

WildLog log file JSON format

The log file JSON format has two top level objects:

- `ioinfo`
- `state`

Each can have unlimited entries, but certain fields are required.

`ioinfo`

This object contains descriptors for each channel that is available in the log file for viewing.

As an example:

```
"ioinfo": [
  { "name": "Current 0", "type": "Monitor", "direction": "Input", "port": {} },
  { "name": "Current 1", "type": "Monitor", "direction": "Input", "port": {} }
]
```

The following fields are required:

- `name` – the name of the channel
- `type` – the type of I/O (eg, button, joystick), informational
- `direction` – can contain only either “Input” or “Output”
- `port` – informational, may be empty

`state`

The state object contains an entry for each set of I/O state values captured. Typically this would be written to the file during each iteration of the robot code main loop.

Each entry contains a timestamp, and an array of values containing the entry for each channel.

```
"state": [
{
  "timestamp": "1450745183674",
  "values": [
    { "name": "Driver button 3", "parent": "Driver button 3", "value": "false" },
    { "name": "Driver button 2", "parent": "Driver button 2", "value": "false" },
    { "name": "Driver button 4", "parent": "Driver button 4", "value": "false" },
    { "name": "Driver button 1", "parent": "Driver button 1", "value": "false" },
    { "name": "Current 3", "parent": "PDP", "value": "0.0" },
    { "name": "Current 4", "parent": "PDP", "value": "0.0" },
    { "name": "Rear left rotation", "parent": "Rear left rotation", "value": "0" },
    { "name": "Driver left X", "parent": "Driver left X", "value": "0" }
  ]
},
...
]
```

The required fields in each entry are:

- timestamp – the timestamp of the entry, as a long (milliseconds since Jan 1, 1970)
- values – the array of channel values

Each item in values has three required fields:

- name – the name of the channel (must match that in ioinfo)
- parent – the name of the channels parent/owner (reserved for future use)
- value – the current value of the channel (eg. true/false state of a button)

Example log file

```
{
  "ioinfo":[
    {"name":"Current 0","type":"Monitor","direction":"Input","port":{}},
    {"name":"Current 1","type":"Monitor","direction":"Input","port":{}},
    {"name":"Current 2","type":"Monitor","direction":"Input","port":{}},
    {"name":"Current 3","type":"Monitor","direction":"Input","port":{}},
    {"name":"Current 4","type":"Monitor","direction":"Input","port":{}},
    {"name":"Current 5","type":"Monitor","direction":"Input","port":{}},
    {"name":"Current 6","type":"Monitor","direction":"Input","port":{}},
    {"name":"Current 7","type":"Monitor","direction":"Input","port":{}},
    {"name":"Driver button 1","type":"Joystick
Button","direction":"Input","port":{"port": 0,"button": 0}},
    {"name":"Driver button 2","type":"Joystick
Button","direction":"Input","port":{"port": 0,"button": 1}},
    {"name":"Driver button 3","type":"Joystick
Button","direction":"Input","port":{"port": 0,"button": 2}}
  ],
  "state":[
    {
      "timestamp":"1450745183674",
      "values":[
        {"name":"Driver button 3","parent":"Driver button 3","value":"false"},
        {"name":"Driver button 2","parent":"Driver button 2","value":"false"},
        {"name":"Driver button 4","parent":"Driver button 4","value":"false"},
        {"name":"Driver button 1","parent":"Driver button 1","value":"false"},
        {"name":"Current 3","parent":"PDP","value":"0.0"},
        {"name":"Current 4","parent":"PDP","value":"0.0"},
        {"name":"Rear left rotation","parent":"Rear left
rotation","value":"0"},
        {"name":"Driver left X","parent":"Driver left X","value":"0"}
      ]
    },
    {
      "timestamp":"1450745183752",
      "values":[
        {"name":"Driver button 3","parent":"Driver button 3","value":"false"},
        {"name":"Driver button 2","parent":"Driver button 2","value":"false"},
        {"name":"Driver button 4","parent":"Driver button 4","value":"false"},
        {"name":"Driver button 1","parent":"Driver button 1","value":"false"},
        {"name":"Current 3","parent":"PDP","value":"0.0"},
        {"name":"Current 4","parent":"PDP","value":"0.0"},
        {"name":"Rear left rotation","parent":"Rear left
rotation","value":"0"},
        {"name":"Driver left X","parent":"Driver left X","value":"0"}
      ]
    }
  ]
}
```

```
},
{
  "timestamp":"1450745183793",
  "values":[
    {"name":"Driver button 3","parent":"Driver button 3","value":"false"},
    {"name":"Driver button 2","parent":"Driver button 2","value":"false"},
    {"name":"Driver button 4","parent":"Driver button 4","value":"false"},
    {"name":"Driver button 1","parent":"Driver button 1","value":"false"},
    {"name":"Current 3","parent":"PDP","value":"0.0"},
    {"name":"Current 4","parent":"PDP","value":"0.0"},
    {"name":"Rear left rotation","parent":"Rear left
rotation","value":"0"},
    {"name":"Driver left X","parent":"Driver left X","value":"0"}
  ]
}
]
```