

Verify Flow Sensor NetFlow Templates and Information Elements

Contents

[Introduction](#)

[Prerequisites](#)

[Template IDs](#)

[Standard NetFlow Elements](#)

[Enterprise-Specific Elements](#)

[Template Formats](#)

[IPv4 First Flow - Template 317](#)

[IPv4 First Flow Deep - Template 318](#)

[IPv4 Flow - Template 319](#)

[IPv4 Event - Template 320](#)

[IPv6 First Flow - Template 321](#)

[IPv6 First Flow Deep - Template 322](#)

[IPv6 Flow - Template 323](#)

[IPv6 Event - Template 324](#)

[IPv4 Source Email Counts - Template 325](#)

[IPv4 First Flow Response Time Monitoring - Template 326](#)

[IPv4 First Flow Deep Response Time Monitoring - Template 327](#)

[IPv4 Flow Response Time Monitoring - Template 328](#)

[IPv6 First Flow Response Time Monitoring - Template 329](#)

[IPv6 First Flow Deep Response Time Monitoring - Template 330](#)

[IPv6 Flow Response Time Monitoring - Template 331](#)

[IPv4 Destination Email Counts - Template 332](#)

[IPv6 Source Email Counts - Template 333](#)

[IPv6 Destination Email Counts - Template 334](#)

[IPv4 First Flow IPFIX Template 335](#)

[IPv4 First Flow Deep IPFIX - Template 336](#)

[IPv4 Flow IPFIX - Template 337](#)

[IPv4 Event IPFIX - Template 338](#)

[IPv6 First Flow IPFIX - Template 339](#)

[IPv6 First Flow Deep IPFIX - Template 340](#)

[IPv6 Flow IPFIX - Template 341](#)

[IPv6 Event IPFIX - Template 342](#)

[IPv4 Source Email Counts IPFIX - Template 343](#)

[IPv4 First Flow Response Time Monitoring - Template 344](#)

[IPv4 First Flow Deep Response Time Monitoring - Template 345](#)

[IPv4 Flow Response Time Monitoring IPFIX - Template 346](#)

[IPv6 First Flow Response Time Monitoring IPFIX - Template 347](#)

[IPv6 First Flow Deep RTM IPFIX - Template 348](#)

[IPv6 Flow Response Time Monitoring - Template 349](#)

[IPv4 Destination Email Counts IPFIX - Template 350](#)

[IPv6 Source Email Counts IPFIX - Template 351](#)

[IPv6 Destination Email Counts IPFIX - Template 352](#)

[ETTA Template 353-372](#)

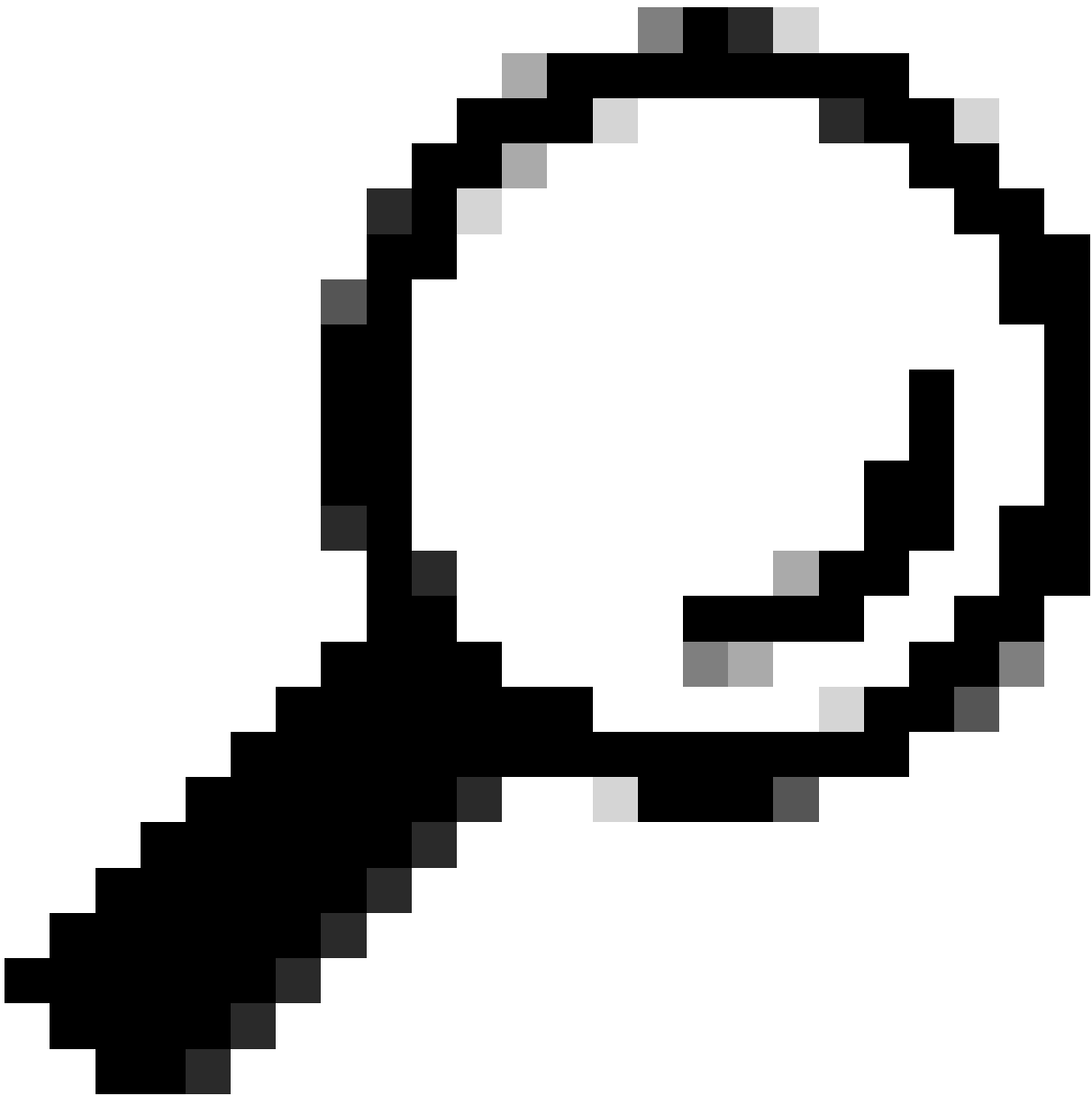
Introduction

This document describes the NetFlow templates used by the SNA Flow Sensor, this includes information regarding Enterprise-specific elements.

Prerequisites

The NetFlow element IDs used here are standard netflow protocol, however the template information and which elements included in each template are subject to change at any time.

Template IDs



Tip: As of SNA version 7.3 the Flow Sensor appears to only send template IDs 335-352 by default, which are the IPFIX templates. All IPFIX templates are sent together every 60 seconds, regardless of the type of traffic seen by the monitoring port of the Flow Sensor (for example IPv4 vs IPv6).

Note: The templates with an asterisk (*) beside them contain the basic NetFlow v9/IPFIX fields found on the IANA list for standard flow creation and analysis.

| | |
|--------------------------------------|------|
| IPV4_FIRST_FLOW_TEMPLATE_ID | 317* |
| IPV4_FIRST_FLOW_DEEP_TEMPLATE_ID | 318* |
| IPV4_FLOW_TEMPLATE_ID | 319* |
| IPV4_EVENT_TEMPLATE_ID | 320 |
| IPV6_FIRST_FLOW_TEMPLATE_ID | 321* |
| IPV6_FIRST_FLOW_DEEP_TEMPLATE_ID | 322* |
| IPV6_FLOW_TEMPLATE_ID | 323* |
| IPV6_EVENT_TEMPLATE_ID | 324 |
| IPV4_SRC_EMAIL_COUNTS_TEMPLATE_ID | 325 |
| IPV4_FIRST_FLOW_RTM_TEMPLATE_ID | 326* |
| IPV4_FIRST_FLOW_DEEP_RTM_TEMPLATE_ID | 327* |
| IPV4_FLOW_RTM_TEMPLATE_ID | 328* |
| IPV6_FIRST_FLOW_RTM_TEMPLATE_ID | 329* |
| IPV6_FIRST_FLOW_DEEP_RTM_TEMPLATE_ID | 330* |
| IPV6_FLOW_RTM_TEMPLATE_ID | 331* |
| IPV4_DST_EMAIL_COUNTS_TEMPLATE_ID | 332 |
| IPV6_SRC_EMAIL_COUNTS_TEMPLATE_ID | 333 |
| IPV6_DST_EMAIL_COUNTS_TEMPLATE_ID | 334 |

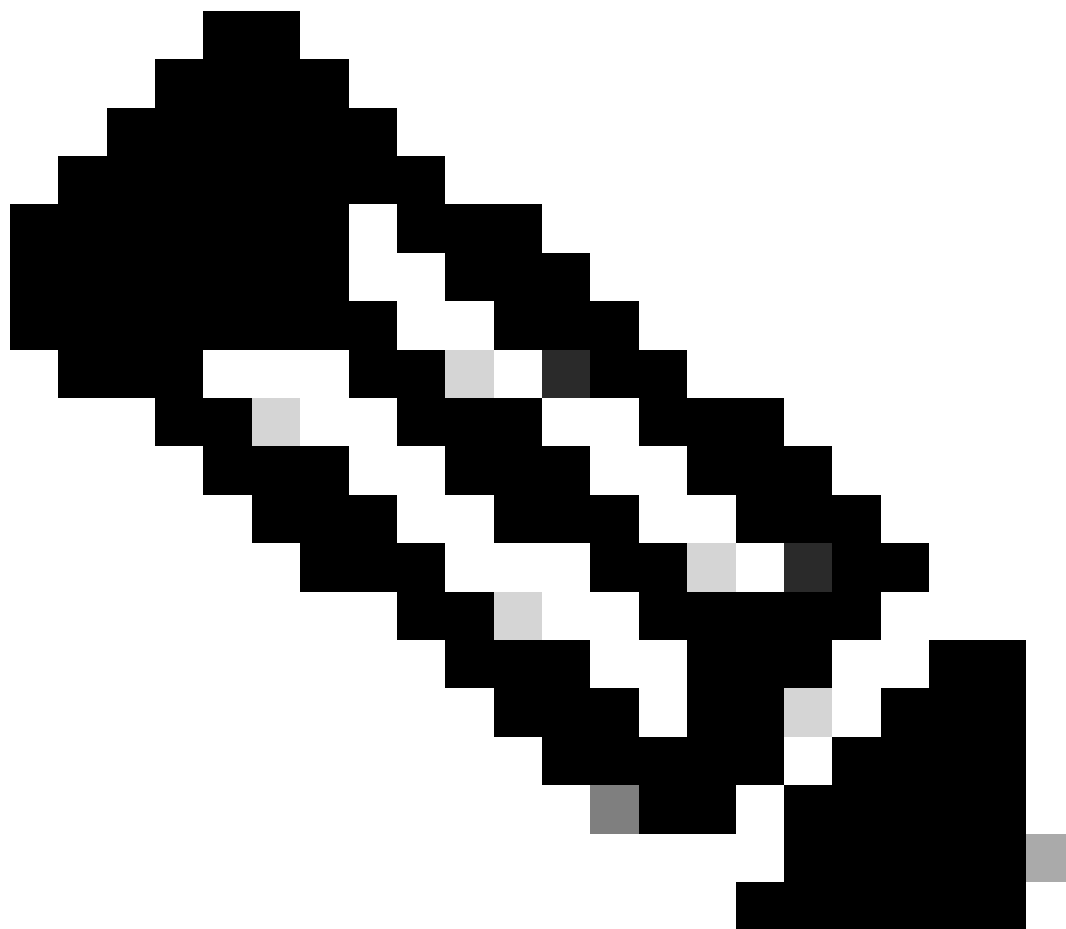
| | |
|--|------|
| IPV4_FIRST_FLOW_IPFIX_TEMPLATE_ID | 335* |
| IPV4_FIRST_FLOW_DEEP_IPFIX_TEMPLATE_ID | 336* |
| IPV4_FLOW_IPFIX_TEMPLATE_ID | 337* |
| IPV4_EVENT_IPFIX_TEMPLATE_ID | 338 |
| IPV6_FIRST_FLOW_IPFIX_TEMPLATE_ID | 339* |
| IPV6_FIRST_FLOW_DEEP_IPFIX_TEMPLATE_ID | 340* |
| IPV6_FLOW_IPFIX_TEMPLATE_ID | 341* |
| IPV6_EVENT_IPFIX_TEMPLATE_ID | 342 |
| IPV4_SRC_EMAIL_COUNTS_IPFIX_TEMPLATE_ID | 343 |
| IPV4_FIRST_FLOW_RTM_IPFIX_TEMPLATE_ID | 344* |
| IPV4_FIRST_FLOW_DEEP_RTM_IPFIX_TEMPLATE_ID | 345* |
| IPV4_FLOW_RTM_IPFIX_TEMPLATE_ID | 346* |
| IPV6_FIRST_FLOW_RTM_IPFIX_TEMPLATE_ID | 347* |
| IPV6_FIRST_FLOW_DEEP_RTM_IPFIX_TEMPLATE_ID | 348* |
| IPV6_FLOW_RTM_IPFIX_TEMPLATE_ID | 349* |
| IPV4_DST_EMAIL_COUNTS_IPFIX_TEMPLATE_ID | 350 |
| IPV6_SRC_EMAIL_COUNTS_IPFIX_TEMPLATE_ID | 351 |
| IPV6_DST_EMAIL_COUNTS_IPFIX_TEMPLATE_ID | 352 |
| IPV4_ETTA_IDP_TEMPLATE_ID | 353 |
| IPV4_ETTA_IDP_IPFIX_TEMPLATE_ID | 354 |
| IPV4_ETTA_SPLT_TEMPLATE_ID | 355 |
| IPV4_ETTA_SPLT_IPFIX_TEMPLATE_ID | 356 |
| IPV4_ETTA_BD_TEMPLATE_ID | 357 |
| IPV4_ETTA_BD_IPFIX_TEMPLATE_ID | 358 |
| IPV4_ETTA_TLS_TEMPLATE_ID | 359 |
| IPV4_ETTA_TLS_IPFIX_TEMPLATE_ID | 360 |
| IPV4_ETTA_SALT_TEMPLATE_ID | 361 |
| IPV4_ETTA_SALT_IPFIX_TEMPLATE_ID | 362 |
| IPV6_ETTA_IDP_TEMPLATE_ID | 363 |
| IPV6_ETTA_IDP_IPFIX_TEMPLATE_ID | 364 |
| IPV6_ETTA_SPLT_TEMPLATE_ID | 365 |
| IPV6_ETTA_SPLT_IPFIX_TEMPLATE_ID | 366 |
| IPV6_ETTA_BD_TEMPLATE_ID | 367 |
| IPV6_ETTA_BD_IPFIX_TEMPLATE_ID | 368 |
| IPV6_ETTA_TLS_TEMPLATE_ID | 369 |
| IPV6_ETTA_TLS_IPFIX_TEMPLATE_ID | 370 |
| IPV6_ETTA_SALT_TEMPLATE_ID | 371 |
| IPV6_ETTA_SALT_IPFIX_TEMPLATE_ID | 372 |

Standard NetFlow Elements

| | |
|---------------------|----|
| NF_F_IN_BYTES | 1 |
| NF_F_IN_PKTS | 2 |
| NF_F_PROTOCOL | 4 |
| NF_F_SRC_TOS | 5 |
| NF_F_TCP_FLAGS | 6 |
| NF_F_L4_SRC_PORT | 7 |
| NF_F_SRC_ADDR_IPV4 | 8 |
| NF_F_SRC_INTF_ID | 10 |
| NF_F_L4_DST_PORT | 11 |
| NF_F_DST_ADDR_IPV4 | 12 |
| NF_F_DST_INTF_ID | 14 |
| NF_F_LAST_SWITCHED | 21 |
| NF_F_FIRST_SWITCHED | 22 |
| NF_F_SRC_ADDR_IPV6 | 27 |
| NF_F_DST_ADDR_IPV6 | 28 |
| NF_F_MIN_TTL | 52 |

| | |
|------------------------------------|-----|
| NF_F_IN_SRC_MAC | 56 |
| NF_F_OUT_DST_MAC | 57 |
| NF_F_SRC_VLAN | 58 |
| NF_F_MPLS_LABEL_1 | 70 |
| NF_F_SYSTEM_INIT_TIME_MILLISECONDS | 160 |
| NF_F_TCP_SYN_TOTAL_COUNT | 218 |
| NF_F_TCP_FIN_TOTAL_COUNT | 219 |
| NF_F_TCP_RST_TOTAL_COUNT | 220 |
| NF_F_TCP_ACK_TOTAL_COUNT | 222 |
| NF_F_IP_SECTION_HEADER | 313 |
| NF_F_IP_SECTION_PAYLOAD | 314 |

Enterprise-Specific Elements



Note: The Flow Sensor uses Lancope Information Element Identifier Definitions: Private Enterprise Number (PEN) - 8712

More information about these elements is available in the [Secure Analytics Information Elements guide](#)

| | |
|---|-------|
| NF_F_FLOWSENSOR_INITIATOR | 29794 |
| NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 29795 |
| NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 29796 |
| NF_F_FLOWSENSOR_RTT | 29797 |
| NF_F_FLOWSENSOR_SVR_RESP | 29798 |
| NF_F_FLOWSENSOR_RETRANSMITS | 29799 |
| NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 29800 |
| NF_F_FLOWSENSOR_TCP_FRAG_TOTAL_COUNT | 29801 |
| NF_F_FLOWSENSOR_SRC_EMAIL_IN | 29802 |
| NF_F_FLOWSENSOR_SRC_EMAIL_OUT | 29803 |
| NF_F_FLOWSENSOR_SRC_EMAIL_IN_MESS | 29804 |
| NF_F_FLOWSENSOR_SRC_EMAIL_OUT_MESS | 29805 |
| NF_F_FLOWSENSOR_SRC_EMAIL_IN_TRYS | 29806 |
| NF_F_FLOWSENSOR_SRC_EMAIL_OUT_TRYS | 29807 |
| NF_F_FLOWSENSOR_DST_EMAIL_IN | 29808 |
| NF_F_FLOWSENSOR_DST_EMAIL_OUT | 29809 |
| NF_F_FLOWSENSOR_DST_EMAIL_IN_MESS | 29810 |
| NF_F_FLOWSENSOR_DST_EMAIL_OUT_MESS | 29811 |
| NF_F_FLOWSENSOR_DST_EMAIL_IN_TRYS | 29812 |
| NF_F_FLOWSENSOR_DST_EMAIL_OUT_TRYS | 29813 |
| NF_F_FLOWSENSOR_TRACES | 29814 |
| NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 29817 |
| NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 29818 |
| NF_F_FLOWSENSOR_EMB_ICMP_CODE | 29819 |
| NF_F_FLOWSENSOR_APPLICATION_ID | 29820 |
| NF_F_FLOWSENSOR_BAD_FLAG_XMAS | 29821 |
| NF_F_FLOWSENSOR_BAD_FLAG_SYN_FIN | 29822 |
| NF_F_FLOWSENSOR_BAD_FLAG_BAD_RST | 29823 |
| NF_F_FLOWSENSOR_BAD_FLAG_NO_ACK | 29824 |
| NF_F_FLOWSENSOR_BAD_FLAG_URG | 29825 |
| NF_F_FLOWSENSOR_BAD_FLAG_NOFLAG | 29826 |
| NF_F_FLOWSENSOR_BAD_TCP_PROBE | 29827 |
| NF_F_FLOWSENSOR_SHORT_FRAG_ATTACK | 29828 |
| NF_F_FLOWSENSOR_FRAG_PKT_TOO_SHORT | 29829 |
| NF_F_FLOWSENSOR_FRAG_PKT_TOO_LONG | 29830 |
| NF_F_FLOWSENSOR_FRAG_DIFFERENT_SIZES | 29831 |
| NF_F_FLOWSENSOR_APPLICATION_DETAILS | 29832 |

Template Formats



Note: Each template includes the Template Name and field count, followed by the individual NetFlow/IPFIX fields and the size of each field (in bytes).

Note that Enterprise-specific IPFIX elements are ored with 0x8000 to turn on the high bit, so the collector knows that the Private Enterprise Number (PEN) field is present.

An example with NetFlow v9 and Enterprise-specific IPFIX elements is included.

```
TEMPLATE_NAME, ## <-- Field Count (Total number of NF_F fields in the template)
FIELD_NAME_V9, # <-- Field size (in bytes)
ENTERPRISE_FIELD_NAME_IPFIX | 0x8000, # <-- Field size (in bytes)
0000, 8712 <-- Private Enterprise Number (PEN)
```

IPv4 First Flow - Template 317

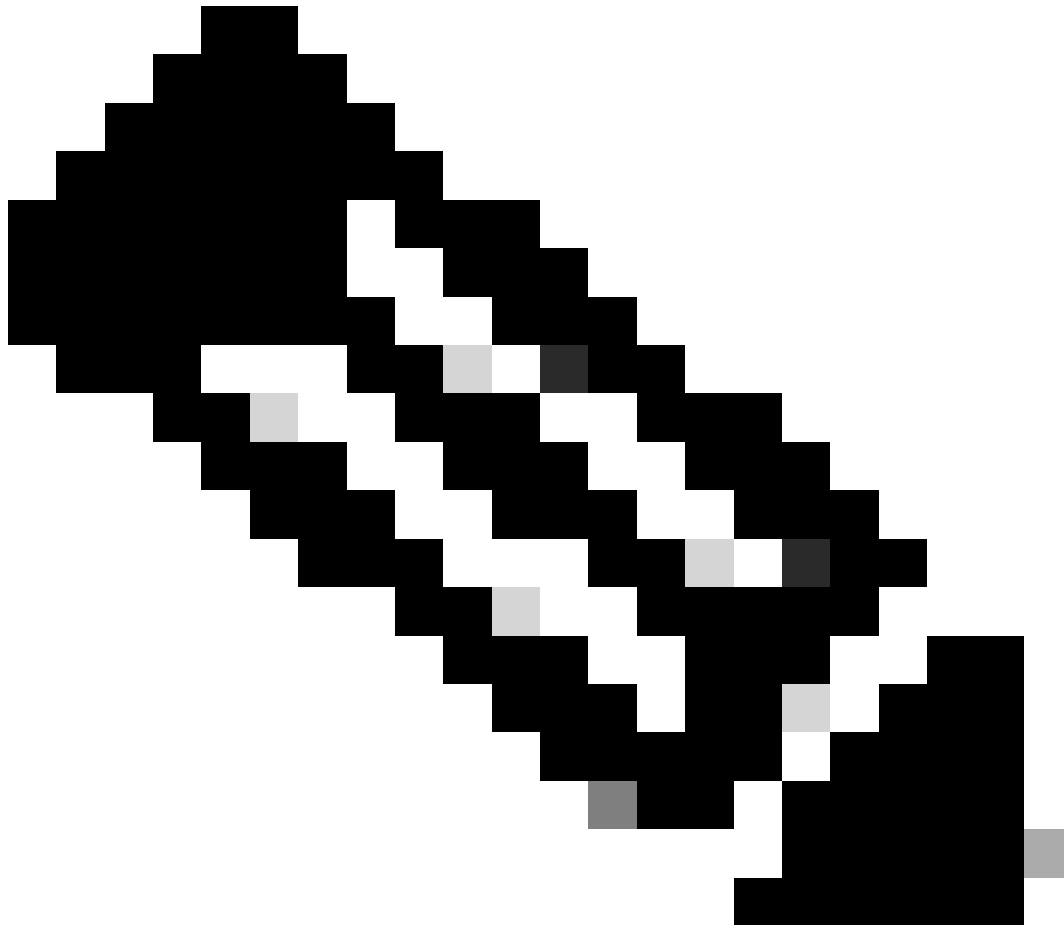


Note: This template is used for the initial v9 export of IPv4 flow information from a flow slot in the Flow Sensor engine.

```
IPV4_FIRST_FLOW_TEMPLATE_ID, 31
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
```

NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv4 First Flow Deep - Template 318



Note: This template is used for the initial v9 export of IPv4 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected.

IPV4_FIRST_FLOW_DEEP_TEMPLATE_ID, 33
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv4 Flow - Template 319

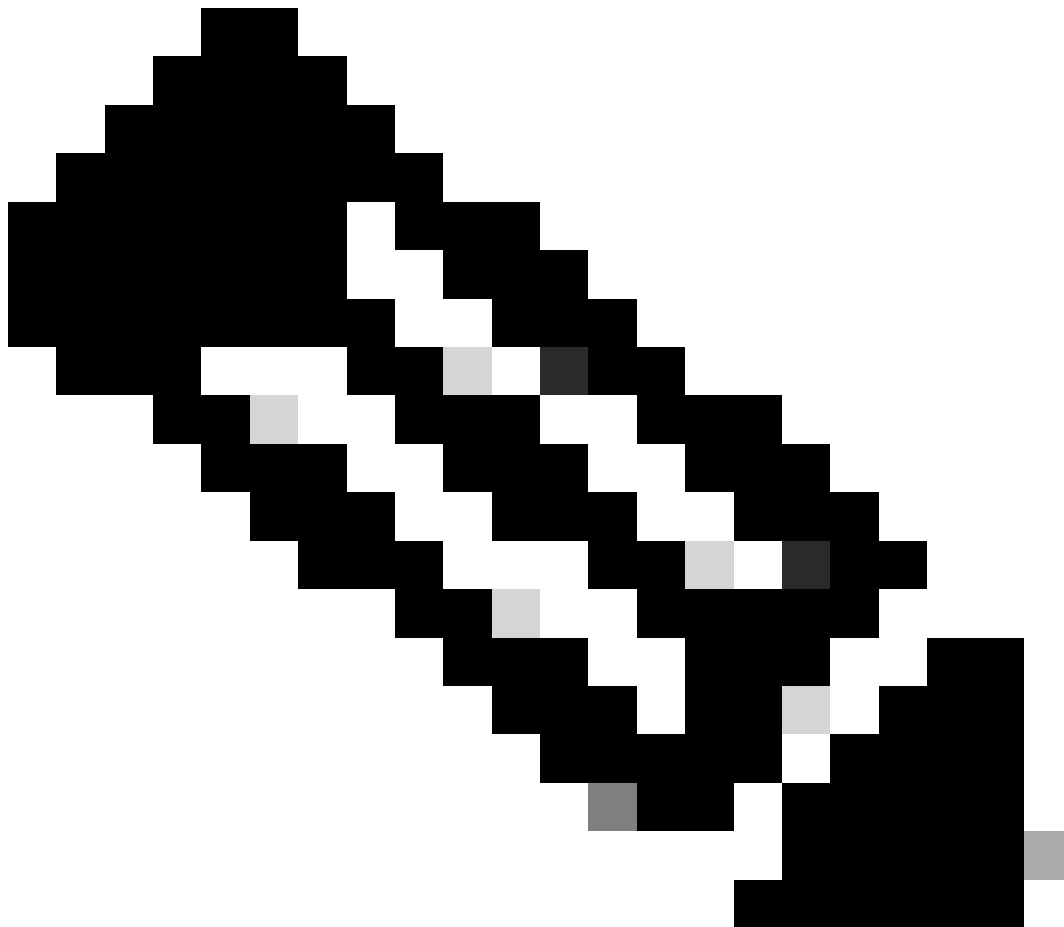


Note: This template is used for follow-on v9 exports of IPv4 flow information from a flow slot in the Flow Sensor engine.

```
IPV4_FLOW_TEMPLATE_ID, 25
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SRC_ADDR_IPV4, 4
  NF_F_DST_ADDR_IPV4, 4
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_MIN_TTL, 1
  NF_F_TCP_SYN_TOTAL_COUNT, 2
  NF_F_TCP_ACK_TOTAL_COUNT, 2
  NF_F_TCP_FIN_TOTAL_COUNT, 2
  NF_F_TCP_RST_TOTAL_COUNT, 2
```

NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv4 Event - Template 320

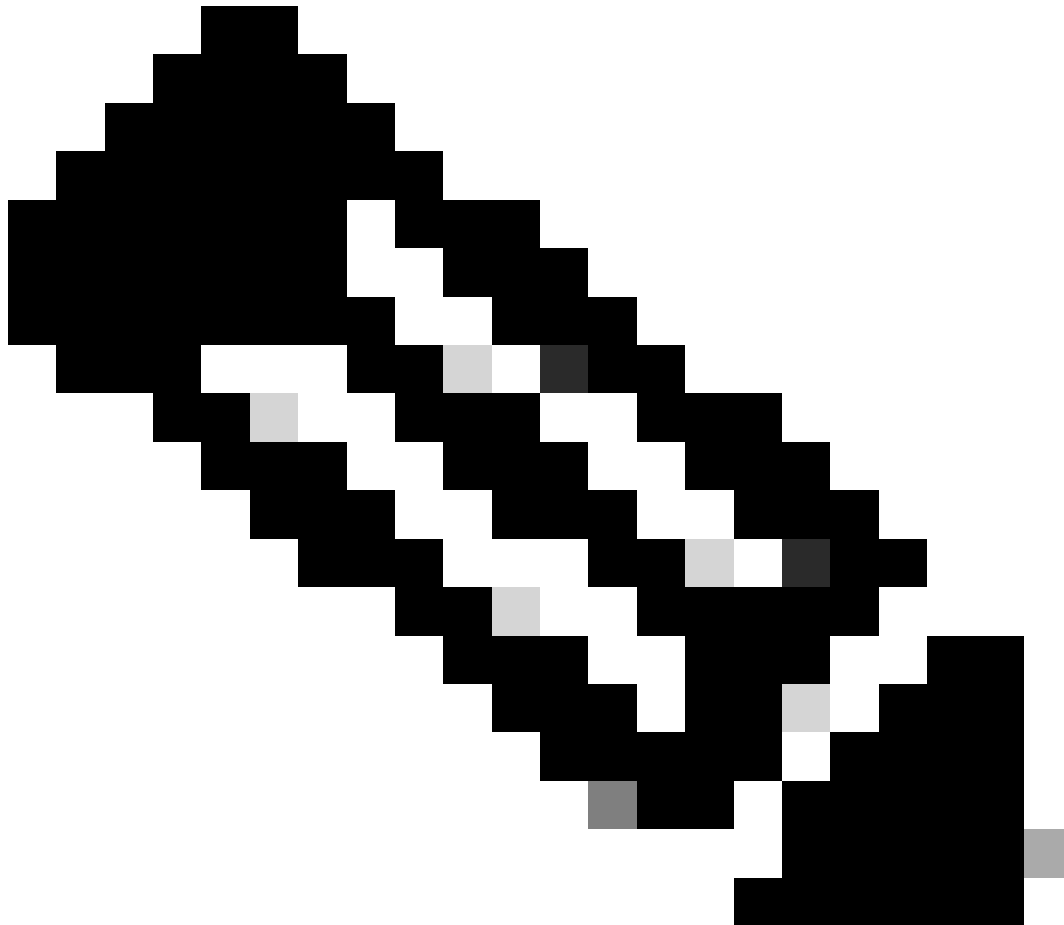


Note: This template is used for v9 exports of IPv4 bad fragment and flag combination counts detected by the Flow Sensor engine.

IPV4_EVENT_TEMPLATE_ID, 18
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4

```
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_PROTOCOL, 1
NF_F_FLOWSENSOR_BAD_FLAG_XMAS, 2
NF_F_FLOWSENSOR_BAD_FLAG_SYN_FIN, 2
NF_F_FLOWSENSOR_BAD_FLAG_BAD_RST, 2
NF_F_FLOWSENSOR_BAD_FLAG_NO_ACK, 2
NF_F_FLOWSENSOR_BAD_FLAG_URG, 2
NF_F_FLOWSENSOR_BAD_FLAG_NOFLAG, 2
NF_F_FLOWSENSOR_BAD_TCP_PROBE, 2
NF_F_FLOWSENSOR_SHORT_FRAG_ATTACK, 2
NF_F_FLOWSENSOR_FRAG_PKT_TOO_SHORT, 2
NF_F_FLOWSENSOR_FRAG_PKT_TOO_LONG, 2
NF_F_FLOWSENSOR_FRAG_DIFFERENT_SIZES, 2
```

IPv6 First Flow - Template 321



Note: This template is used for the initial v9 export of IPv6 flow information from a flow slot in the Flow Sensor engine.

IPV6_FIRST_FLOW_TEMPLATE_ID, 31
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv6 First Flow Deep - Template 322

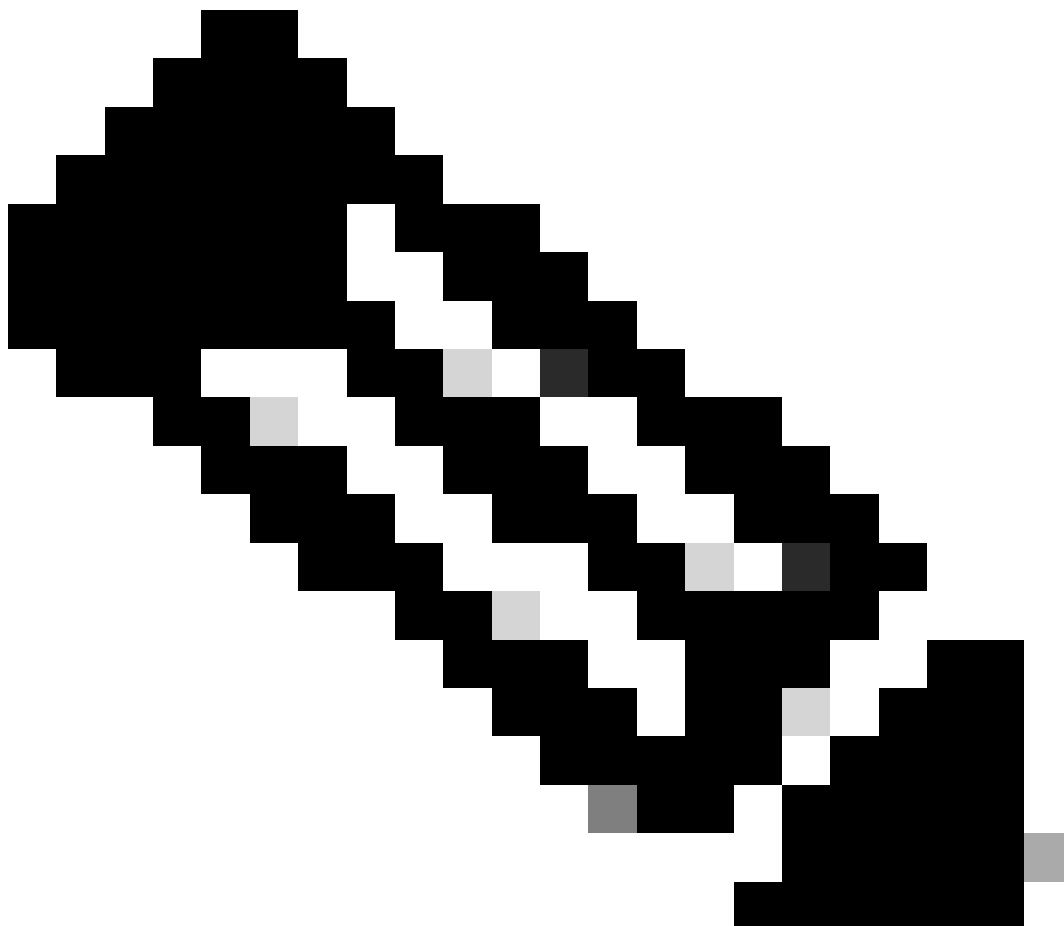


Note: This template is used for the initial v9 export of IPv6 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected.

```
IPV6_FIRST_FLOW_DEEP_TEMPLATE_ID, 33
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
```


NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv6 Flow - Template 323



Note: This template is used for follow-on v9 exports of IPv6 flow information from a flow slot in the Flow Sensor engine.

IPV6_FLOW_TEMPLATE_ID, 25
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_MIN_TTL, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_APPLICATION_ID, 4

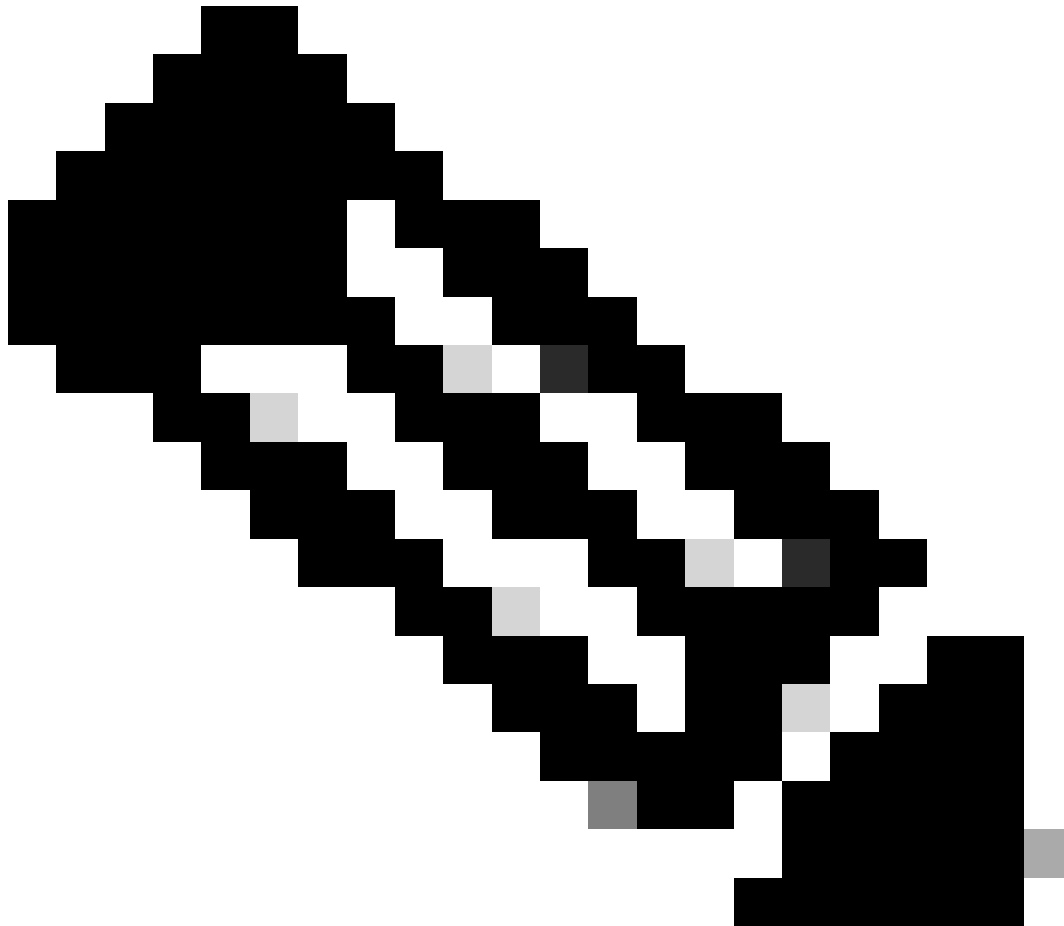
IPv6 Event - Template 324



Note: This template is used for v9 exports of IPv6 bad fragment and flag combination counts detected by the Flow Sensor engine.

```
IPV6_EVENT_TEMPLATE_ID, 18
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_PROTOCOL, 1
NF_F_FLOWSENSOR_BAD_FLAG_XMAS, 2
NF_F_FLOWSENSOR_BAD_FLAG_SYN_FIN, 2
NF_F_FLOWSENSOR_BAD_FLAG_BAD_RST, 2
NF_F_FLOWSENSOR_BAD_FLAG_NO_ACK, 2
NF_F_FLOWSENSOR_BAD_FLAG_URG, 2
NF_F_FLOWSENSOR_BAD_FLAG_NOFLAG, 2
NF_F_FLOWSENSOR_BAD_TCP_PROBE, 2
NF_F_FLOWSENSOR_SHORT_FRAG_ATTACK, 2
NF_F_FLOWSENSOR_FRAG_PKT_TOO_SHORT, 2
NF_F_FLOWSENSOR_FRAG_PKT_TOO_LONG, 2
```

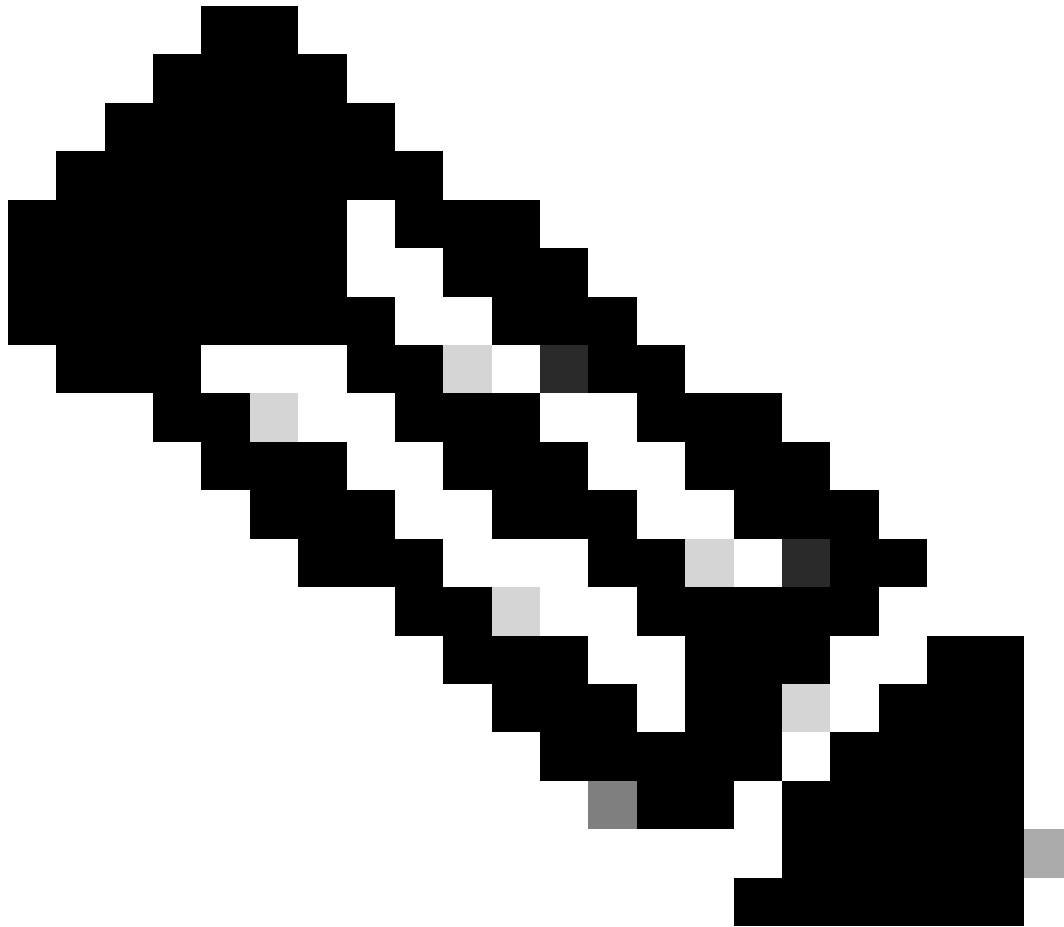
IPv4 Source Email Counts - Template 325



Note: This template is used for v9 exports of IPv4 email counts information sourced from the source IP address as detected by the Flow Sensor engine.

IPV4_SRC_EMAIL_COUNTS_TEMPLATE_ID, 8
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_FLOWSENSOR_SRC_EMAIL_IN, 4
NF_F_FLOWSENSOR_SRC_EMAIL_OUT, 4
NF_F_FLOWSENSOR_SRC_EMAIL_IN_MESS, 4
NF_F_FLOWSENSOR_SRC_EMAIL_OUT_MESS, 4
NF_F_FLOWSENSOR_SRC_EMAIL_IN_TRYS, 4
NF_F_FLOWSENSOR_SRC_EMAIL_OUT_TRYS, 4

IPv4 First Flow Response Time Monitoring - Template 326

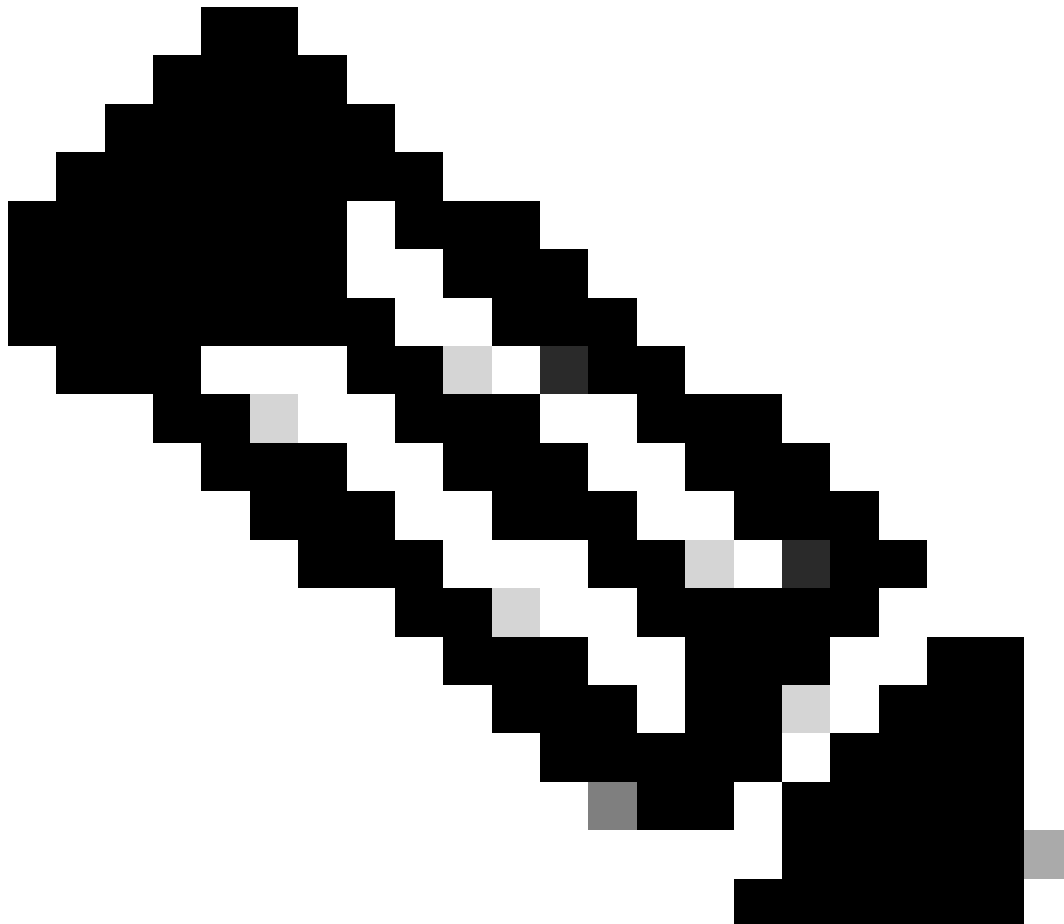


Note: This template is used for the initial v9 export of IPv4 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

```
IPV4_FIRST_FLOW_RTM_TEMPLATE_ID, 34
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
```

NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_RTT, 4
NF_F_FLOWSENSOR_SVR_RESP, 4
NF_F_FLOWSENSOR_RETRANSMITS, 2
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv4 First Flow Deep Response Time Monitoring - Template 327



Note: This template is used for the initial v9 export of IPv4 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected and RTM data has been computed.

IPV4_FIRST_FLOW_DEEP_RTM_TEMPLATE_ID, 36
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_RTT, 4
NF_F_FLOWSENSOR_SVR_RESP, 4
NF_F_FLOWSENSOR_RETRANSMITS, 2
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv4 Flow Response Time Monitoring - Template 328

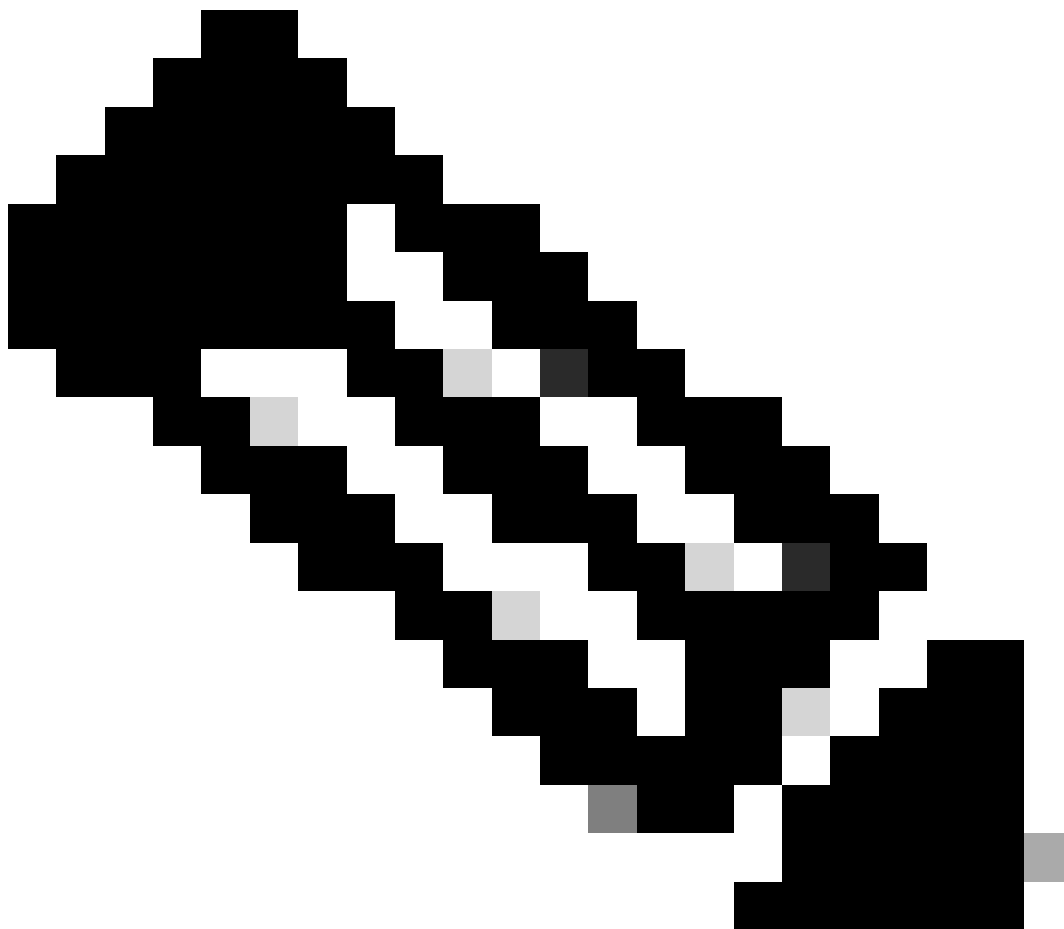


Note: This template is used for follow-on v9 exports of IPv4 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

```
IPV4_FLOW_RTM_TEMPLATE_ID, 28
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_MIN_TTL, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
```


NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_RTT, 4
NF_F_FLOWSENSOR_SVR_RESP, 4
NF_F_FLOWSENSOR_RETRANSMITS, 2
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv6 First Flow Response Time Monitoring - Template 329



Note: This template is used for the initial v9 export of IPv6 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

IPV6_FIRST_FLOW_RTM_TEMPLATE_ID, 34
NF_F_FIRST_SWITCHED, 4

NF_F_LAST_SWITCHED, 4
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_RTT, 4
NF_F_FLOWSENSOR_SVR_RESP, 4
NF_F_FLOWSENSOR_RETRANSMITS, 2
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv6 First Flow Deep Response Time Monitoring - Template 330



Note: This template is used for the initial v9 export of IPv6 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected and RTM data has been computed.

```
IPV6_FIRST_FLOW_DEEP_RTM_TEMPLATE_ID, 36
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SRC_ADDR_IPV6, 16
  NF_F_DST_ADDR_IPV6, 16
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_SRC_MAC, 6
  NF_F_OUT_DST_MAC, 6
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_SRC_VLAN, 2
  NF_F_MPLS_LABEL_1, 3
```

NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR, 1
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_RTT, 4
NF_F_FLOWSENSOR_SVR_RESP, 4
NF_F_FLOWSENSOR_RETRANSMITS, 2
NF_F_FLOWSENSOR_APPLICATION_ID, 4

IPv6 Flow Response Time Monitoring - Template 331

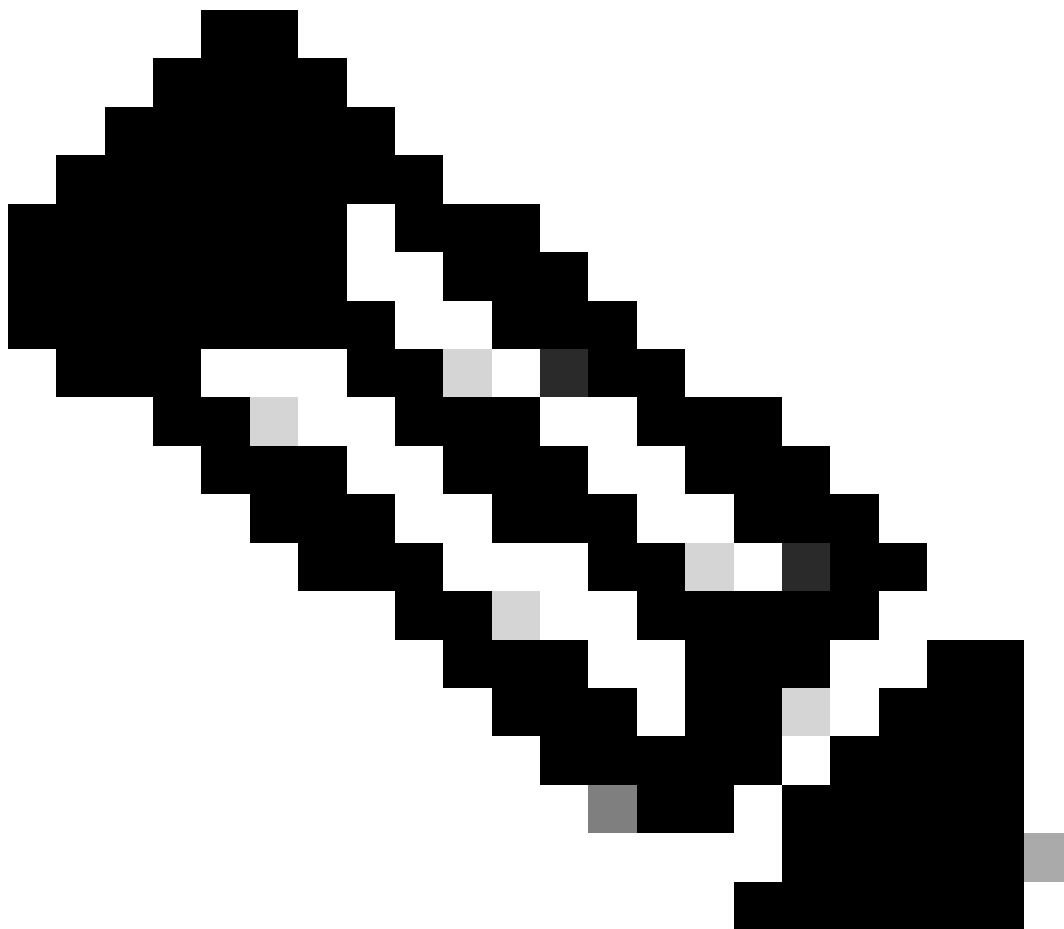


Note: This template is used for follow-on v9 exports of IPv6 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

```
IPV6_FLOW_RTM_TEMPLATE_ID, 28
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SRC_ADDR_IPV6, 16
  NF_F_DST_ADDR_IPV6, 16
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_MIN_TTL, 1
  NF_F_TCP_SYN_TOTAL_COUNT, 2
  NF_F_TCP_ACK_TOTAL_COUNT, 2
  NF_F_TCP_FIN_TOTAL_COUNT, 2
  NF_F_TCP_RST_TOTAL_COUNT, 2
```

NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TRACES, 2
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL, 1
NF_F_FLOWSENSOR_EMB_ICMP_TYPE, 1
NF_F_FLOWSENSOR_EMB_ICMP_CODE, 1
NF_F_FLOWSENSOR_RTT, 4
NF_F_FLOWSENSOR_SVR_RESP, 4
NF_F_FLOWSENSOR_RETRANSMITS, 2
NF_F_FLOWSENSOR_APPLICATION_ID, 4

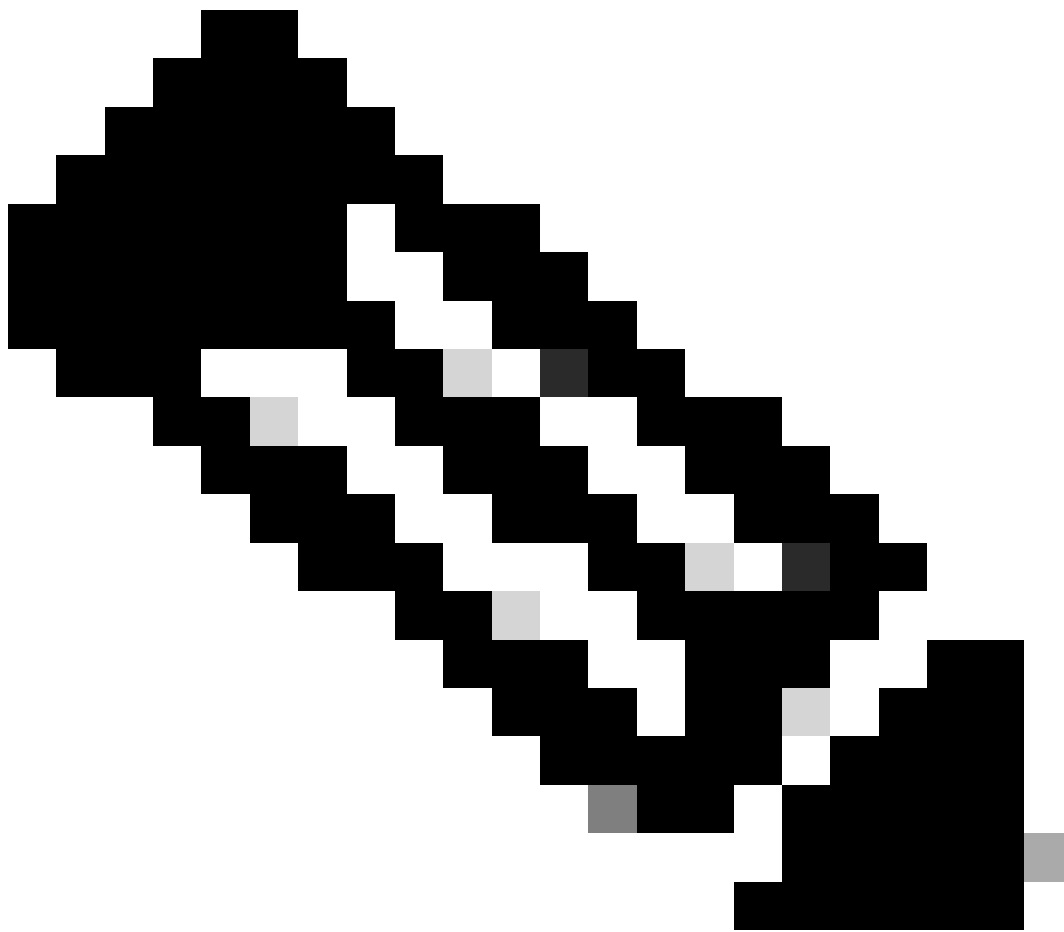
IPv4 Destination Email Counts - Template 332



Note: This template is used for v9 exports of IPv4 email counts information received by the destination IP address as detected by the Flow Sensor engine.

NF_F_DST_ADDR_IPV4, 4
NF_F_FLOWSENSOR_DST_EMAIL_IN, 4
NF_F_FLOWSENSOR_DST_EMAIL_OUT, 4
NF_F_FLOWSENSOR_DST_EMAIL_IN_MESS, 4
NF_F_FLOWSENSOR_DST_EMAIL_OUT_MESS, 4
NF_F_FLOWSENSOR_DST_EMAIL_IN_TRYS, 4
NF_F_FLOWSENSOR_DST_EMAIL_OUT_TRYS, 4

IPv6 Source Email Counts - Template 333

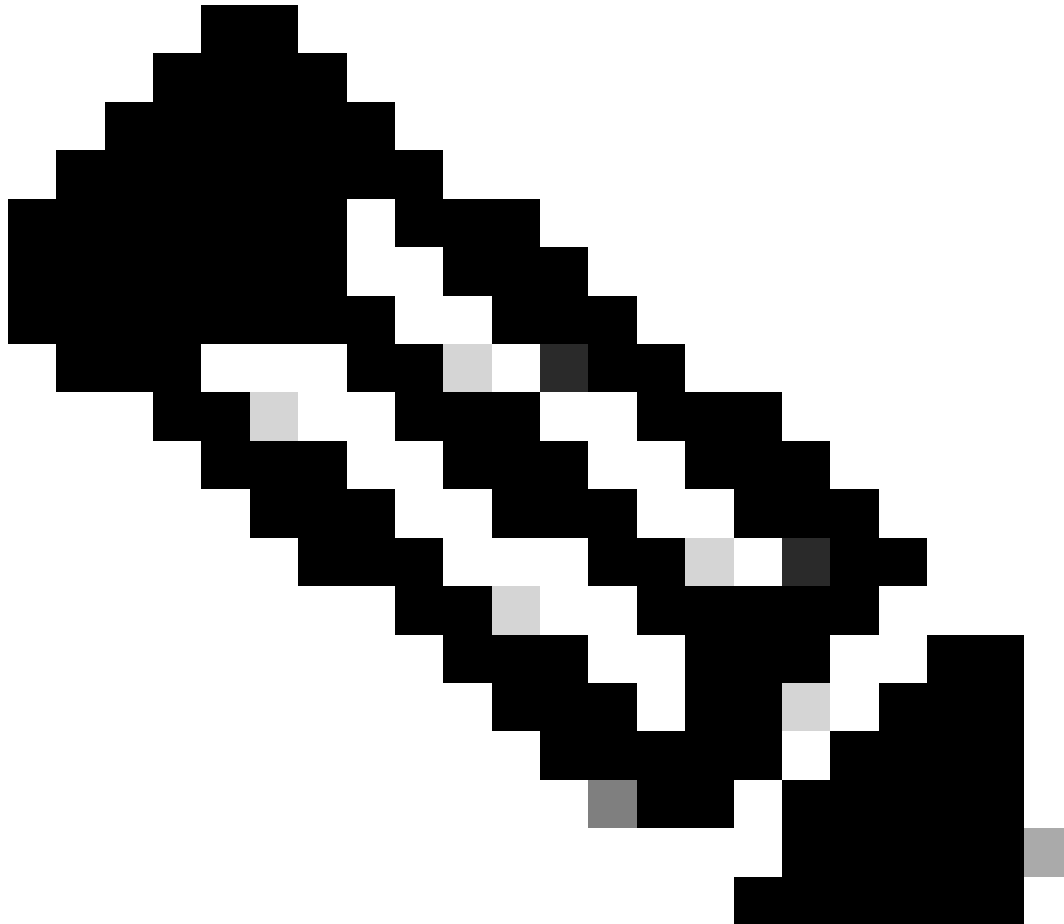


Note: This template is used for v9 exports of IPv6 email counts information sourced from the source IP address as detected by the Flow Sensor engine.

IPV6_SRC_EMAIL_COUNTS_TEMPLATE_ID, 8
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_FLOWSENSOR_SRC_EMAIL_IN, 4
NF_F_FLOWSENSOR_SRC_EMAIL_OUT, 4
NF_F_FLOWSENSOR_SRC_EMAIL_IN_MESS, 4

NF_F_FLOWSENSOR_SRC_EMAIL_OUT_MESS, 4
NF_F_FLOWSENSOR_SRC_EMAIL_IN_TRYS, 4
NF_F_FLOWSENSOR_SRC_EMAIL_OUT_TRYS, 4

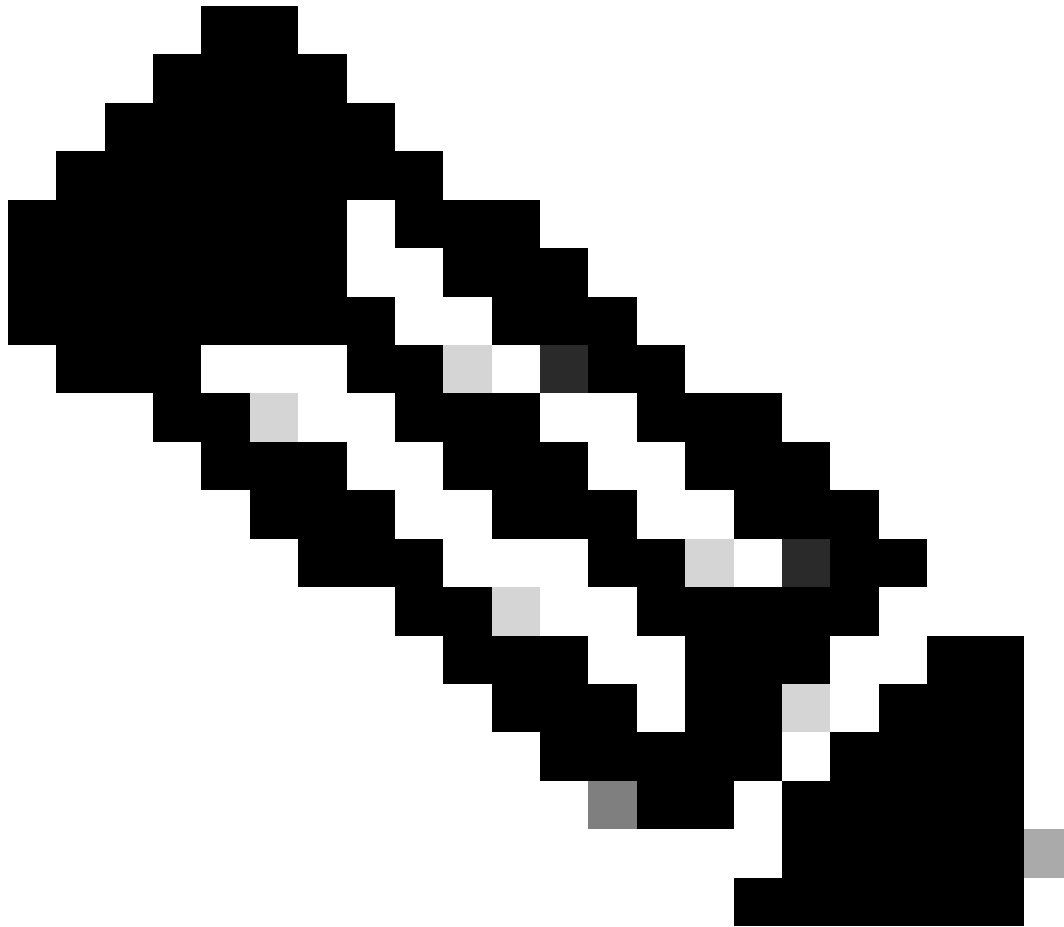
IPv6 Destination Email Counts - Template 334



Note: This template is used for v9 exports of IPv6 email counts information received by the destination IP address as detected by the Flow Sensor engine.

IPV6_DST_EMAIL_COUNTS_TEMPLATE_ID, 8
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_FLOWSENSOR_DST_EMAIL_IN, 4
NF_F_FLOWSENSOR_DST_EMAIL_OUT, 4
NF_F_FLOWSENSOR_DST_EMAIL_IN_MESS, 4
NF_F_FLOWSENSOR_DST_EMAIL_OUT_MESS, 4
NF_F_FLOWSENSOR_DST_EMAIL_IN_TRYS, 4
NF_F_FLOWSENSOR_DST_EMAIL_OUT_TRYS, 4

IPv4 First Flow IPFIX Template 335



Note: This template is used for the initial IPFIX export of IPv4 flow information from a flow slot in the Flow Sensor engine.

```
IPV4_FIRST_FLOW_IPFIX_TEMPLATE_ID, 33
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
```

NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv4 First Flow Deep IPFIX - Template 336

Note: This template is used for the initial IPFIX export of IPv4 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected.

```
IPV4_FIRST_FLOW_DEEP_IPFIX_TEMPLATE_ID, 35
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
```

NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

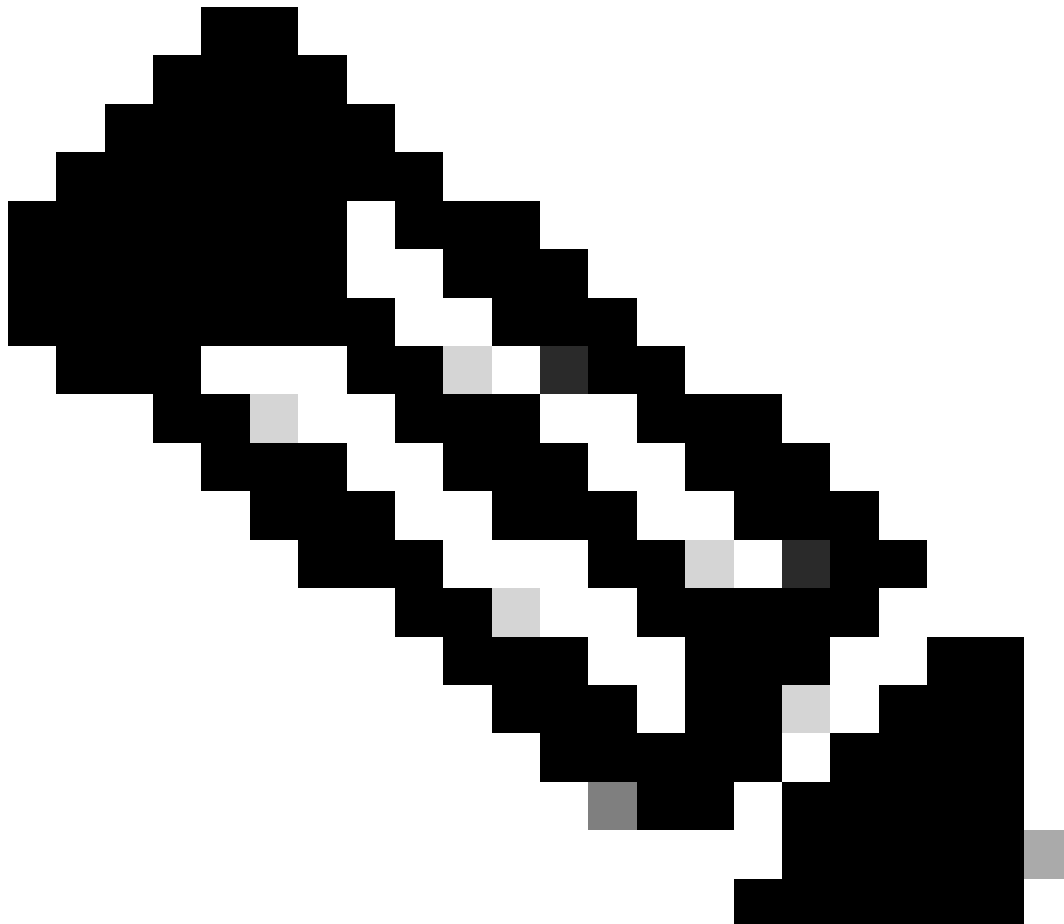
IPv4 Flow IPFIX - Template 337

Note: This template is used for follow-on IPFIX exports of IPv4 flow information from a flow slot in the Flow Sensor engine.

```
IPV4_FLOW_IPFIX_TEMPLATE_ID, 27
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
  NF_F_SRC_ADDR_IPV4, 4
  NF_F_DST_ADDR_IPV4, 4
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_MIN_TTL, 1
  NF_F_TCP_SYN_TOTAL_COUNT, 2
  NF_F_TCP_ACK_TOTAL_COUNT, 2
  NF_F_TCP_FIN_TOTAL_COUNT, 2
```

NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv4 Event IPFIX - Template 338



Note: This template is used for IPFIX exports of IPv4 bad fragment and flag combination counts detected by the Flow Sensor engine.

IPV4_EVENT_IPFIX_TEMPLATE_ID, 19
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_PROTOCOL, 1
NF_F_FLOWSENSOR_BAD_FLAG_XMAS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_SYN_FIN | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_BAD_RST | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_NO_ACK | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_URG | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_NOFLAG | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_TCP_PROBE | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_SHORT_FRAG_ATTACK | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_FRAG_PKT_TOO_SHORT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_FRAG_PKT_TOO_LONG | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_FRAG_DIFFERENT_SIZES | 0x8000, 2
0000, 8712

IPv6 First Flow IPFIX - Template 339

Note: This template is used for the initial IPFIX export of IPv6 flow information from a flow slot in the Flow Sensor engine.

```
IPV6_FIRST_FLOW_IPFIX_TEMPLATE_ID, 33
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
  NF_F_SRC_ADDR_IPV6, 16
  NF_F_DST_ADDR_IPV6, 16
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_SRC_MAC, 6
  NF_F_OUT_DST_MAC, 6
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_SRC_VLAN, 2
  NF_F_MPLS_LABEL_1, 3
```


NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv6 First Flow Deep IPFIX - Template 340

Note: This template is used for the initial IPFIX export of IPv6 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected.

```
IPV6_FIRST_FLOW_DEEP_IPFIX_TEMPLATE_ID, 35
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
  NF_F_SRC_ADDR_IPV6, 16
  NF_F_DST_ADDR_IPV6, 16
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_SRC_MAC, 6
  NF_F_OUT_DST_MAC, 6
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_SRC_VLAN, 2
  NF_F_MPLS_LABEL_1, 3
```

NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

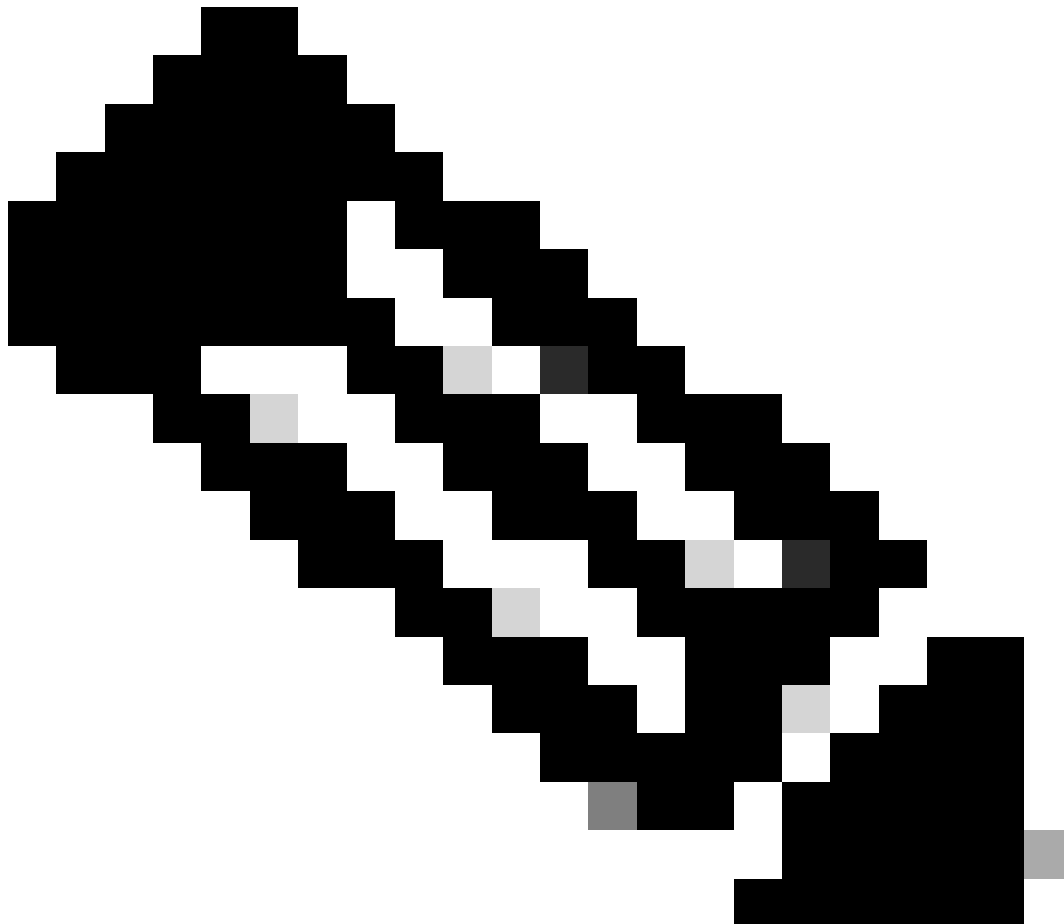
IPv6 Flow IPFIX - Template 341

Note: This template is used for follow-on IPFIX exports of IPv6 flow information from a flow slot in the Flow Sensor engine.

```
IPV6_FLOW_IPFIX_TEMPLATE_ID, 27
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
  NF_F_SRC_ADDR_IPV6, 16
  NF_F_DST_ADDR_IPV6, 16
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_MIN_TTL, 1
  NF_F_TCP_SYN_TOTAL_COUNT, 2
  NF_F_TCP_ACK_TOTAL_COUNT, 2
  NF_F_TCP_FIN_TOTAL_COUNT, 2
```

NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv6 Event IPFIX - Template 342



Note: This template is used for IPFIX exports of IPv6 bad fragment and flag combination counts detected by the Flow Sensor engine.

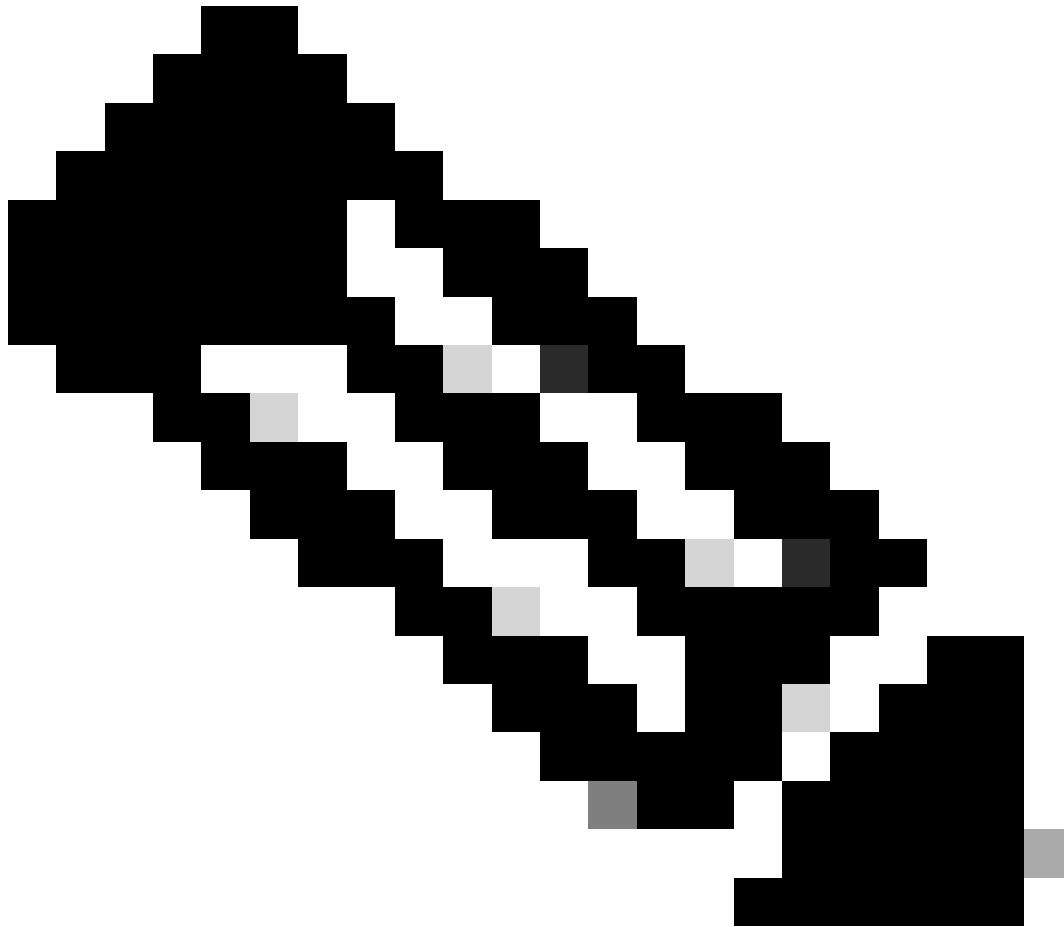
IPV6_EVENT_IPFIX_TEMPLATE_ID, 19
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_PROTOCOL, 1
NF_F_FLOWSENSOR_BAD_FLAG_XMAS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_SYN_FIN | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_BAD_RST | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_NO_ACK | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_URG | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_FLAG_NOFLAG | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_BAD_TCP_PROBE | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_SHORT_FRAG_ATTACK | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_FRAG_PKT_TOO_SHORT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_FRAG_PKT_TOO_LONG | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_FRAG_DIFFERENT_SIZES | 0x8000, 2
0000, 8712

IPv4 Source Email Counts IPFIX - Template 343

Note: This template is used for IPFIX exports of IPv4 email counts information sourced from the source IP address as detected by the Flow Sensor engine.

```
IPV4_SRC_EMAIL_COUNTS_IPFIX_TEMPLATE_ID, 8
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_FLOWSENSOR_SRC_EMAIL_IN | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_OUT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_IN_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_OUT_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_IN_TRYIS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_OUT_TRYIS | 0x8000, 4
0000, 8712
```

IPv4 First Flow Response Time Monitoring - Template 344



Note: This template is used for the initial IPFIX export of IPv4 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

```
IPV4_FIRST_FLOW_RTM_IPFIX_TEMPLATE_ID, 36
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
```


NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_RTT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SVR_RESP | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_RETRANSMITS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv4 First Flow Deep Response Time Monitoring - Template 345

Note: This template is used for the initial IPFIX export of IPv4 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected.

```
IPV4_FIRST_FLOW_DEEP_RTM_IPFIX_TEMPLATE_ID, 38
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
  NF_F_SRC_ADDR_IPV4, 4
  NF_F_DST_ADDR_IPV4, 4
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_SRC_MAC, 6
  NF_F_OUT_DST_MAC, 6
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_SRC_VLAN, 2
  NF_F_MPLS_LABEL_1, 3
```

NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_RTT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SVR_RESP | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_RETRANSMITS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv4 Flow Response Time Monitoring IPFIX - Template 346

Note: This template is used for follow-on IPFIX exports of IPv4 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

```
IPV4_FLOW_RTM_IPFIX_TEMPLATE_ID, 30
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
  NF_F_SRC_ADDR_IPV4, 4
  NF_F_DST_ADDR_IPV4, 4
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_MIN_TTL, 1
  NF_F_TCP_SYN_TOTAL_COUNT, 2
  NF_F_TCP_ACK_TOTAL_COUNT, 2
  NF_F_TCP_FIN_TOTAL_COUNT, 2
```

NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_RTT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SVR_RESP | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_RETRANSMITS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv6 First Flow Response Time Monitoring IPFIX - Template 347

Note: This template is used for the initial IPFIX export of IPv6 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

```
IPV6_FIRST_FLOW_RTM_IPFIX_TEMPLATE_ID, 36
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
```

NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_RTT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SVR_RESP | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_RETRANSMITS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv6 First Flow Deep RTM IPFIX - Template 348



Note: This template is used for the initial IPFIX export of IPv6 flow information from a flow slot in the Flow Sensor engine when the Export Packet Payload check box is selected.

```
IPV6_FIRST_FLOW_DEEP_RTM_IPFIX_TEMPLATE_ID, 38
NF_F_FIRST_SWITCHED, 4
NF_F_LAST_SWITCHED, 4
NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_L4_SRC_PORT, 2
NF_F_L4_DST_PORT, 2
NF_F_IN_SRC_MAC, 6
NF_F_OUT_DST_MAC, 6
NF_F_IN_BYTES, 4
NF_F_IN_PKTS, 4
NF_F_SRC_INTF_ID, 2
NF_F_DST_INTF_ID, 2
NF_F_PROTOCOL, 1
NF_F_TCP_FLAGS, 1
NF_F_SRC_VLAN, 2
NF_F_MPLS_LABEL_1, 3
```


NF_F_MIN_TTL, 1
NF_F_SRC_TOS, 1
NF_F_IP_SECTION_HEADER, 64
NF_F_IP_SECTION_PAYLOAD, 26
NF_F_FLOWSENSOR_INITIATOR | 0x8000, 1
0000, 8712
NF_F_TCP_SYN_TOTAL_COUNT, 2
NF_F_TCP_ACK_TOTAL_COUNT, 2
NF_F_TCP_FIN_TOTAL_COUNT, 2
NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_RTT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SVR_RESP | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_RETRANSMITS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

IPv6 Flow Response Time Monitoring - Template 349

Note: This template is used for follow-on IPFIX exports of IPv6 flow information from a flow slot in the Flow Sensor engine when RTM data has been computed.

```
IPV6_FLOW_RTM_IPFIX_TEMPLATE_ID, 30
  NF_F_FIRST_SWITCHED, 4
  NF_F_LAST_SWITCHED, 4
  NF_F_SYSTEM_INIT_TIME_MILLISECONDS, 8
  NF_F_SRC_ADDR_IPV6, 16
  NF_F_DST_ADDR_IPV6, 16
  NF_F_L4_SRC_PORT, 2
  NF_F_L4_DST_PORT, 2
  NF_F_IN_BYTES, 4
  NF_F_IN_PKTS, 4
  NF_F_SRC_INTF_ID, 2
  NF_F_DST_INTF_ID, 2
  NF_F_PROTOCOL, 1
  NF_F_TCP_FLAGS, 1
  NF_F_MIN_TTL, 1
  NF_F_TCP_SYN_TOTAL_COUNT, 2
  NF_F_TCP_ACK_TOTAL_COUNT, 2
  NF_F_TCP_FIN_TOTAL_COUNT, 2
```

NF_F_TCP_RST_TOTAL_COUNT, 2
NF_F_FLOWSENSOR_TCP_BAD_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SRS_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TCP_SYN_ACK_TOTAL_COUNT | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_TRACES | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_PROTOCOL | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_TYPE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_EMB_ICMP_CODE | 0x8000, 1
0000, 8712
NF_F_FLOWSENSOR_RTT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SVR_RESP | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_RETRANSMITS | 0x8000, 2
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_ID | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_APPLICATION_DETAILS | 0x8000, 65535
0000, 8712

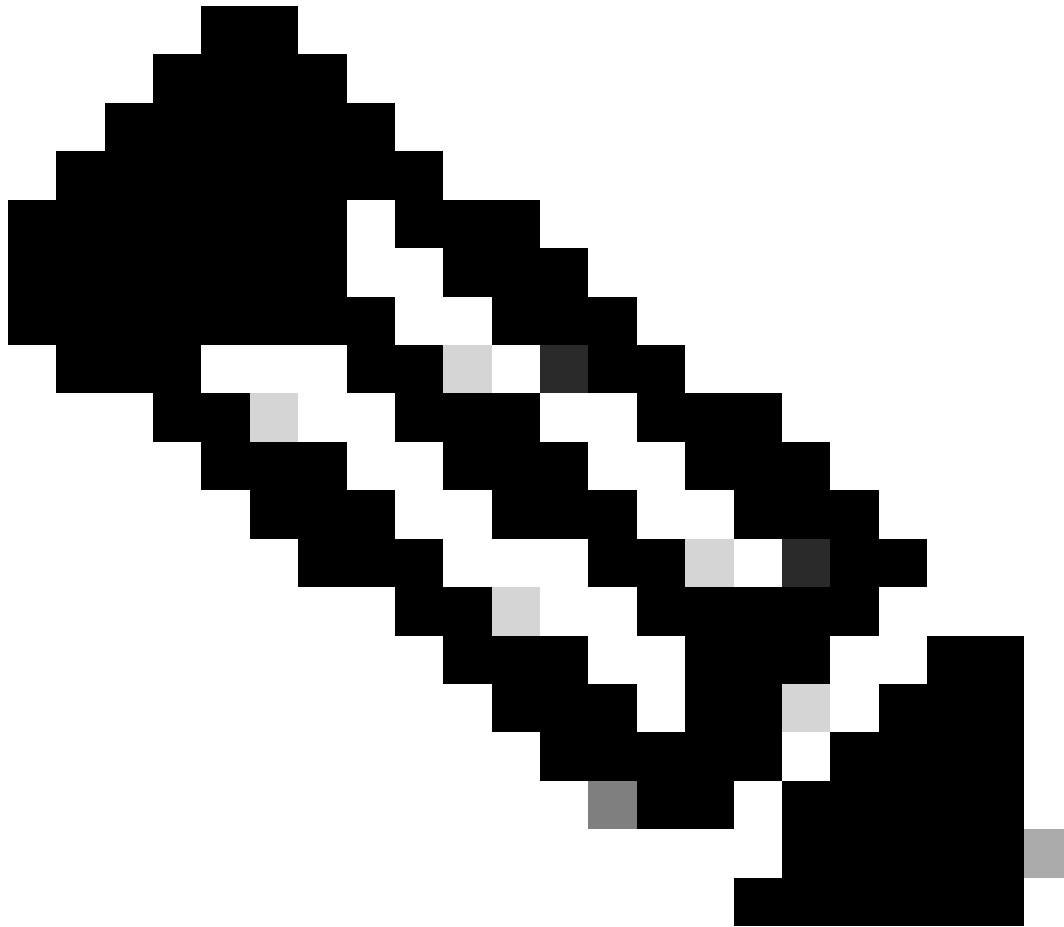
IPv4 Destination Email Counts IPFIX - Template 350



Note: This template is used for IPFIX exports of IPv4 email counts information received by the destination IP address as detected by the Flow Sensor engine.

```
IPV4_DST_EMAIL_COUNTS_IPFIX_TEMPLATE_ID, 8
NF_F_SRC_ADDR_IPV4, 4
NF_F_DST_ADDR_IPV4, 4
NF_F_FLOWSENSOR_DST_EMAIL_IN | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_OUT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_IN_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_OUT_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_IN_TRYIS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_OUT_TRYIS | 0x8000, 4
0000, 8712
```

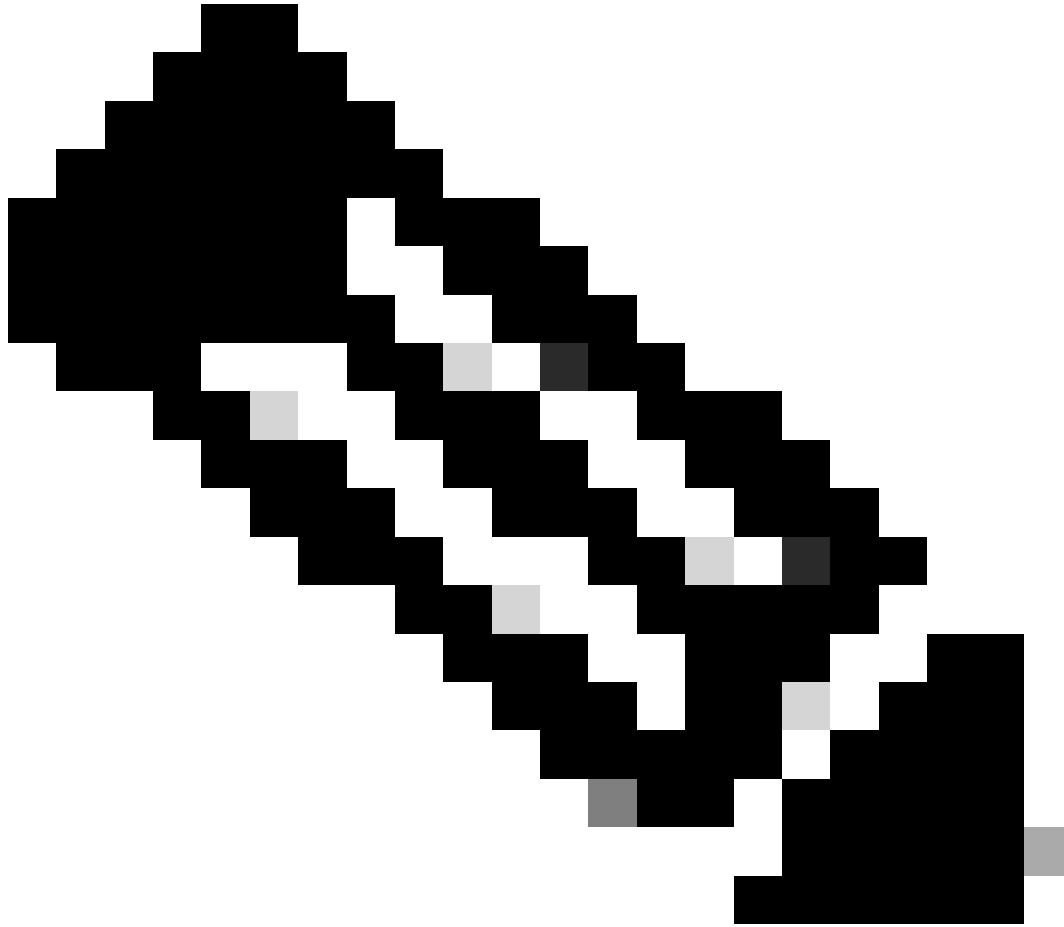
IPv6 Source Email Counts IPFIX - Template 351



Note: This template is used for IPFIX exports of IPv6 email counts information sourced from the source IP address as detected by the Flow Sensor engine.

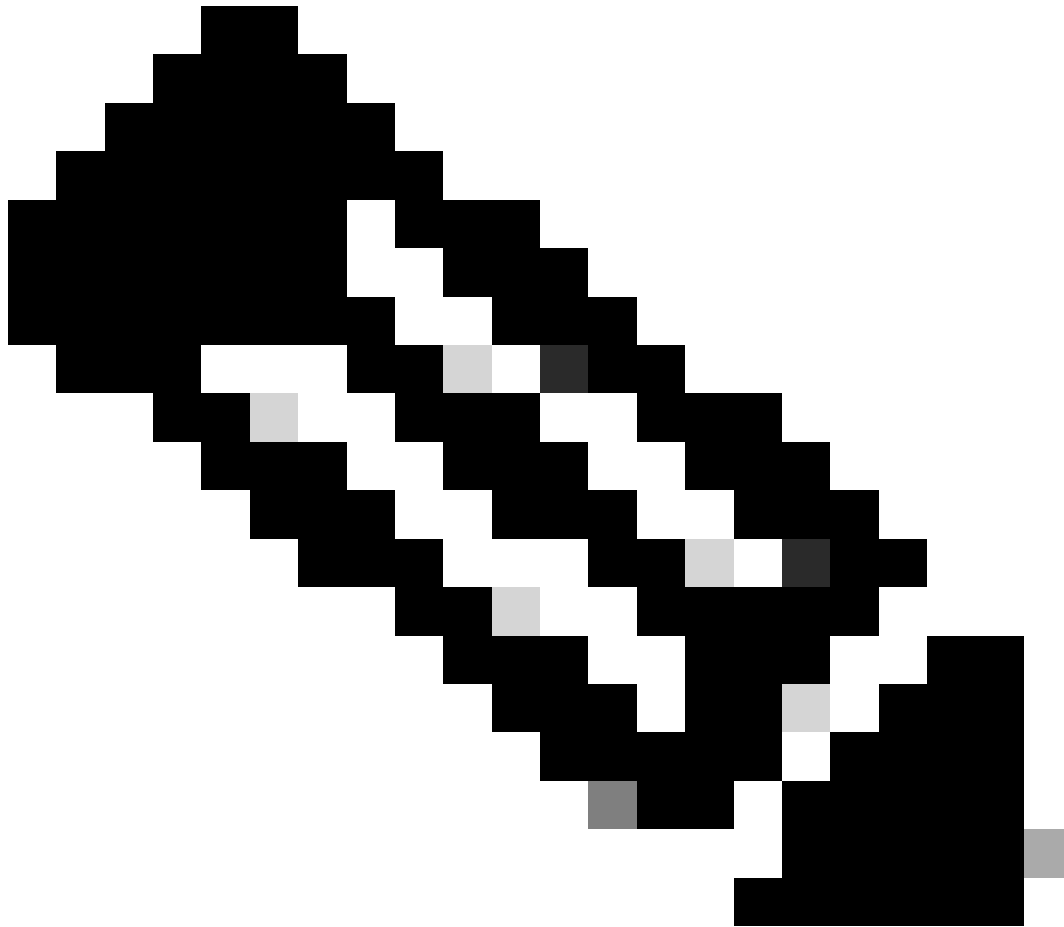
```
IPV6_SRC_EMAIL_COUNTS_IPFIX_TEMPLATE_ID, 8
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_FLOWSENSOR_SRC_EMAIL_IN | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_OUT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_IN_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_OUT_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_IN_TRYIS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_SRC_EMAIL_OUT_TRYIS | 0x8000, 4
0000, 8712
```

IPv6 Destination Email Counts IPFIX - Template 352



Note: This template is used for IPFIX exports of IPv6 email counts information received by the destination IP address as detected by the Flow Sensor engine.

```
IPV6_DST_EMAIL_COUNTS_IPFIX_TEMPLATE_ID, 8
NF_F_SRC_ADDR_IPV6, 16
NF_F_DST_ADDR_IPV6, 16
NF_F_FLOWSENSOR_DST_EMAIL_IN | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_OUT | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_IN_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_OUT_MESS | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_IN_TRYES | 0x8000, 4
0000, 8712
NF_F_FLOWSENSOR_DST_EMAIL_OUT_TRYES | 0x8000, 4
0000, 8712
```



Note: These templates are used for the sending of ETA data from the Flow Sensor. The contents of these templates was not available for the writing of this article.
