

# Ethernet Switch Port Fault

Cloud Execution Environment

OPERATING INSTRUCTIONS

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# 1 Introduction

This instruction concerns alarm handling.

This document is only applicable for systems using Extreme switches configured dynamically by the Cloud Execution Environment (CEE). Refer to the [Configuration File Guide](#) for more information about CEE configuration types.

## 1.1 Alarm Description

The Ethernet Switch Port Fault alarm is issued by the Managed Object (MO) `EthernetPort` when the connectivity is lost on an Ethernet switch port in the physical switch.

The severity of the alarm is CRITICAL.

The possible alarm causes and fault locations are described in Table 1.

Table 1 Alarm Causes

| Alarm Cause             | Description                                                                       | Fault Reason                                                                                                                                                                     | Fault Location       | Impact                    |
|-------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|
| Switch port is disabled | Connectivity is lost on the specific Ethernet switch port in the physical switch. | <ul style="list-style-type: none"><li>• Cable is missing</li><li>• Cable is broken</li><li>• Switch port is disabled due to a problem in Ethernet port of compute host</li></ul> | Ethernet switch port | Connectivity remains lost |

The following is the consequence for the node if the alarm is not solved:

- The connectivity remains lost on the Ethernet switch port in the physical switch.

The alarm attributes are listed in Table 2.

Table 2 Alarm Attributes

| Attribute Name       | Attribute Value           |
|----------------------|---------------------------|
| Major Type           | 193                       |
| Minor Type           | 2031684                   |
| Managed Object Class | <code>EthernetPort</code> |



Table 2 Alarm Attributes

| Attribute Name          | Attribute Value                                                                                                                    |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Managed Object Instance | Region=<name_of_the_region>,<br>Equipment=<equipment_id>,<br>TopOfRackSwitch=<switch_id>,<br>EthernetPort=<port_id> <sup>(1)</sup> |
| Specific Problem        | Ethernet Switch Port Fault                                                                                                         |
| Event Type              | equipmentAlarm (5)                                                                                                                 |
| Probable Cause          | lanError (100523)                                                                                                                  |
| Additional Text         | Connectivity is lost on this Ethernet Switch Port in the ToR switch. <sup>(2)</sup>                                                |
| Severity                | CRITICAL (3)                                                                                                                       |

(1) See Section 2.1 on page 3 about information on port mapping.

(2) Top of Rack (ToR) stands for the physical switch.

## 1.2 Prerequisites

This section provides information on the documents, tools, and conditions that apply to the procedure.

### 1.2.1 Documents

Before starting this procedure, ensure that the following document is available:

[Summit Family Hardware Installation Guide](#), Reference [1]

### 1.2.2 Tools

No tools are required.

### 1.2.3 Conditions

No conditions.



## 2 Procedure

This section describes the procedure to follow when this alarm is received.

### 2.1 Find Correct Mapping

The `port_id` is calculated as  $((\text{slot} * 1000) + \text{switch port})$  and `slot` is always 1 in case of Extreme X670V/Extreme X770.

For VLANs, `port_id` starts from 1000001.

To find the correct mapping, do the following:

1. Log on to the switch management console.
2. Issue the below command:  
  
**debug vlan show vlans**
3. Check `vlanInstance` and `ifInstance` in the output. If they are equal to `<port_id>`, the alarm was issued about that VLAN.
4. Verify the status of the VLAN with the `vlanId` of the output.

### 2.2 Actions

Do the following:

1. Log on to the switch management console.
2. Verify the status of the port with the following command:  
  
**show port <switch\_port\_id>**
3. Inspect the port state.
4. If the port state is “D” (Disabled), issue the following command to enable the port:

**enable port <switch\_port\_id>**

If enabling the port solved the alarm, proceed to Step 6.

5. If the port state is “E” (Enabled), but the link state is “R” (ready), the following scenarios are possible:
  - No cable is connected to the switch port.
  - The cable between the switch port and the region is broken.



- The port in the POD subrack is faulty.

In these cases, resolve the issues by referring to the instructions in [Summit Family Hardware Installation Guide](#), Reference [1].

6. Confirm that the alarm has ceased.

If the alarm ceases, exit this procedure.

If the alarm remains, proceed to Step 7.

7. Collect troubleshooting data as described in the [Data Collection Guideline](#).
8. Consult the next level of maintenance support.

Further actions are outside the scope of this instruction.

9. The job is completed.





## Reference List

- [1] Summit Family Hardware Installation Guide for Switches Supported by ExtremeXOS 16 and earlier, [http://documentation.extremenetworks.com/summit\\_16/downloads/SummitFamily\\_HW\\_Install.pdf](http://documentation.extremenetworks.com/summit_16/downloads/SummitFamily_HW_Install.pdf), 121141-00