc035722699035f00f1514bba0e0
https://github.com/OISF/suricata/pull/7166/commits/8bf5ed3567288dc481a53fcd2b88c86ab7b51689

**#3 - 04/14/2022 10:11 AM - Sachin Desai**
Thanks a ton for the quick response. This helps.