

## AF40G24AC

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.

Log in 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)# description  (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-reorder)# 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)# description (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)# description (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)# description (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
```

## 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
```