AF10G72AC

This document describes the IPFix configuration options supported by the Advanced Features units. IPFix must be implemented using CLI commands.

Connect to the Advanced Features unit:

A connection to the unit may be established using two options:

      a) Directly connected to the Console Interface - COM Port using Putty/Serial connection.
      b) Connected via the IP Management Interface using Putty/SSH connection.

Login to the Advanced Features unit, (admin/gtadmin1).

Create the Recorder

```
Switch> enable
Switch# configure terminal
Switch(config)# ipfix recorder name     (up to 32 characters)
Switch(Config-ipfix-name)# descrption   (up to 64 characters)
```

Ipv4
```
Switch(Config-ipfix-name)# match ipv4 destination address mask 1-32      (default 32)
Switch(Config-ipfix-name)# match ipv4 source address mask 1-32     (default 32)
Switch(Config-ipfix-name)# match ipv4 dscp
Switch(Config-ipfix-name)# match ipv4 enc
Switch(Config-ipfix-name)# match ipv4 ttl
```

Ipv6
```
Switch(Config-ipfix-name)# match ipv6 destination address mask 1-128      (default 128)
Switch(Config-ipfix-name)# match ipv6 source address mask 1-128     (default 128)
Switch(Config-ipfix-name)# match ipv6 flowlabel
Switch(Config-ipfix-name)# match ipv6 dscp
```

MAC
```
Switch(Config-ipfix-name)# match mac source address
Switch(Config-ipfix-name)# match mac destination address
```

Transport
```
Switch(Config-ipfix-name)# match transport source-port
Switch(Config-ipfix-name)# match transport destination-port
Switch(Config-ipfix-name)# match transport type
Switch(Config-ipfix-name)# match transport opcode
```

VLAN
```
Switch(Config-ipfix-name)# match vlan inner
```

COS
```
Switch(Config-ipfix-name)# match cos inner
```

Interface
```
Switch(Config-ipfix-name)# match interface input
Switch(Config-ipfix-name)# match interface output
```

VxLAN VNI
```
Switch(Config-ipfix-name)# match vxlan-vni
```

I2GRE Key
```
Switch(Config-ipfix-name)# match nvgre-key
```

Transport TCP Flags
```
Switch(Config-ipfix-reocrder)# match transport tcp flags value
```

Packet Drop / Non Drop
```
Switch(Config-ipfix-name)# match packet drop
Switch(Config-ipfix-name)# match packet non-drop
```

Counter
```
Switch(Config-ipfix-name)# collect counter bytes
Switch(Config-ipfix-name)# collect counter packets
```

Flow
```
Switch(Config-ipfix-name)# collect flow destination
Switch(Config-ipfix-name)# collect flow drop
Switch(Config-ipfix-name)# collect flow fragmentation
```

TTL
```
Switch(Config-ipfix-name)# collect ttl maximum
Switch(Config-ipfix-name)# collect ttl minimum
Switch(Config-ipfix-name)# collect ttl changed
```

Timestamp
```
Switch(Config-ipfix-name)# collect timestamp first
Switch(Config-ipfix-name)# collect timestamp last
```

Create the Exporter

```
Switch> enable
Switch# configure terminal
Switch(config)# ipfix exporter name      (up to 32 characters)
Switch(Config-ipfix-name)# descrption    (up to 64 characters)
```

Destination
```
Switch(Config-ipfix-name)# destination mgmt-if ipv4 x.x.x.x (collector address)
```

DSCP
```
Switch(Config-ipfix-name)# dscp value 0-63      (default 63)
```

Domain ID
```
Switch(Config-ipfix-name)# domain-id 1-65535   (no default)
```

Template Data Timeout
```
Switch(Config-ipfix-name)# template data timeout 1-86400    (default 600)
```

Flow Data Timeout
```
Switch(Config-ipfix-name)# flow data timeout 1-86400 (default 600)
```

Transport Protocol
```
Switch(Config-ipfix-name)# transport protocol udp 2000-65535       (default 2055)
```

TTL
```
Switch(Config-ipfix-name)# ttl 1-255     (default 255)
```

Event Flow
```
Switch(Config-ipfix-name)# event flow start
Switch(Config-ipfix-exporter)# event flow tcp-end
```

Flow Data Flush Threshold Length
```
Switch(Config-ipfix-name)# flow data flush threshold length 1000-60000  (default 1416)
```

Flow Data Flush Threshold Timer
```
Switch(Config-ipfix-name)# flow data flush threshold timer 100-60000      (default 500)
```

Flow Data Flush Threshold Count
```
Switch(Config-ipfix-name)# flow data flush threshold count 1-100   (default 10)
```

Create the Sampler
```
Switch> enable
Switch# configure terminal
Switch(config)# ipfix sampler name      (up to 32 characters)
Switch(Config-ipfix-name)# descrption   (up to 64 characters)
```

1 Out Of
```
Switch(Config-ipfix-name)# 1 out of 2-8191     (no default)
```

Mode
```
Switch(Config-ipfix-sampler)# mode determinate
Switch(Config-ipfix-sampler)# mode random
```

Mode Flow
```
Switch(Config-ipfix-sampler)# mode flow (default all)
Switch(Config-ipfix-sampler)# mode flow new
```

Create the Monitor

```
Switch> enable
Switch# configure terminal
Switch(config)# ipfix monitor name        (up to 32 characters)
Switch(Config-ipfix-name)# descrption    (up to 64 characters)
```

Assign Recorder
```
Switch(Config-ipfix-name)# recorder name
```

Assign Exporter
```
Switch(Config-ipfix-name)# exporter name
```

Assign IPFix Monitor
```
Switch(config)# interface eth-0-1
Switch(config-if)# ipfix monitor input monitorname sampler samplername
```

IPFix Global Options

```
Switch(config)# ipfix global
```

Flow Aging
```
Switch(config-ipfix-global)# flow aging 15-65535      (default 1800)
```

Flow Export
```
Switch(config-ipfix-global)# flow export 0-1000       (default 5)
```

IPFix Show Commands

Show IPFix Global
```
Switch> enable
Switch# show ipfix global
```

Show IPFix Recorder
```
Switch> enable
Switch# show ipfix recorder name
```

Show IPFix Exporter
```
Switch> enable
Switch# show ipfix exporter name
```

Show IPFix Cache
```
Switch> enable
Switch# show ipfix cache observe-point interface eth-0-1 input
```

Show IPFix Monitor
```
Switch> enable
Switch# show ipfix monitor name
```

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Show IPFix Sampler
```
Switch> enable
Switch# show ipfix sampler name
```

IPFix Clear Commands

Clear IPFix Cache Monitor
```
Switch> enable
Switch# clear ipfix cache monitor name
```

Clear IPFix Cache Observe-point Interface
```
Switch> enable
Switch# clear ipfix cache observe-point interface eth-0-1 input
```