

# HX 4.0(2a) Onward DNS Monitoring and Alerting

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## Introduction

Starting in HyperFlex 4.0(2a), there is a new watchdog service that will monitor the resolveability of the ESXi and SCVM hostnames. The show dns command is used by the watchdog process to raise an alarm/event if HX cannot resolve the hostname or reach the DNS server. This document will cover the workaround for [CSCvt13947](#) - One or more DNS servers not responding on HX Connect for DNS Alert from Health Monitoring.

## Prerequisites

The prerequisite to hit this issue is Hyperflex Data Platform 4.0(2a).

## Background Information

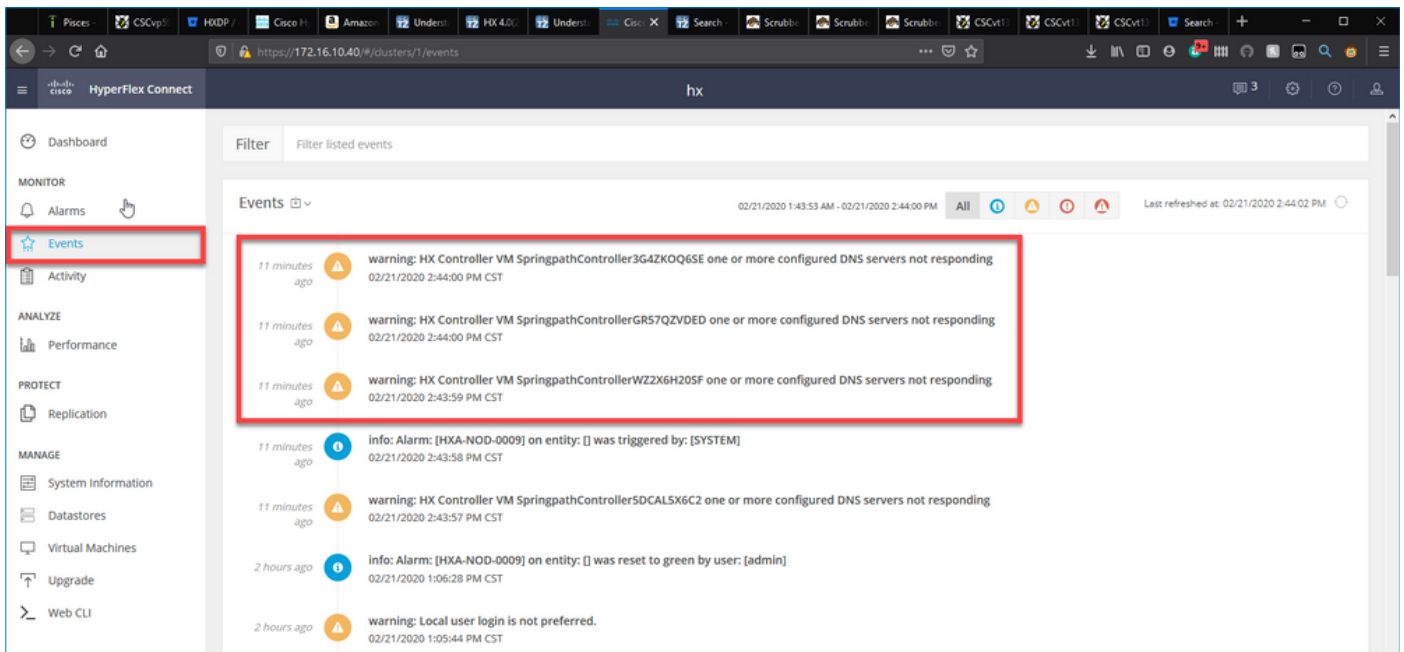
With this new framework, esxi hostname and scvm hostname must be in DNS in order to not have this event trigger.

```
{
  "message": "HX Controller VM {HOSTNAME} one or more configured DNS servers not
responding",
  "type": "NODE",
  "name": "DnsServerOfflineEvent",
  "severity": "warning"
},
```

There is an alarm around DNS as well:

```
{
  "name": "HXA-NOD-0009",
  "description": "Triggered when one or more configured DNS servers on controller VM cannot
be reached.",
  "category": "warning",
  "message": "One or more DNS servers configured on HX controller VM {HOSTNAME} not
responding",
  "triggeringEvents" : ["DnsServerOfflineEvent"],
  "resetEvents" : ["DnsServerOnlineEvent"]
}
```

Here is an example for the faults you will see in HX Connect:



Here is the corresponding show dns output:

```

root@SpringpathController3G4ZKOQ6SE:~# show dns
+-----+-----+-----+-----+
| DNS Name | Resolved Address | status | error |
+-----+-----+-----+-----+
| HX01.rchs.local | None | Not Resolved | No DNS servers |
configured |
| HX04.rchs.local | None | Not Resolved | No DNS servers |
configured |
| HX03.rchs.local | None | Not Resolved | No DNS servers |
configured |
| HX02.rchs.local | None | Not Resolved | No DNS servers |
configured |
| SpringpathController3G4ZKOQ6SE.rchs.local | None | Not Resolved | No DNS servers |
configured |
| SpringpathController5DCAL5X6C2.rchs.local | None | Not Resolved | No DNS servers |
configured |
| SpringpathControllerWZZX6H20SF.rchs.local | None | Not Resolved | No DNS servers |
configured |
| SpringpathControllerGR57QZVDED.rchs.local | None | Not Resolved | No DNS servers |
configured |
+-----+-----+-----+-----+
Name Servers: ['172.16.199.101'], Search Domains: - rchs.local

```

As you can see, the status for each is Not Resolved and the error is that No DNS servers configured. The DNS server in this output is 172.16.199.101.

If we perform a nslookup, we see that the hostname, SpringpathController3G4ZKOQ6SE, does not resolve.

```

root@SpringpathController5DCAL5X6C2:~# nslookup SpringpathController3G4ZKOQ6SE
Server:          172.16.199.101
Address:         172.16.199.101#53

```

\*\* server can't find SpringpathController3G4ZKOQ6SE: SERVFAIL

Once the hostnames in the show dns command are added to DNS, show DNS will show the resolved address and the status will be Resolved:

```
root@SpringpathController3G4ZKOQ6SE:~# show dns
+-----+-----+-----+-----+
| DNS Name | Resolved Address | status | error |
+-----+-----+-----+-----+
| HX01.rchs.local | 172.16.10.45 | Resolved | - |
| HX04.rchs.local | 172.16.10.48 | Resolved | - |
| HX03.rchs.local | 172.16.10.47 | Resolved | - |
| HX02.rchs.local | 172.16.10.46 | Resolved | - |
| SpringpathController3G4ZKOQ6SE.rchs.local | 172.16.10.41 | Resolved | - |
| SpringpathController5DCAL5X6C2.rchs.local | 172.16.10.44 | Resolved | - |
| SpringpathControllerWZ2X6H20SF.rchs.local | 172.16.10.43 | Resolved | - |
| SpringpathControllerGR57QZVDED.rchs.local | 172.16.10.42 | Resolved | - |
+-----+-----+-----+-----+
Name Servers: ['172.16.199.101'], Search Domains: - rchs.local
```

## Workaround

The workaround is to disable the monitoring feature using the commands below.

```
root@hx-02-scvms-01:~# grep -i "monitor_dns_servers" /opt/springpath/hx-diag-
tools/watchdog_config.json && sed -ie 's/"monitor_dns_servers": true/"monitor_dns_servers":
false/' /opt/springpath/hx-diag-tools/watchdog_config.json && grep -i "monitor_dns_servers"
/opt/springpath/hx-diag-tools/watchdog_config.json && restart watchdog
    "monitor_dns_servers": true,
    "monitor_dns_servers": false,
watchdog start/running, process 6350
root@hx-02-scvms-01:~#
```

This command will set "**monitor\_dns\_servers**" to false in **/opt/springpath/hx-diag-tools/watchdog\_config.json** and restart the watchdog service.

To revert the change, run the following command on each storage controller VM:

```
root@hx-02-scvms-01:~# grep -i "monitor_dns_servers" /opt/springpath/hx-diag-
tools/watchdog_config.json && sed -ie 's/"monitor_dns_servers": false/"monitor_dns_servers":
true/' /opt/springpath/hx-diag-tools/watchdog_config.json && grep -i "monitor_dns_servers"
/opt/springpath/hx-diag-tools/watchdog_config.json && restart watchdog
    "monitor_dns_servers": false,
    "monitor_dns_servers": true,
watchdog start/running, process 9473
root@hx-02-scvms-01:~#
```

In Hyperflex 4.0(2b), the feature will be disabled by default. The recommendation is for it to remain disabled until further notice.