

Hyperflex 자동 지원 구성

목차

[소개](#)

[사전 요구 사항](#)

[요구 사항](#)

[사용되는 구성 요소](#)

[구성](#)

[HX Connect UI를 통해 구성](#)

[CLI를 통해 구성](#)

[다음을 확인합니다.](#)

[문제 해결](#)

소개

이 문서에서는 Cisco Hyperflex 시스템을 위한 자동 지원 및 Smart Call Home에 대해 설명합니다.

문서화된 이벤트와 관련된 자동 이메일 알림을 전송하도록 HX 스토리지 클러스터를 구성할 수 있습니다. 알림에서 수집된 데이터를 사용하여 HX 스토리지 클러스터의 문제를 해결할 수 있습니다.

사전 요구 사항

요구 사항

다음 주제에 대한 지식을 보유하고 있으면 유용합니다.

- HXDP 클러스터
- SMTP 서버
- HX 연결

사용되는 구성 요소

이 문서의 정보는 다음 소프트웨어 및 하드웨어 버전을 기반으로 합니다.

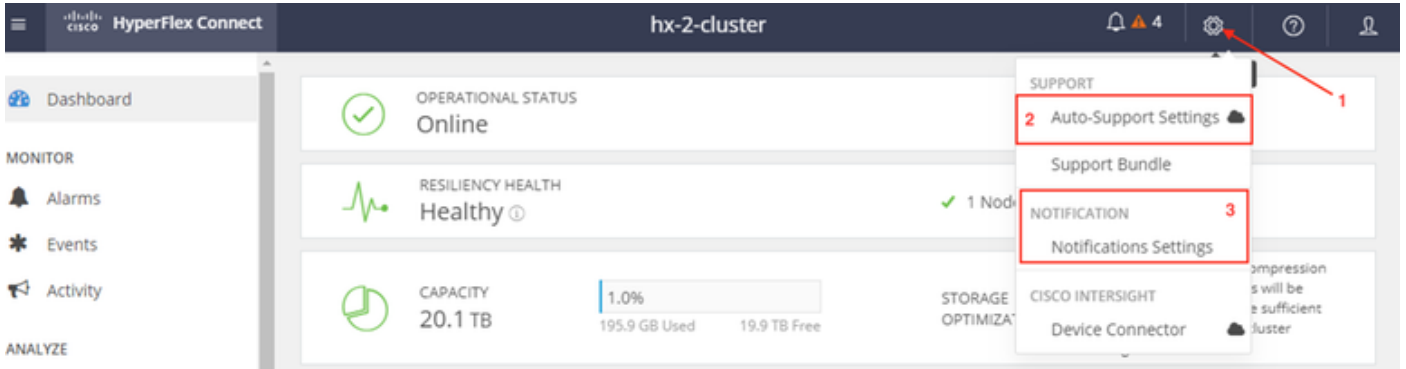
- HX Cluster 버전 3.0(1c)
- SMTP 이메일 서버 DNS

이 문서의 정보는 특정 랩 환경의 디바이스를 토대로 작성되었습니다. 이 문서에 사용된 모든 디바이스는 초기화된(기본) 컨피그레이션으로 시작되었습니다. 네트워크가 작동 중인 경우 모든 명령의 잠재적인 영향을 이해해야 합니다.

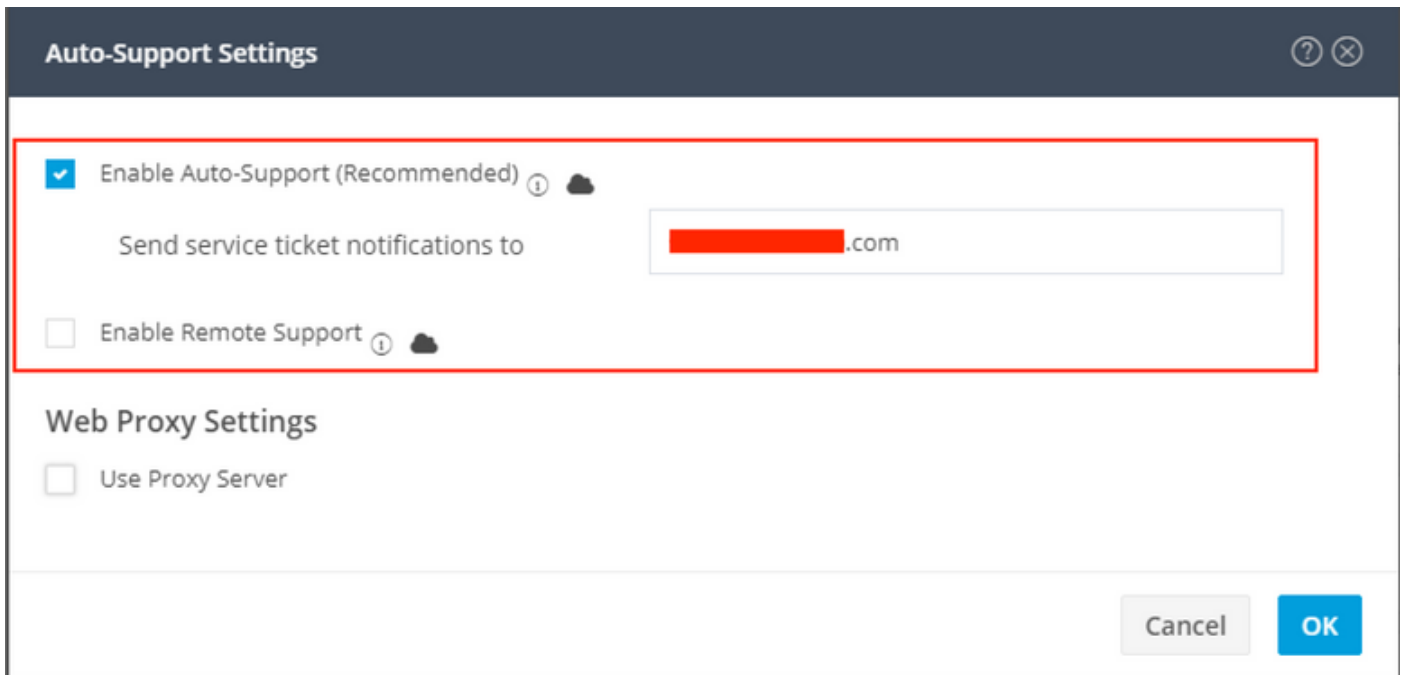
구성

HX Connect UI를 통해 구성

1단계. HX 연결에 로그인합니다.Edit settings(설정 편집)(기어 아이콘)를 클릭하고 이미지에 표시된 대로 Auto Support Settings(자동 지원 설정)를 선택합니다.



2단계. Auto Support Setting(자동 지원 설정)을 클릭하고 매개변수를 구성합니다.



참고:Enable Remote Support(원격 지원 활성화) - Support(지원)를 통해 HX 스토리지 클러스터에 대한 액세스를 활성화하여 클러스터 작업에 대한 정보를 수집하여 보고된 이상 징후의 문제 해결을 가속화합니다.

3단계. 배너에서 설정 편집(기어 모양 아이콘)을 클릭한 다음 알림 설정을 확인합니다.

Send email notifications for alarms

Mail Server Address

[REDACTED].com

From Address

HX-[REDACTED].com

Recipient List (Comma separated)

[REDACTED]@cisco.com

Cancel

OK

CLI를 통해 구성

1단계. ASUP 알림을 활성화합니다.

```
# stcli 서비스 asup 활성화
```

2단계. SMTP 메일 서버를 구성합니다.

```
# stcli 서비스 smtp set --smtp mailhost.eng.mycompany.com --froaddress
smtpnotice@mycompany.com
```

3단계. 수신자 이메일 주소를 추가합니다.

```
# stcli 서비스 assign recipients add - recipients user1@mycompany.com user2@mycompany.com
```

```
root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# stcli services asup enable
root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# stcli services smtp set --smtp [REDACTED]co.com --fromaddress HX-[REDACTED]co.com
root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# stcli services asup recipients add --recipients [REDACTED]@cisco.com [REDACTED]@cisco.com
root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# stcli cluster version
Cluster version: 3.0(1c)
Node hx-2-esxi-03 version: 3.0(1c)
Node hx-2-esxi-04 version: 3.0(1c)
Node hx-2-esxi-01 version: 3.0(1c)
Node hx-2-esxi-02 version: 3.0(1c)
root@SpringpathController7HNFK1BYQ4:~# █
```

다음을 확인합니다.

1단계. SCVM 클러스터 IP에 로그인하고 CLI에서 이 명령을 실행합니다.

```

root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# stcli services asup show
recipientList:
  [redacted].com
enabled: True
root@SpringpathController7HNFK1BYQ4:~# stcli services smtp show
smtpServer: [redacted].com
fromAddress: HX-[redacted].com
root@SpringpathController7HNFK1BYQ4:~# █

```

2단계. SCVM에서 `sendasup -t` 명령을 실행하고 ASUP 이메일에 대한 "실패 메시지"가 표시되지 않는지 확인합니다.

```

root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# sendasup -t
***** asup created, now consolidate and email: Args = -t
sendasup email_asup: arg from parent script:
Cluster-Name: hx-2-cluster
Cluster-Version: 3.0.1c-29681
Email - PrepareSubject command option : -t
Process command option : t
Subject with event type: HX Cluster: hx-2-cluster | test
ASUP_email_asup: non-Ping scenario
non-ping scenario - event without attachment target: default
SendMailWork---Arg-1 : /var/support/asup/email/cluster_body_1202d0099f0fb5a2:6a418293d93d8293..txt Arg-2 : [redacted]@cisco
.com [redacted]@cisco.com [redacted]@springpathinc.com Arg-3 :
Sending email for PING scenario: HX Cluster: hx-2-cluster | test | Version: 3.0.1c-29681 | ID: 1202d0099f0fb5a2:6a418293d9
3d8293 Content-Type=text/plain
Delete email tmp files
root@SpringpathController7HNFK1BYQ4:~# █

```

3단계. 클러스터 상태에 대한 정보가 포함된 ASUP 테스트 이메일이 포함된 이메일을 수신하는지 확인하고 확인합니다.



HX-2-Cluster [redacted]

Thursday, October 4, 2018 at 4:19 PM

To: Atul Khanna [redacted]; autosupport@springpathinc.com; Avinash Shukla [redacted]

Content-Type=text/plain
User-Agent: s-nail v14.8.6

```
address: [redacted]
name: hx-2-cluster
state: online
uptime: 30 days 5 hours 48 minutes 16 seconds
activeNodes: 4 of 4
compressionSavings: 0.0%
deduplicationSavings: 0.0%
freeCapacity: 19.9T
healingInfo:
  inProgress: False
resiliencyDetails:
  current ensemble size:4
  # of caching failures before cluster shuts down:3
  minimum cache copies remaining:3
  minimum data copies available for some user data:3
  minimum metadata copies available for cluster metadata:3
  # of unavailable nodes:0
  # of nodes failure tolerable for cluster to be available:1
  health state reason:storage cluster is healthy.
  # of node failures before cluster shuts down:3
  # of node failures before cluster goes into readonly:3
  # of persistent devices failures tolerable for cluster to be available:2
  # of node failures before cluster goes to enospace warn trying to move the existing data:na
  # of persistent devices failures before cluster shuts down:3
  # of persistent devices failures before cluster goes into readonly:3
  # of caching failures before cluster goes into readonly:na
  # of caching devices failures tolerable for cluster to be available:2
resiliencyInfo:
  messages:
    Storage cluster is healthy.
  state: 1
  nodeFailuresTolerable: 1
  cachingDeviceFailuresTolerable: 2
  persistentDeviceFailuresTolerable: 2
  zoneResInfoList: None
spaceStatus: normal
totalCapacity: 20.1T
totalSavings: 0.0%
usedCapacity: 195.9G
clusterAccessPolicy: lenient
dataReplicationCompliance: compliant
dataReplicationFactor: 3
```

문제 해결

1단계. asup.cfg 파일에서 컨피그레이션을 확인합니다.샘플 파일입니다.

```
root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# cd /opt/springpath/storfs-asup/
root@SpringpathController7HNFK1BYQ4:/opt/springpath/storfs-asup# cat asup.cfg
#
# asup.cfg
#
STORFS_ASUP_VERSION=0.1
STORFS_ASUP=/opt/springpath/storfs-asup
STORFS_ASUP_COMMANDFILE=${STORFS_ASUP}/asup.commands
ASUP_RECIPIENTS=autosupport@springpathinc.com
root@SpringpathController7HNFK1BYQ4:/opt/springpath/storfs-asup# █
```

2단계. 테스트 이메일이 수신되지 않거나 테스트 수행 시 오류가 발생하면 tcpdump를 동시에 수행 하여 실패하는 이유를 확인합니다.

예 tcpdump - SMTP 포트 번호는 25이므로 #tcpdump -v "port 25"를 실행합니다.

```
root@SpringpathController7HNFK1BYQ4:~#
root@SpringpathController7HNFK1BYQ4:~# tcpdump -v "port 25"
tcpdump: listening on eth0, link-type EN10MB (Ethernet), capture size 262144 bytes
23:39:43.919480 IP (tos 0x0, ttl 64, id 14932, offset 0, flags [DF], proto TCP (6), length 60)
```

작동 중인 SMTP tcp 연결의 샘플 이메일 출력.

```
root@SpringpathController:~# tcpdump -v "port 25"
```

```
tcpdump: listening on eth0, link-type EN10MB (Ethernet), capture size 262144 bytes
23:19:29.675676 IP (tos 0x0, ttl 64, id 32615, offset 0, flags [DF], proto TCP (6), length 60)
SpringpathController.43728 > smtp: Flags [S], cksum 0x0eb4 (correct -> 0x30d2), seq 1145499023,
win 29200, options [mss 1460,sackOK,TS val 653300456 ecr 0,nop,wscale 7], length 0
23:19:29.718179 IP (tos 0x0, ttl 50, id 0, offset 0, flags [DF], proto TCP (6), length 60) smtp
> SpringpathController.43728: Flags [S.], cksum 0x7b29 (correct), seq 3464669186, ack
1145499024, win 28960, options [mss 1460,sackOK,TS val 3313859196 ecr 653300456,nop,wscale 7],
length 0 23:19:29.718196 IP (tos 0x0, ttl 64, id 32616, offset 0, flags [DF], proto TCP (6),
length 52) SpringpathController.43728 > smtp: Flags [.], cksum 0x0eac (correct -> 0x1a26), ack
1, win 229, options [nop,nop,TS val 653300467 ecr 3313859196], length 0 23:19:29.766871 IP (tos
0x0, ttl 50, id 53925, offset 0, flags [DF], proto TCP (6), length 142) smtp >
SpringpathController.43728: Flags [P.], cksum 0xeaal (correct), seq 1:91, ack 1, win 227,
options [nop,nop,TS val 3313859245 ecr 653300467], length 90: SMTP, length: 90 220 cisco.com
ESMTP Sendmail 8.15.2/8.15.2; Thu, 4 Oct 2018 23:19:29 GMT 23:19:29.766963 IP (tos 0x0, ttl 64,
id 32617, offset 0, flags [DF], proto TCP (6), length 52) SpringpathController.43728 > smtp:
Flags [.], cksum 0x0eac (correct -> 0x198f), ack 91, win 229, options [nop,nop,TS val 653300479
ecr 3313859245], length 0 23:19:29.767007 IP (tos 0x0, ttl 64, id 32618, offset 0, flags [DF],
proto TCP (6), length 68) SpringpathController.43728 > smtp: Flags [P.], cksum 0x0ebc (correct -
> 0xad5), seq 1:17, ack 91, win 229, options [nop,nop,TS val 653300479 ecr 3313859245], length
16: SMTP, length: 16 EHLO localhost 23:19:29.809718 IP (tos 0x0, ttl 50, id 53926, offset 0,
flags [DF], proto TCP (6), length 52) smtp > SpringpathController.43728: Flags [.], cksum 0x1957
(correct), ack 17, win 227, options [nop,nop,TS val 3313859287 ecr 653300479], length 0
23:19:29.809843 IP (tos 0x0, ttl 50, id 53927, offset 0, flags [DF], proto TCP (6), length 278)
smtp > SpringpathController.43728: Flags [P.], cksum 0xf21f (correct), seq 91:317, ack 17, win
227, options [nop,nop,TS val 3313859287 ecr 653300479], length 226: SMTP, length: 226 250-
smtp.cisco.com Hello [172.16.67.141], pleased to meet you 250-ENHANCEDSTATUSCODES 250-PIPELINING
250-EXPN 250-VERB 250-8BITMIME 250-SIZE 33554432 250-DSN 250-ETRN 250-STARTTLS 250-DELIVERBY 250
HELP 23:19:29.809907 IP (tos 0x0, ttl 64, id 32619, offset 0, flags [DF], proto TCP (6), length
88) SpringpathController.43728 > smtp: Flags [P.], cksum 0x0ed0 (correct -> 0x37fb), seq 17:53,
ack 317, win 237, options [nop,nop,TS val 653300490 ecr 3313859287], length 36: SMTP, length: 36
MAIL FROM:<HX-Cluster@cisco.com> 23:19:29.891867 IP (tos 0x0, ttl 50, id 53928, offset 0, flags
[DF], proto TCP (6), length 52) smtp > SpringpathController.43728: Flags [.], cksum 0x17f3
(correct), ack 53, win 227, options [nop,nop,TS val 3313859370 ecr 653300490], length 0
23:19:29.891885 IP (tos 0x0, ttl 64, id 32620, offset 0, flags [DF], proto TCP (6), length 159)
SpringpathController.43728 > smtp: Flags [P.], cksum 0x0f17 (correct -> 0x6d30), seq 53:160, ack
317, win 237, options [nop,nop,TS val 653300510 ecr 3313859370], length 107: SMTP, length: 107
RCPT TO:<email@cisco.com> RCPT TO:<autosupport@springpathinc.com> RCPT TO:<email2@cisco.com>
DATA 23:19:29.926710 IP (tos 0x0, ttl 50, id 53929, offset 0, flags [DF], proto TCP (6), length
101) smtp > SpringpathController.43728: Flags [P.], cksum 0x8bed (correct), seq 317:366, ack 53,
win 227, options [nop,nop,TS val 3313859404 ecr 653300490], length 49: SMTP, length: 49 250
2.1.0 <HX-Cluster@cisco.com>... Sender ok 23:19:29.934244 IP (tos 0x0, ttl 50, id 53930, offset
0, flags [DF], proto TCP (6), length 52) smtp > SpringpathController.43728: Flags [.], cksum
0x1719 (correct), ack 160, win 227, options [nop,nop,TS val 3313859412 ecr 653300510], length 0
23:19:29.965252 IP (tos 0x0, ttl 64, id 32621, offset 0, flags [DF], proto TCP (6), length 52)
SpringpathController.43728 > smtp: Flags [.], cksum 0x0eac (correct -> 0x1704), ack 366, win
237, options [nop,nop,TS val 653300529 ecr 3313859404], length 0 23:19:30.007490 IP (tos 0x0,
ttl 50, id 53931, offset 0, flags [DF], proto TCP (6), length 257) smtp >
SpringpathController.43728: Flags [P.], cksum 0x85af (correct), seq 366:571, ack 160, win 227,
options [nop,nop,TS val 3313859485 ecr 653300529], length 205: SMTP, length: 205 250 2.1.5
<email@cisco.com>... Recipient ok 250 2.1.5 <autosupport@springpathinc.com>... Recipient ok 250
2.1.5 <email2@cisco.com>... Recipient ok 354 Enter mail, end with "." on a line by itself
23:19:30.007516 IP (tos 0x0, ttl 64, id 32622, offset 0, flags [DF], proto TCP (6), length 52)
SpringpathController.43728 > smtp: Flags [.], cksum 0x0eac (incorrect -> 0x15d4), ack 571, win
245, options [nop,nop,TS val 653300539 ecr 3313859485], length 0 23:19:30.007541 IP (tos 0x0,
ttl 64, id 32623, offset 0, flags [DF], proto TCP (6), length 82) SpringpathController.43728 >
smtp: Flags [P.], cksum 0x0eca (incorrect -> 0x8563), seq 160:190, ack 571, win 245, options
[nop,nop,TS val 653300539 ecr 3313859485], length 30: SMTP, length: 30 From: HX-
Cluster@cisco.com 23:19:30.007591 IP (tos 0x0, ttl 64, id 32624, offset 0, flags [DF], proto TCP
(6), length 1500) SpringpathController.43728 > smtp: Flags [.], cksum 0x1454 (incorrect ->
0xc6bf), seq 190:1638, ack 571, win 245, options [nop,nop,TS val 653300539 ecr 3313859485],
```

length 1448: SMTP, length: 1448 Date: Thu, 04 Oct 2018 23:19:29 +0000 To: user1@cisco.com, autosupport@springpathinc.com, user2@cisco.com Subject: HX Cluster: hx-cluster | test | Version: 3.0.1c-29681 | ID: 1202d0099f0fb5a2:6a418293d93d8293 Content-Type=text/plain User-Agent: s-nail v14.8.6 address: X.X.X.X name: hx-cluster state: online uptime: 30 days 5 hours 48 minutes 16 seconds activeNodes: 4 of 4 compressionSavings: 0.0% deduplicationSavings: 0.0% freeCapacity: 19.9T .. <EMAIL Output Truncate > 23:19:30.050129 IP (tos 0x0, ttl 50, id 53933, offset 0, flags [DF], proto TCP (6), length 52) smtp > SpringpathController.43728: Flags [.] , cksum 0x0fdf (correct), ack 1638, win 249, options [nop,nop,TS val 3313859528 ecr 653300539], length 0 23:19:30.092223 IP (tos 0x0, ttl 50, id 53934, offset 0, flags [DF], proto TCP (6), length 52) smtp > SpringpathController.43728: Flags [.] , cksum 0x0dfe (correct), ack 2043, win 272, options [nop,nop,TS val 3313859570 ecr 653300550], length 0 23:19:30.101680 IP (tos 0x0, ttl 50, id 53935, offset 0, flags [DF], proto TCP (6), length 108) smtp > SpringpathController.43728: Flags [P.] , cksum 0x836b (correct), seq 571:627, ack 2043, win 272, options [nop,nop,TS val 3313859579 ecr 653300550], length 56: SMTP, length: 56 250 2.0.0 w94NJTiv013119 Message accepted for delivery 23:19:30.101719 IP (tos 0x0, ttl 64, id 32626, offset 0, flags [DF], proto TCP (6), length 58) SpringpathController7HNFk1BYQ4.43728 > smtp: Flags [P.] , cksum 0x0eb2 (incorrect -> 0x6609), seq 2043:2049, ack 627, win 245, options [nop,nop,TS val 653300563 ecr 3313859579], length 6: SMTP, length: 6 QUIT 23:19:30.144067 IP (tos 0x0, ttl 50, id 53936, offset 0, flags [DF], proto TCP (6), length 108) smtp > SpringpathController.43728: Flags [P.] , cksum 0xcba6 (correct), seq 627:683, ack 2049, win 272, options [nop,nop,TS val 3313859622 ecr 653300563], length 56: SMTP, length: 56 221 2.0.0 rcdn-core2-2-r6.cisco.com closing connection