

# DNS, ASDNS Node Down IPWorks

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## OPERATING INSTRUCTIONS

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DNS, ASDNS Node Down



# 1 Introduction

This instruction concerns alarm handling.

## 1.1 Alarm Description

The alarm is issued when one of the monitored nodes is down.

The possible alarm causes and the corresponding fault reasons, fault locations and impacts are described in Table 1.

*Table 1 Alarm Causes*

Alarm Cause	Description	Fault Reason	Fault Location	Impact	Solution
A monitored node is down.	The monitored machine is shutdown.	Network connection is blocked.	Monitored node	When ASDNS service starts, the returned result for DNS query does not include the IP address of the node.	See Section 2.2 on page 3
Network Issues	ASDNS Monitor lost the network connection with the monitored node.	Network connection is blocked.	Network connection		See Section 2.3 on page 4
The monitored IP address is invalid.	The monitored node IP address does not exist.	The monitored IP address is invalid.	Configuration error		See Section 2.4 on page 4
Getting monitoring report times out.	DNS cannot receive the monitoring report from monitor after timeout.	ASDNS Monitor service is down.	ASDNS Monitor service	DNS considers all the monitored nodes are down.	See Section 2.5 on page 5

**Note:** An alarm can appear as a result of the maintenance activity.

The alarm attributes are listed and explained in Table 2.

*Table 2 Alarm Attributes*

Attribute Name	Attribute Value
Major Type	193
Minor Type	851974
Managed Object Class	ipworksDns



Attribute Name	Attribute Value
Source	ManagedElement=<Node Name>, SystemFunctions=1, Fm=1, FmAlarmModel=ipworksDns, FmAlarmType=ipworksDnsServAS DNSNodeDown, HostName=<PL hostname>,Node=<Monitored Node IP>
Specific Problem	DNS, ASDNS Node Down
Event Type	COMMUNICATIONSALARM(2)
Probable Cause	x733RemoteNodeTransmissionError(342)
Additional Text	<p>Additional Text is one of the following texts:</p> <ul style="list-style-type: none"><li>• Agent (&lt;ASDNS monitor IP&gt;) reports node (&lt;monitored node IP&gt;) down (IpworksDns &lt;hostname&gt;).</li><li>• DNS fails to receive the ASDNS monitor report for the monitored node %s within a defined time period.</li></ul>
Perceived Severity	Minor

## 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 you have read the following documents:

- *System Safety Information*
- *Personal Health and Safety Information*

### 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 Analyzing the Alarm

Do the following at the maintenance center:

1. Check machine status.
2. Solve network issues.
3. Check monitored IP address.
4. Start ASDNS service.

### 2.2 Checking Machine Status

To clear the alarm, perform the following steps:

1. Log on to an SC node (SC-1 or SC-2).

For example:

```
#ssh <Username>@<SC-1 IP Address>  
Password:<Password>
```

2. Check the status of all the neighbors on the SC node.

For example:

```
SC-1:~ # tipc-config -n  
Neighbors:  
<1.1.2>: up  
<1.1.3>: up  
<1.1.4>: up  
<1.1.5>: up  
<1.1.6>: up  
...
```



Make sure that all the neighbors are in `up` status.

3. Check whether the network communication of the monitored node is available.

For example:

```
# ssh <PL hostname>
# ping <IPv4 address> //For IPv4
# ping6 <IPv6 address> //For IPv6
```

Where:

- *<PL hostname>* represents the PL node that holds the ASDNS Monitor.
- *<IP address>* represents the IP address of the monitored node.

If no response is received, try to solve network issues (see Section 2.3 on page 4) or check the monitored node IP (see Section 2.4 on page 4).

4. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.

## 2.3 Solving Network Issues

To clear the alarm, perform the following steps:

1. Solve the networks and other related issues.
2. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.

## 2.4 Checking Monitored IP Address

To clear the alarm, perform the following steps:

1. Make sure that the monitored IP address maps to the node to be monitored.





**Note:** When this alarm is raised due to invalid IP address, the alarm cannot cease automatically. To clear the alarm manually, execute the following command:

Example:

```
SC-1:~ # ntfsend -c "193,13,6" -n "FmAlarmType=ipworksDnsServASDNSNodeDown,
FmAlarmModel=ipworksDns,Fm=1" -a "" -s
0 -p 6 -e 16385
```

Execute `ntfsend --help` to get more information about the `ntfsend`.

2. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.

## 2.5 Starting ASDNS Service

To clear the alarm, perform the following steps:

1. Check the status of ASDNS service and ASDNS Server Manager.

```
#ipw-ctr status asdns <PL hostname>
#ipw-ctr status asdnssm <PL hostname>
```

2. Start the ASDNS service and ASDNS Server Manager, if they are down.

```
#ipw-ctr start asdns <PL hostname>
#ipw-ctr start asdnssm <PL hostname>
```

3. Confirm that the alarm has ceased. If the alarm remains, consult the next level of maintenance support. Further actions are outside the scope of this instruction.