Downloads
Installation
API
Contribute & source
ChirpStack Gateway Bridge
Introduction
Changelog
Configuration
Downloads
Installation
Payload formats
Events
Event types
stats - Gateway statistics
up - Received uplink frames
ack - Downlink tx acknowledgement
exec - Command execution response
raw - Raw packet-forwarder event
States
Commands
Backends
Integrations
Metrics
Contribute & source
ChirpStack Gateway OS
Introduction
Changelog
Image types
Hardware support
Downloads
Installation

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Events

Events are generated by the ChirpStack Gateway Bridge integration. Depending the `marshaler` configuration, th

- JSON: JSON based on the Protobuf Buffers JSON m
- Protobuf: Protocol Buffers binary encoding (recom

For the Protobuf message definitions, please refer to gv

Event types

stats - Gateway statistics

Defined by the `GatewayStats` Protobuf message.

JSON example:

```
{
    "gatewayId": "0016c001f153a14c",
    "time": "2022-08-03T14:37:59Z",
    "rxPacketsReceived": 1,
    "rxPacketsReceivedOk": 1,
    "txPacketsReceived": 1,
    "txPacketsEmitted": 1,
    "txPacketsPerFrequency": {
        "867300000": 1
    },
    "rxPacketsPerFrequency": {
        "867300000": 1
    },
    "txPacketsPerModulation": [{
```

Downloads
Installation
API
Contribute & source
ChirpStack Gateway Bridge
Introduction
Changelog
Configuration
Downloads
Installation
Payload formats
Events
Event types
`stats` - Gateway statistics
`up` - Received uplink frames
`ack` - Downlink tx acknowledgement
`exec` - Command execution response
`raw` - Raw packet-forwarder event
States
Commands
Backends
Integrations
Metrics
Contribute & source
ChirpStack Gateway OS
Introduction
Changelog
Image types
Hardware support
Downloads
Installation

```
        "modulation": {
            "lora": {
                "bandwidth": 125000,
                "spreadingFactor": 7,
                "codeRate": "CR_4_5",
                "polarizationInversion": true
            }
        },
        "count": 1
    }],
    "rxPacketsPerModulation": [{
        "modulation": {
            "lora": {
                "bandwidth": 125000,
                "spreadingFactor": 7,
                "codeRate": "CR_4_5"
            }
        },
        "count": 1
    }],
    "txPacketsPerStatus": {
        "OK": 1
    }
}
```

up - Received uplink frames

Defined by the `UplinkFrame` Protobuf message.

JSON example:

```
{
    "phyPayload": "gKb+agGABQABOIc6cwQ=",
    "txInfo": {
        "frequency": 867300000,
        "modulation": {
            "lora": {
                "bandwidth": 125000,
                "spreadingFactor": 7,
                "codeRate": "CR_4_5"
            }
        }
    },
    "rxInfo": {
        "gatewayId": "0016c001f153a14c",
        "uplinkId": 7895,
        "time": "2022-08-03T14:37:43.383634108Z"
        "rssi": -52,
        "snr": 13.75,
        "context": "xwx0GQ=="
```

Downloads
Installation
API
Contribute & source
ChirpStack Gateway Bridge
Introduction
Changelog
Configuration
Downloads
Installation
Payload formats
Events
Event types
`stats` - Gateway statistics
`up` - Received uplink frames
`ack` - Downlink tx acknowledgement
`exec` - Command execution response
`raw` - Raw packet-forwarder event
States
Commands
Backends
Integrations
Metrics
Contribute & source
ChirpStack Gateway OS
Introduction
Changelog
Image types
Hardware support
Downloads
Installation

```
    }
}
```

ack - Downlink tx acknowledgement

Acknowledgement (or error) after a downlink command

The index of `items` correlates to the same order of the

Defined by the `DownlinkTxAck` Protobuf message.

JSON example:

```
{
    "gatewayId": "0016c001f153a14c",
    "downlinkId": 894104280,
    "items": [{
        "status": "OK"
    }, {}]
}
```

exec - Command execution response

Defined by the `GatewayCommandExecResponse` Protobuf

JSON example:

```
{
    "gatewayID": "0016c001f153a14c",
    "execId": 529413,
    "stdout": "[BASE64 ENCODED BLOB]",
    "stderr": "[BASE64 ENCODED BLOB]",
    "error": "optional error message"
}
```

`raw` - Raw packet-forwarder event

This payload is used for raw packet-forwarder events th ChirpStack Gateway Bridge. Currently these are the:

- BasicStation Remote Command
- BaiscStation Remote Shell

Downloads
Installation
API
Contribute & source
ChirpStack Gateway Bridge
Introduction
Changelog
Configuration
Downloads
Installation
Payload formats
Events
Event types
`stats` - Gateway statistics
`up` - Received uplink frames
`ack` - Downlink tx acknowledgement
`exec` - Command execution response
`raw` - Raw packet-forwarder event
States
Commands
Backends
Integrations
Metrics
Contribute & source
ChirpStack Gateway OS
Introduction
Changelog
Image types
Hardware support
Downloads
Installation

Defined by the `RawPacketForwarderEvent` Protobuf me

JSON example:

```
{
    "gatewayID": "0016c001f153a14c",
    "payload": "[BASE64 ENCODED BLOB]"
}
```