

رادص إلـا ، جـمانـربـل رـشـنـلـاوـ نـيـوـكـتـلـا لـيـلـدـ رـفـوـتـلـا يـلـاعـ 8.0

تـايـوـتـحـمـلـا

قـمـدـقـمـلـا

قـيـسـاسـأـتـامـوـلـعـمـ

دوـيـقـلـاوـقـيـهـيـجـوـتـلـا ئـدـابـمـلـا

(قـكـبـشـلـابـلـصـتـمـلـا) MSE يـرـهـاـظـلـا زـاهـجـلـلـ HA نـيـوـكـتـ وـيـرـانـيـسـ

يـونـاـثـلـا MSE دـادـعـا

لـقـيـسـاسـأـلـا قـيـنـبـلـا وـأـ Cisco Prime NCS نـمـمـهـتـرـادـا

Cisco Prime NCS ئـفـاضـلـا MSE ئـلـا يـونـاـثـلـا

رـشـابـمـلـا لـاصـتـالـا عـمـ (HA) رـفـوـتـلـا قـئـىـافـ قـيـيـهـتـ

يـدـامـلـا زـاهـجـلـلـ HA نـيـوـكـتـ وـيـرـانـيـسـ

قـحـصـلـا نـمـ قـقـحـتـلـا

يـفـقـيـسـاسـأـلـا لـكـاشـمـلـا لـحـ

لـاطـعـأـلـا قـهـجـاـوـمـلـشـفـلـا زـوـاجـتـ وـيـرـانـيـسـ

مـالـتـسـالـلـ زـهـاـجـ يـونـاـثـلـا وـقـوـفـ يـسـاسـأـلـا

قـيـونـاـثـلـا ئـلـا لـشـفـلـا

يـسـاسـأـلـا ئـلـا قـدـوـعـلـا يـفـ لـشـفـلـا

HA State Matrix

نـعـقـمـمـعـئـاقـوـوـتـاـطـحـاـلـمـ HA

اـحـاـلـصـاـوـ HA فـاـشـكـتـسـأـ

قـمـدـقـمـلـا

فـاـشـكـتـسـأـتـاحـيـمـلـتـ ئـلـا ةـفـاـضـإـلـابـ ، رـشـنـلـاوـ نـيـوـكـتـلـا تـادـاـشـرـا دـنـتـسـمـلـا اـذـهـ فـصـيـ
لـقـنـتـلـا تـامـدـخـ كـرـحـمـلـ (HA) يـلـاعـلـا رـفـوـتـلـا قـيـضـتـ يـتـلـا كـلـلـلـ اـهـحـاـلـصـ اوـتـالـكـشـمـلـا
قـكـبـشـلـا (AwIPS LAN) فـيـكـتـلـلـ لـبـاـقـلـا يـكـلـسـاـلـلـا لـلـسـتـلـا عـنـمـ مـاـظـنـ وـأـوـ (MSE)
قـيـهـيـجـوـتـلـا ئـدـابـمـلـا حـرـشـ وـهـ دـنـتـسـمـلـا اـذـهـ نـمـ ضـرـغـلـاـوـ Cisco (WLAN) نـمـ ـدـحـوـمـلـا ئـيـكـلـسـاـلـلـا
رـشـنـ تـاـهـوـيـرـانـيـسـ رـيـفـوـتـوـ ئـرـاـوـطـلـا ةـلـاـحـ يـفـ ئـرـاـوـطـلـا ةـلـاـحـ نـعـ يـبـطـلـا فـشـكـلـاـبـ ةـقـلـعـتـمـلـا
ئـرـاـوـطـلـا تـالـاـحـ يـفـ ئـرـاـوـطـلـا ةـلـاـحـ نـعـ فـشـكـلـا.

تـانـوـكـمـلـاـوـ MSE رـشـوـمـبـ ةـصـاـخـلـا نـيـوـكـتـلـا لـيـصـاـفـتـ دـنـتـسـمـلـا اـذـهـ مـدـقـيـ الـ : ةـظـحـاـلـمـ
، يـرـخـأـ قـئـاثـوـيـفـ تـامـوـلـعـمـلـا هـذـهـ درـتـوـ MSE HA. رـشـوـمـبـ قـلـعـتـتـ الـ يـتـلـا هـ بـ ةـطـبـتـرـمـلـا
دـنـتـسـمـلـا اـذـهـ يـفـ فـيـكـتـمـلـا wIPS نـيـوـكـتـ ةـيـطـعـتـ مـتـتـ الـ اـمـكـ. اـهـنـأـشـبـ عـجـارـمـ درـتـوـ.

قـيـسـاسـأـتـامـوـلـعـمـ

فـئـاـظـوـتـامـدـخـلـا هـذـهـ رـفـوـتـ . ةـطـبـتـرـمـ ةـدـدـعـتـمـ تـامـدـخـ لـيـغـشـتـ يـلـعـ رـدـاـقـ يـسـاسـأـ مـاـظـنـ وـهـ MSE نـاـ
قـيـمـهـأـلـا غـلـابـ رـمـأـ يـلـاعـلـا يـحـصـلـا نـيـمـأـتـلـلـ رـاـبـتـعـلـا ئـالـيـاـ نـإـفـ ، كـلـذـلـوـ. يـوـتـسـمـلـا ئـلـاـعـ قـمـدـخـ
قـمـدـخـلـا يـفـ ةـقـقـثـ يـلـعـ ظـافـحـلـا لـجـأـ نـمـ.

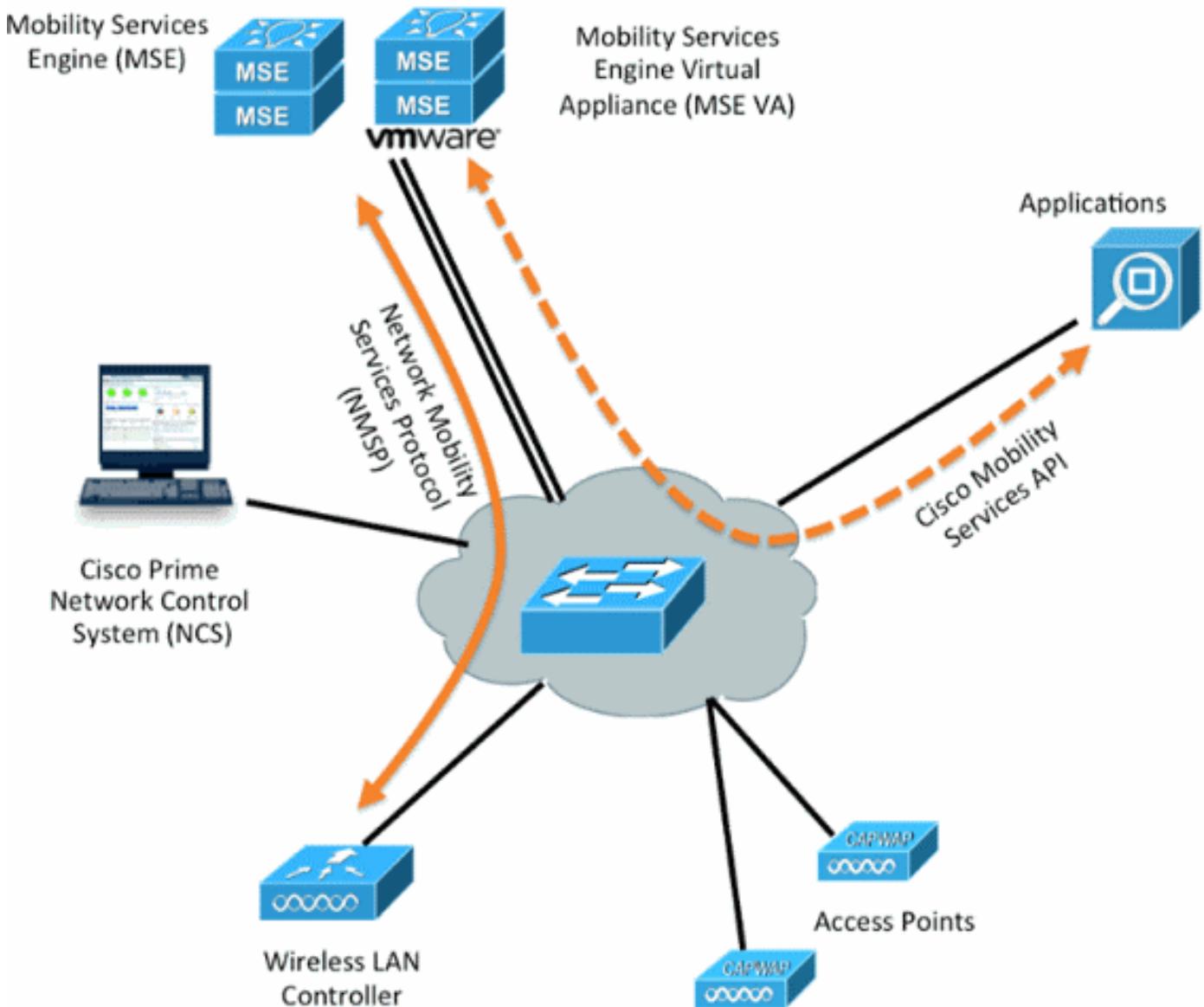
زـاهـجـ مـدـقـيـ . رـخـآ طـشـنـ رـيـغـ لـيـثـمـ ةـطـسـاـوبـ طـشـنـ لـكـ معـدـمـتـيـ HA نـيـكـمـتـ عـمـ

ظافحلا متيو. يل اعلا رفوتلا دادع | ةبقارم و ةراد او ةئيھتب هيف موقعي يذلا ٰفحصلـا ةبقارم "ةيامحـلا بقارـم" دعـي. يـونـاثـلـاـوـيـسـاسـأـلـاـ فـرـصـلـاـ رـاعـسـأـ رـشـفـمـ نـيـبـ بـلـقـلـاـ تـاضـبـنـ لـعـ لـشـفـيـ اـمـدـنـعـ. قـيـبـطـتـلـاـ ةـبـقـارـمـ وـ تـافـلـمـلـاـ خـسـنـوـ تـانـايـبـلـاـ ٰفعـاـقـ دـادـعـاـ نـعـ الـوـفـسـمـ يـسـاسـأـلـاـ MSEـ بـ صـاخـلـاـ يـرـهـاـظـلـاـ نـاـوـنـعـلـاـ لـيـدـبـتـ مـتـيـ، يـونـاثـلـاـ رـيـدـمـلـاـ مـلـسـتـيـوـ يـسـاسـأـلـاـ فـافـشـ لـكـشـبـ.

نـيـكـمـتـ نـمـضـتـيـ Ciscoـ نـمـ يـجـذـومـنـ WLANـ رـشـنـ (1ـ لـكـشـلـاـ عـجـاـنـ)ـ دـادـعـاـ اـدـهـ حـضـوـيـ HAـ.

ىـلـعـ يـرـهـاـظـلـاـ زـاهـجـلـاـوـ 3365ـ وـ 3355ـ وـ MSEـ3310ـ ESXiـ مـعـدـ رـفـوتـيـ.

يـفـ MSEـ ٰفعـمـدـخـ رـشـنـ 1ـ لـكـشـ.



دوـيـقـلـاـوـ ةـيـھـيـجـوـتـلـاـ ئـدـابـمـلـاـ

ةـيـنـبـ نـعـ انـهـ تـامـوـلـعـمـلـاـ MSE~ HA~:

- طـقـفـ رـاتـكـهـ 1:1ـ غـلـبـتـ ٰفعـاـسـمـ MSEـ يـرـهـاـظـلـاـ زـاهـجـلـاـ مـعـدـيـ
- رـظـنـاـ. نـيـيـسـاسـأـلـاـ MSEـ يـحـلـصـمـ ىـلـاـ لـصـيـ اـمـ يـونـاثـلـاـ MSEـ رـشـفـمـ مـعـدـيـ نـأـ نـكـمـيـ
- 3ـ وـ 2ـ نـالـكـشـلـاـ HAـ طـبـرـ ٰفعـوـفـصـمـ

- رشابملا لاصتا او ٽكبشلا ليصوت HA معدي
- IP و ٽحصلاب قارمب صاخلا IP نم لك نوكى نأ بجي . طقف MSE-2 ٽقبط راركت معدمتى
- 3 ٽقبطلا راركت نم هيلالوصولا نوكى نأو اسفن ٽيعرفلا ٽكبشلا يلعيهاظلا موعدم ريغ (NCS) ٽكبشلا يف مكحتلا ماظنل
- ٽيفلتخ يرهاظلا IP ب صاخلا Health Monitor نوكى نأ بجي
- ايئاقلت وأ ايودي لشفلا زواجت مادختسا كنكمي
- ايئاقلت وأ ايودي لاطعألا عاجرا امإ مادختسا كنكمي
- جمانربلا رادصا سفن يلعيوناثل او يساسألا MSE نم لك نوكى نأ بجي
- راعسأ رشوفم حبصي ال . خآ طشن ريغ ليثمب طشن يساسأ MSE رشوفم لك معدمتى
- لشفلا زواجت عارج ا عدب ال اطشن يوناثل (MSE) فرصللا
- ايئاقلت وأ ايودي لشفلا زواجت عارج نوكى نأ نكمي
- لجسم يساسأ MSE لكل تانايبل دع او وجوه ماربلل دحاو ليثم دجوي
- معدنارتقا ٽفوفصم 2 لکش MSE HA

Primary Server Type	Secondary Server Type					
	3310	3350	3355	VA-Low	VA-Standard	VA-High
3310	Y	Y	Y	N	N	N
3350	N	Y	Y	N	N	N
3355	N	Y	Y	N	N	N
VA-Low	N	N	N	Y	Y	Y
VA-Standard	N	N	N	N	Y	Y
VA-High	N	N	N	N	N	Y

تافص اوامىئاد هل نوكى نأ بجي ييوناثل لايتملا نأ و ٽفوفصملا هذهل يساسألا طخلنا ئيضاً ارتفا ٽزهجا وأ ٽزهجا تناك ئاووس ، يساسألا نم ٽيلاع وأ ٽيواستم.

خآ ٽبيكرت يأ معد/رابتخا متى مل . خآ MSE-3365 عم MSE-3365 نارقا طقف نكمي.

نارتقا ٽفوفصم 3 لکش MSE HA N:1

Secondary Server	Primary Server
3310	N:1 not supported
3350	Two 3310 servers are supported
3355	Two 3310 servers are supported
3355	Two 3350 servers are supported
3355	One 3310 and one 3350 are supported

لصتملا) يرهاظلا زاهجلل HA نيوكت ويرانيس

ةكبشلا

اده ، ويرانيس اذه ل . ل 4 (L4) عجا (VA) يرهاظللا زاهجلل HA نيوكت لاثمل ا اذه حضوي تلکش دادع! ةيلمع:

- MSE VA يس اسأ:

Virtual IP - [10.10.10.11]

Health Monitor interface (Eth0) - [10.10.10.12]

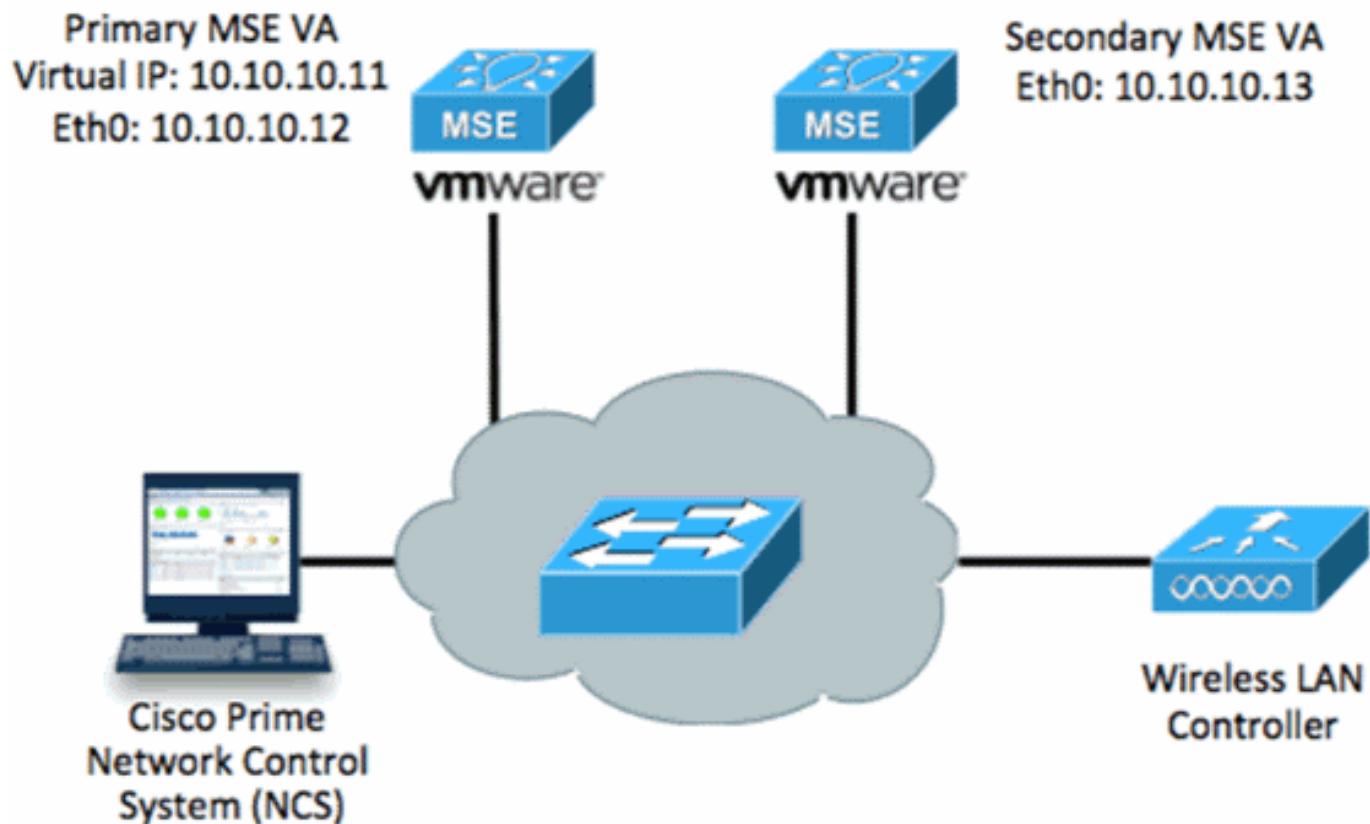
- MSE VA يونا ثلا:

Virtual IP - [None]

Health Monitor interface (Eth0) - [10.10.10.13]

ل HA نيوكتل بولطم اذه ل كل VA. طي شنتلا صيخرت مزلي: ظحالم VA.

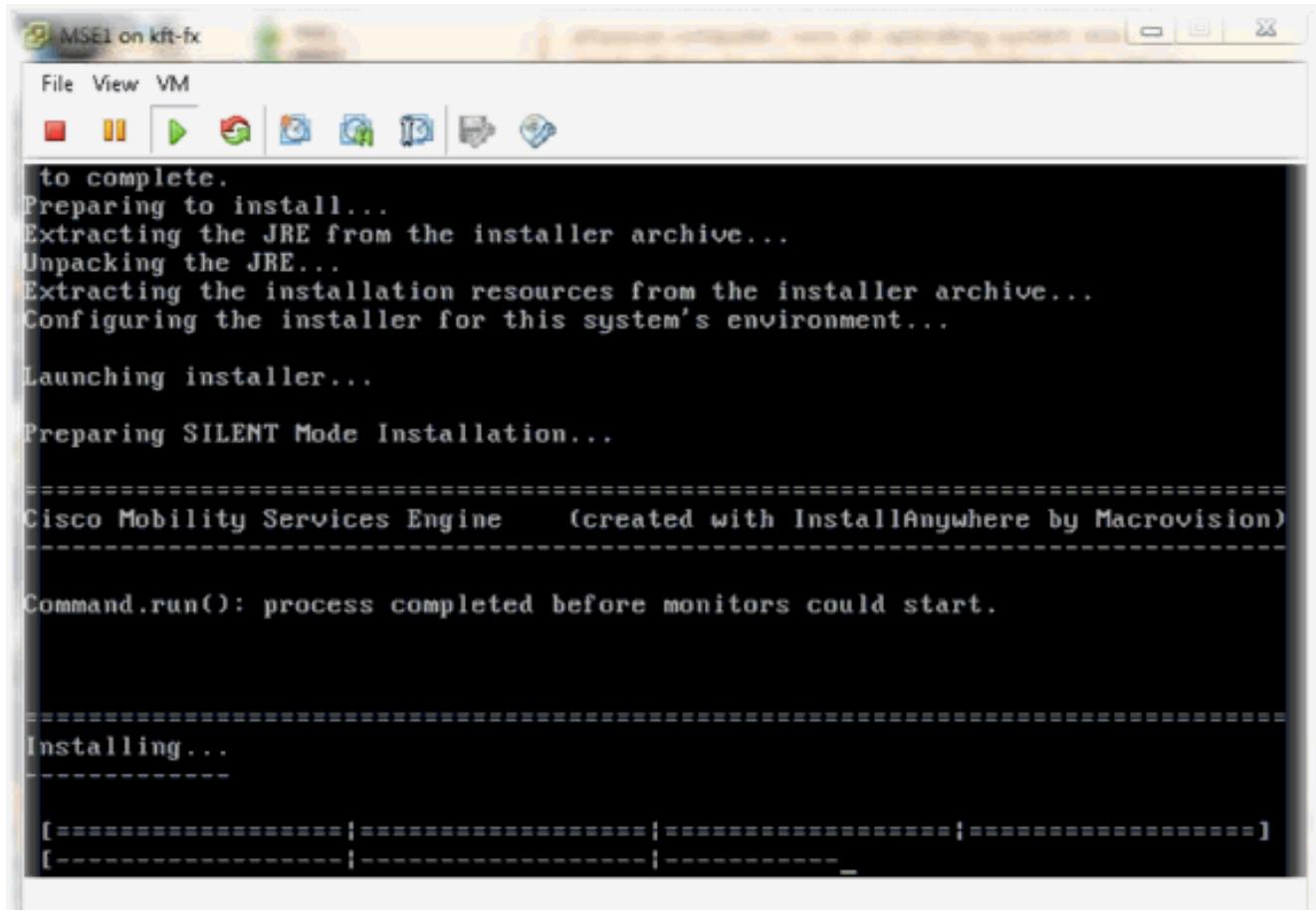
يف MSE يرهاظللا زاهجلل HA ل 4 . ل 4



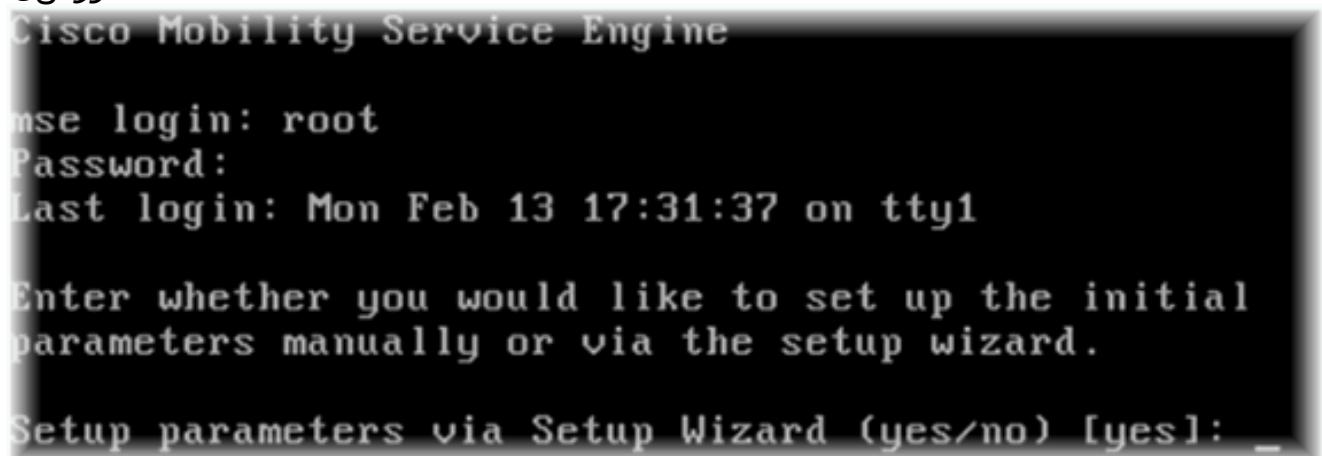
تامولعملانم ديزم ىلع لوصح ل HA يرهاظللا زاهجلل Cisco MSE قياثو عجا.

قاماعلا تاوطلخلا يلي امي ف:

1. يف حضوم وه امك ةكبشلا تادادع! عيمج عافيتسا نم ققحتو VA ل MSE تي بثت لمك ا. قروصلا.



يـف حـضـوم وـه اـمـك الـوـلـوـخـدـلـا لـيـجـسـت دـنـع "ـدـادـعـإـلـا جـلـاعـمـ" لـالـخـنـم تـامـلـعـمـلـا دـادـعـإـبـ مـقـ. 2. ـةـرـوـصـلـا.



3. ـةـوـطـخـلـا يـف مـعـن لـخـدـأـ. (ـكـلـذـىـلـا اـمـوـ،ـلـاجـمـلـاـوـفـيـضـمـلـا مـسـاـ) ـةـبـوـلـطـمـلـا تـالـاخـدـلـا لـخـدـأـ رـفـوـتـلـا نـيـوـكـتـلـا يـلـاعـلـا.

```

Current hostname=[mse]
Configure hostname? (Y)es/(S)kip/(U)se default [Yes]: Y

The host name should be a unique name that can identify
the device on the network. The hostname should start with
a letter, end with a letter or number, and contain only
letters, numbers, and dashes.

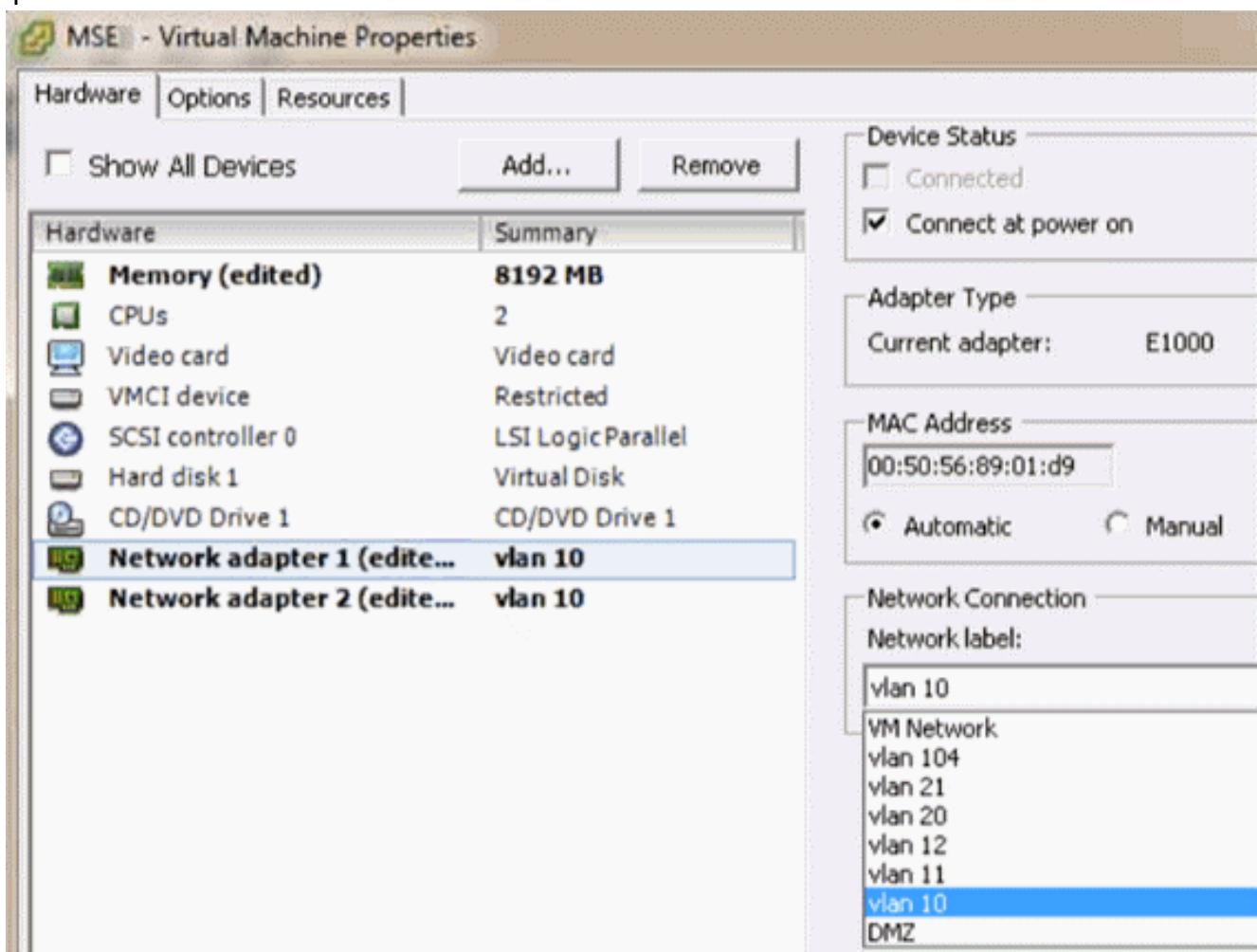
Enter a host name [mse]: mse1

Current domain=[]
Configure domain name? (Y)es/(S)kip/(U)se default [Yes]: S

Current role=[Primary]
Configure High Availability? (Y)es/(S)kip/(U)se default [Yes]: S

```

4. ظبقارم ةهجاو.[يساسألل 1] - رود ديدحت. روصلا يف حضوم وه امك تامولعملاء هذه لاخداي مق
ةكبشلا لوحمل ئيلع ئنيعملا ةكبشلا تادادعاء [eth0] * - ئحصلا
1



```
Enter a host name [mse1]
Current domain=[]
Configure domain name? (Y)es/(S)kip/(U)se default [Yes]: s
Current role=[Primary]
Configure High Availability? (Y)es/(S)kip/(U)se default [Yes]:
High availability role for this MSE (Primary/Secondary)
Select role [1 for Primary, 2 for Secondary] [1]:
Health monitor interface holds physical IP address of this MSE server.
This IP address is used by Secondary, Primary MSE servers and WCS to communicate
among themselves
Select Health Monitor Interface [eth0/eth1] [eth0]: _
```

5. يف حضوم وه امك [none] رش ابمل ا لاصتالا ٰهه ج او ددح
ةروصل ا.

```
Health monitor interface holds physical IP address of this MSE server.
This IP address is used by Secondary, Primary MSE servers and WCS to communicate
among themselves

Select Health Monitor Interface [eth0/eth1] [eth0]:
-----
Direct connect configuration facilitates use of a direct cable connection between
the primary and secondary MSE servers.
This can help reduce latencies in heartbeat response times, data replication and
failure detection times.
Please choose a network interface that you wish to use for direct connect. You s
hould appropriately configure the respective interfaces.
\"none\" implies you do not wish to use direct connect configuration.

Select direct connect interface [eth0/eth1/none] [none]: _
```

- ع انق[10.10.10.11] - يرهاظل ا IP ناونع:ةروصل ا يف حضوم وه امك تامولعمل ا هذه لخدا
- دادرتس الاعضو يف MSE ليغشت عدب[255.255.255.0] - ٰهه كبس لـ
[J]

```
Select direct connect interface [eth0/eth1/none] [none]:
Enter a Virtual IP address for first this primary MSE server
Enter Virtual IP address [1.1.1.1]: 10.10.10.11
Enter the network mask for IP address 10.10.10.11.
Enter network mask [1.1.1.1]: 255.255.255.0
Choose to start the server in recovery mode.
You should choose yes only if this primary was paired earlier and you have now l
ost the configuration from this box.
And, now you want to restore the configuration from Secondary via NCS
Do you wish to start this MSE in HA recovery mode ?: (yes/no): no_
```

7. ناونع لخدا[معن] - ةروصل ا يف حضوم وه امك تامولعمل ا هذه لخدا
- ةيضارتفا لـ ٰهه كبس لـ عانق[255.255.255.0] - [10.10.10.12]
[10.10.10.1]

```
Current IP address=[1.1.1.10]
Current eth0 netmask=[255.255.255.0]
Current gateway address=[1.1.1.1]
Configure eth0 interface parameters? (Y)es/(S)kip/(U)se default [Yes]

Enter an IP address for first ethernet interface of this machine.

Enter eth0 IP address [1.1.1.10]: 10.10.10.12

Enter the network mask for IP address 10.10.10.12.

Enter network mask [255.255.255.0]:

Enter an default gateway address for this machine.

Note that the default gateway must be reachable from
the first ethernet interface.

Enter default gateway address [1.1.1.1]: 10.10.10.1
```

وه امك [ي] طخت لـ [I] - ئەج او نىوكت (ETH1) ئەيناثلا تىنرىتى ئەج او مادختسە مەتى ال
يىف حضۇم
رۆوصىلما.

```
The second ethernet interface is currently disabled for this machine.
Configure eth1 interface parameters? (Y)es/(S)kip/(U)se default [Yes]: s
```

لچا نەم NTP مەداخ نىكەت مەھمەلە نەم رۆوصىلايىف حضۇم وە امك "دادع إلە جىلاغىم" لالخ نەم عبات
يىملاعلە تىقوقتلا يە ۋەلصىفەملە ئەينمۇزلا ۋەقطەنمەلە. ۋەسلى ئەنمەزم
قىسنەمەلە.

```
Domain Name Service (DNS) Setup
DNS is currently enabled.
No DNS servers currently defined
Configure DNS related parameters? (Y)es/(S)kip/(U)se default [Yes]: s
```

```
Current timezone=[America/New_York]
Configure timezone? (Y)es/(S)kip/(U)se default [Yes]:
```

Enter the current date and time.

Please identify a location so that time zone rules can be set correctly.
Please select a continent or ocean.

- 1) Africa
 - 2) Americas
 - 3) Antarctica
 - 4) Arctic Ocean
 - 5) Asia
 - 6) Atlantic Ocean
 - 7) Australia
 - 8) Europe
 - 9) Indian Ocean
 - 10) Pacific Ocean
 - 11) UTC - I want to use Coordinated Universal Time.
 - 12) Return to previous setup step (^).
- #? 11

Network Time Protocol (NTP) Setup.

If you choose to enable NTP, the system time will be configured from NTP servers that you select. Otherwise, you will be prompted to enter the current date and time.

NTP is currently disabled.

Configure NTP related parameters? (Y)es/(S)kip/(U)se default [Yes]:

Enter whether or not you would like to set up the Network Time Protocol (NTP) for this machine.

If you choose to enable NTP, the system time will be configured from NTP servers that you select. Otherwise, you will be prompted to enter the current date and time.

Enable NTP (yes/no) [no]: yes

Enter NTP server name or address: ntp.network.local

يُسّاس ألا اذه صخلی setup:

-----BEGIN-----

Role=1, Health Monitor Interface=eth0, Direct connect interface=none

Virtual IP Address=10.10.10.11, Virtual IP Netmask=255.255.255.0

Eth0 IP address=10.10.10.12, Eth0 network mask=255.0.0.0

Default Gateway=10.10.10.1

-----END-----

10. يف حضوم وہ امک ۃحیحص دادع إلا تامولعم عیمج نأ دیکأتل معن لخداً روصلا.

Please verify the following setup information.

-----BEGIN-----

Host name=mse1

Role=1, Health Monitor Interface=eth0, Direct connect interface=none
Virtual IP Address=10.10.10.11, Virtual IP Netmask=255.255.255.0

Eth0 IP address=10.10.10.12, Eth0 network mask=255.255.255.0

Default gateway=10.10.10.1

Time zone=UTC

Enable NTP=yes, NTP servers=10.10.10.10

-----END-----

You may enter "yes" to proceed with configuration, "no" to make more changes, or "^" to go back to the previous step.

Configuration Changed

Is the above information correct (yes, no, or ^): yes

11. يف حضوم وہ امک دادع إلادعب ليغشتلا ۃداعاب یصوی

```
[root@mse1 ~]# reboot
Stopping MSE Platform
```

روصلان.

12. رم او مادختساب MSE تامدخ أدبا، ليغشتلا ۃداعاب start msesd start ۃمدخلی وا /etc/init.d/msed start یف حضوم وہ امک start ۃداعاب دعب روصلا.

```
[root@mse1 ~]# getserverinfo
Health Monitor is not running
[root@mse1 ~]# /etc/init.d/mseed start
Starting MSE Platform

ip_tables: (C) 2000-2006 Netfilter Core Team
Netfilter messages via NETLINK v0.30.
ip_conntrack version 2.4 (8192 buckets, 65536 max) - 304 bytes per conntrack
Starting Health Monitor, Waiting to check the status.
Starting Health Monitor, Waiting to check the status.
Health Monitor successfully started
Starting Admin process...
Started Admin process.
Starting database .....
Database started successfully. Starting framework and services .....
Framework and services successfully started

[root@mse1 ~]#
```

- رمألا مادختساب حيحصل لمعدت MSE تامدخ نأ نم دكأت ،تامدخل اعيمج عدب دعب يف حضوم وه امك up ئيلمعلا ۋە لاح رهظت نأ بجي.روصلار.

```
Active Wired Clients: 0
Active Elements(Wireless Clients, Rogue APs, Rogue Clients, Interferers, Wired Clients, Tags) Limit: 100
Active Sessions: 0
Wireless Clients Not Tracked due to the limiting: 0
Tags Not Tracked due to the limiting: 0
Rogue APs Not Tracked due to the limiting: 0
Rogue Clients Not Tracked due to the limiting: 0
Interferers Not Tracked due to the limiting: 0
Wired Clients Not Tracked due to the limiting: 0
Total Elements(Wireless Clients, Rogue APs, Rogue Clients, Interferers, Wired Clients) Not Tracked due to the limiting: 0

-----
Context Aware Sub Services
-----

Subservice Name: Aeroscout Tag Engine
Admin Status: Disabled
Operation Status: Down

Subservice Name: Cisco Tag Engine
Admin Status: Enabled
Operation Status: Up
[root@mse1 ~]#
```

يوناثلارا MSE دادع

يوناثلارا MSE VA دادع نم عزج يه تاوطلخا ھذه:

1. تامولعملارا ھذه لخدا. دادع إلارا جلاغم يف يلولالا لوح دلارا ليجست أدبى، ديدجىلا تىبىتلار دعب يلىرىشى يىذلا [2] - رود دىدجت[مۇن] - يىلاعلار فوتلىنى يوكىت: روصىلار يف حضوم وه امك اھسفن يه [eth0] - ئەحصىلار ئېقكارم ئەھجەويي وناث رود ئىسالار

```
Current hostname=[mse]
Configure hostname? (Y)es/(S)kip/(U)se default [Yes]: yes

The host name should be a unique name that can identify
the device on the network. The hostname should start with
a letter, end with a letter or number, and contain only
letters, numbers, and dashes.

Enter a host name [mse]: mse2

Current domain=[]
Configure domain name? (Y)es/(S)kip/(U)se default [Yes]: s

Current role=[Primary]
Configure High Availability? (Y)es/(S)kip/(U)se default [Yes]:
High availability role for this MSE (Primary/Secondary)

Select role [1 for Primary, 2 for Secondary] [1]: 2

Health monitor interface holds physical IP address of this MSE server.
This IP address is used by Secondary, Primary MSE servers and WCS to communicate
among themselves

Select Health Monitor Interface [eth0/eth1] [eth0]:
```

2. IP ناونع [عيش ال] - رشابم لاصتا: روصلا يف حضوم وه امك تامولعملالاخداپ مق
[10.10.10.13] - ةيضرارتفالا ةبأوبل [255.255.255.0] - ةكبشلا عانق [10.10.10.1]

```
-----  
Select direct connect interface [eth0/eth1/none] [none]:  
  
Current IP address=[1.1.1.10]
Current eth0 netmask=[255.255.255.0]
Current gateway address=[1.1.1.1]
Configure eth0 interface parameters? (Y)es/(S)kip/(U)se default [Yes]:  
  
Enter an IP address for first ethernet interface of this machine.  
Enter eth0 IP address [1.1.1.10]: 10.10.10.13  
Enter the network mask for IP address 10.10.10.13.  
Enter network mask [255.255.255.0]:  
Enter an default gateway address for this machine.  
Note that the default gateway must be reachable from
the first ethernet interface.  
Enter default gateway address [1.1.1.1]: 10.10.10.1
```

3. يف حضوم وه امك [ي طختل] - ETH1 او نيوكت
روصلار.

```
Configure eth0 interface parameters? (Y)es/(S)kip/(U)se default [Yes]:  
Enter an IP address for first ethernet interface of this machine.  
Enter eth0 IP address [1.1.1.10]: 10.10.10.13  
Enter the network mask for IP address 10.10.10.13.  
Enter network mask [255.255.255.0]:  
Enter an default gateway address for this machine.  
Note that the default gateway must be reachable from  
the first ethernet interface.  
Enter default gateway address [1.1.1.1]: 10.10.10.1  
The second ethernet interface is currently disabled for this machine.  
Configure eth1 interface parameters? (Y)es/(S)kip/(U)se default [Yes]: s
```

4. يف حضوم وه امك - ةينمزلا ةقطنملا طبضا
ةروصلأا.

```
Current timezone=[America/New_York]  
Configure timezone? (Y)es/(S)kip/(U)se default [Yes]:  
  
Enter the current date and time.  
  
Please identify a location so that time zone rules can be set correctly.  
Please select a continent or ocean.  
1) Africa  
2) Americas  
3) Antarctica  
4) Arctic Ocean  
5) Asia  
6) Atlantic Ocean  
7) Australia  
8) Europe  
9) Indian Ocean  
10) Pacific Ocean  
11) UTC - I want to use Coordinated Universal Time.  
12) Return to previous setup step (^).  
#? 11
```

5. يف حضوم وه امك مداخنيكمتب مق
ةروصلأا.

Network Time Protocol (NTP) Setup.

If you choose to enable NTP, the system time will be configured from NTP servers that you select. Otherwise, you will be prompted to enter the current date and time.

NTP is currently disabled.

Configure NTP related parameters? (Y)es/(S)kip/(U)se default [Yes]:

Enter whether or not you would like to set up the Network Time Protocol (NTP) for this machine.

If you choose to enable NTP, the system time will be configured from NTP servers that you select. Otherwise, you will be prompted to enter the current date and time.

Enable NTP (yes/no) [no]: yes

Enter NTP server name or address: ntp.network.local

6. ظفح دادع إلـا تامولعم نـم دـكـأـتـو دـادـعـإـلـا جـلـاعـم نـم ةـيـقـبـتـمـلـا تـاوـطـخـلـا لـاـمـكـابـ مـقـ يـفـ حـضـومـ وـهـ اـمـكـ نـيـوـكـتـلـاـ رـوـصـلـاـ.

Please verify the following setup information.

-----BEGIN-----

```
Host name=mse2
      Role=2, Health Monitor Interface=eth0, Direct connect interface=none

Eth0 IP address=10.10.10.13, Eth0 network mask=255.255.255.0
Default gateway=10.10.10.1
Time zone=UTC
Enable NTP=yes, NTP servers=10.10.10.10
```

-----END-----

You may enter "yes" to proceed with configuration, "no" to make more changes, or "^" to go back to the previous step.

Configuration Changed

Is the above information correct (yes, no, or ^): yes

7. وهـ اـمـكـ يـسـاسـأـلـا MSEـ لـ ةـقـبـاسـلـا سـفـنـبـ تـاوـطـخـلـا لـيـغـشـتـ أـدـبـاـوـ دـيـهـمـتـلـاـ دـعـأـ يـفـ حـضـومـ وـهـ اـمـكـ نـيـوـكـتـلـاـ رـوـصـلـاـ.

```
[root@mse2 ~]# /etc/init.d/msed start
Starting MSE Platform

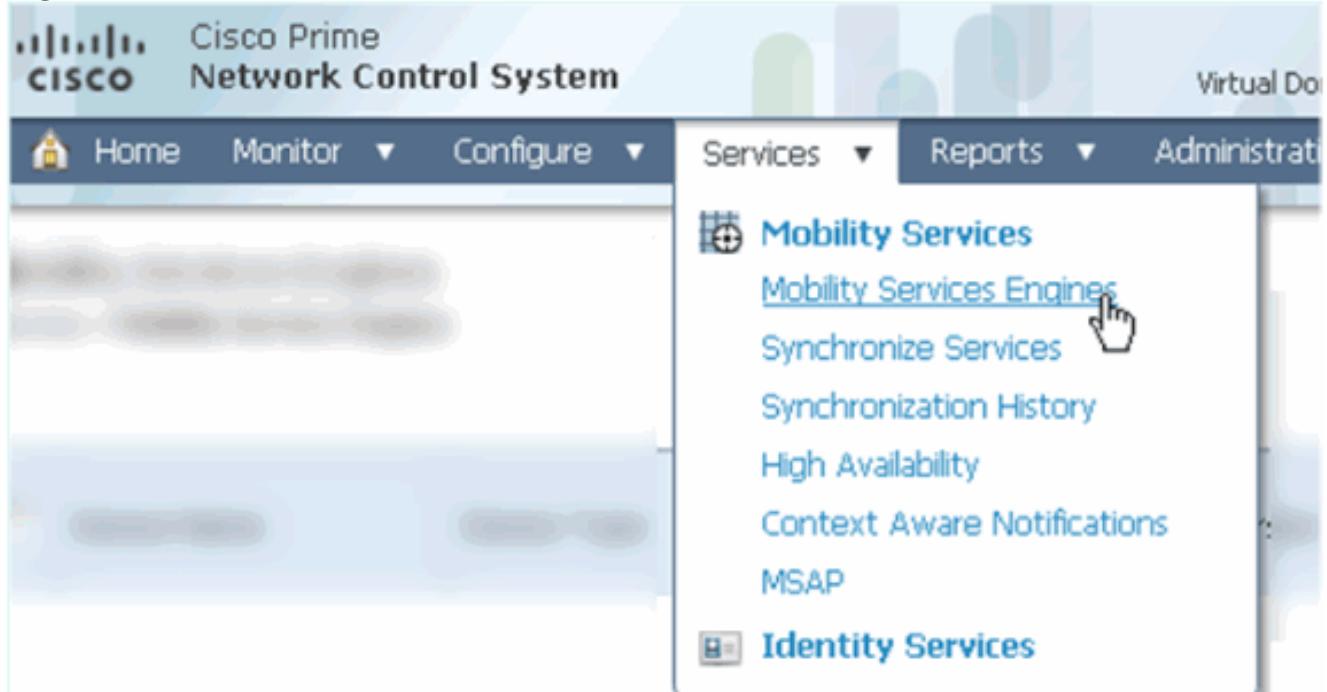
ip_tables: (C) 2000-2006 Netfilter Core Team
Netfilter messages via NETLINK v0.30.
ip_conntrack version 2.4 (8192 buckets, 65536 max) - 304 bytes per conntrack
Starting Health Monitor, Waiting to check the status.
Starting Health Monitor, Waiting to check the status.
Health Monitor successfully started
Starting Admin process...
Started Admin process.
Starting database .....
Database started successfully. Starting framework and services .....
Framework and services successfully started
```

```
[root@mse2 ~]# _
```

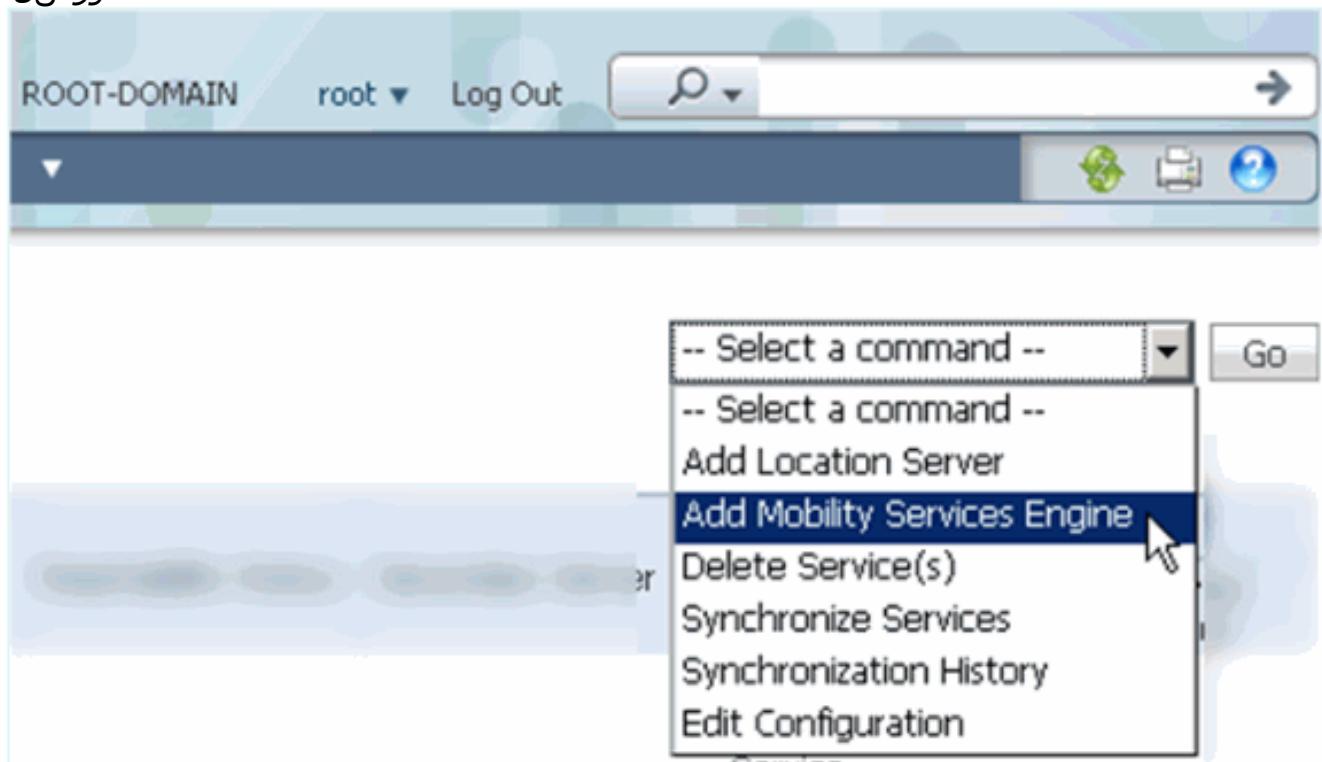
نەم مەتەرا دا (Cisco Prime NCS ئىنپلا وى) ل ئىساس ئەلا

تاق اطبا دىلدا يوناڭلاو يىسالا ئەلا لوحىم ئەفاضى ئېلىتلا تاوطخىلا رەھىت ئەدعا سەملل دشىرمەنىڭنىڭلۇ ئەتكىشىتلا تىأر MSE ئەلەيھىمى ئەلا تىزجىن. ئەكتۈشلى.

- تامىد خەتكىچىم رەت خاۋى ئەلا لققىتىن، Cisco Prime Network Control System > Systems > Mobility Services ئەلەيھىمى ئەلا تاق اطبا نەم. ئەمك لققىتلا يەھىزىم وە ئەمك لققىتلا يەھىزىم.



- وە ئەمك لاققىتىن قوف رقنا مەت. لققىتلا تامىد خەتكىچىم ئەفاضى رەت خاۋى، ئەلدىس نەملا ئەمئاقلان نەم. ئەمك لققىتلا يەھىزىم وە ئەمك لققىتلا يەھىزىم.



- زاهىجلا مىسىلخىدا مىيىقىلا، دنەتسەملا اذە ويغانىيس يە. ل ئىساص ئەلا MSE نىيوكىت جىلاعىم عبىتا دادعى لەككىل (MSE1) ئەلەيھىمى ئەلا مەتەرىملا مىسىلخىدا [10.10.10.12] - IP ناونع [MSE1]. لەلەم

يـف حـضـوم وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ).

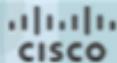
The screenshot shows the 'Add Mobility Services Engine' configuration page. On the left, a sidebar lists 'Add MSE Configuration' options: Licensing, Select Service, Tracking, and Assign Maps. The main panel contains fields for Device Name (mse1), IP Address (10.10.10.12), Contact Name (empty), Username (admin), Password (*****), and HTTP (Enable checkbox, checked). A note at the bottom indicates that deleting synchronized service assignments removes all service assignments, while location history data is retained.

4. يـف حـضـوم وـه اـمـك يـلـاتـلـا قـوـف رـقـنـا مـثـ، ةـرـفـوـتـمـلـا صـيـخـارـتـلـا عـيـمـج فـضـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ).

The screenshot shows the 'MSE License Summary' page. The sidebar includes 'Edit MSE Configuration' and 'Licensing' (selected). The main area displays a summary table with one row for 'mse1 Activated (AIR-MSE-VA-K9:V01:mse1_d5972642-5696-11e1-bd0c)'. Below the table are 'Add License' and 'Remove License' buttons.

MSE Name (UDI)	Service	Platform Limit	Type	Installed Limit
mse1 Activated (AIR-MSE-VA-K9:V01:mse1_d5972642-5696-11e1-bd0c)	CAS	2000	CAS Elements	100
	wIPS	2000	wIPS Monitor Mode APs	10
			wIPS Local Mode APs	10
	MSAP	2000	Service Advertisement Clicks	1000

5. يـف حـضـوم وـه اـمـك يـلـاتـلـا قـوـف رـقـنـا مـثـ، تـامـدـخ دـدـحـ MSEـ، وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ) وـه اـمـك كـلـذ دـعـب تـقـطـقـط(ـيـلـوـأـ).



Edit MSE Configuration

Licensing

Select Service

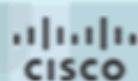
Tracking

Assign Maps

Select Mobility Service

- Context Aware Service
- Cisco Context-Aware Engine for Clients and Tags
- Partner Tag Engine ⓘ
- Wireless Intrusion Protection Service
- MSAP Service

يُف حضوُم وَهُ امْكِنَاتُ الْقُوَّفِ رُقْنَاتُ ، بِقُعْدَتِ الْتَّامِلُعِ نِيَكِمْتَبِ مَقْرُوصَلَا.



Edit MSE Configuration

Licensing

Select Service

Tracking

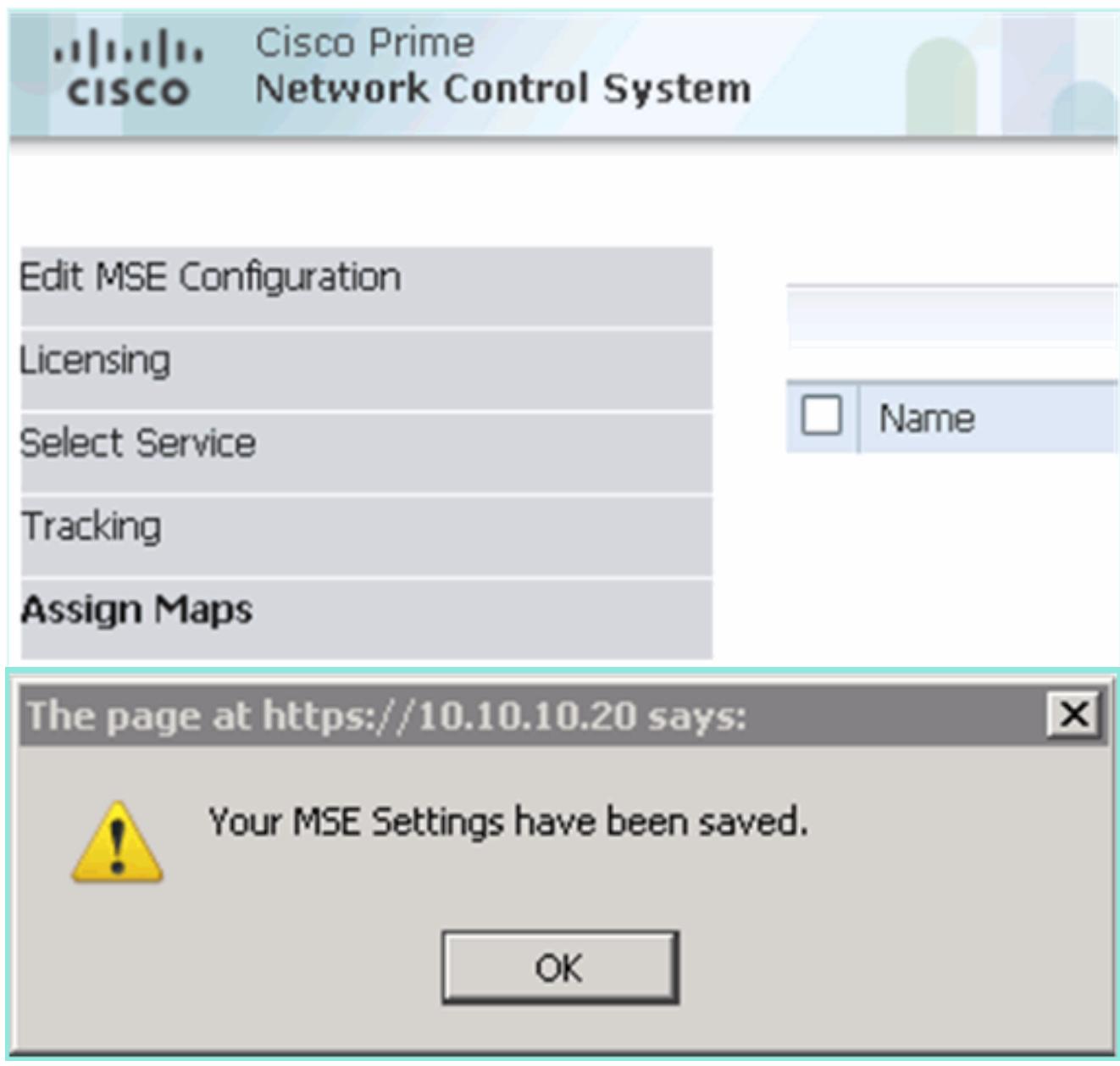
Assign Maps

Select Tracking & History Parameters.

Tracking

- Wired Clients
- Wireless Clients
- Rogue AccessPoints
 - Exclude Adhoc Rogue APs
- Rogue Clients
- Interferers
- Active RFID Tags

تَمَتْ أَمْتَيْ قَطْقَطَةً in order to MSE تَامِدُخَ ةَنْمَازْمَو طَىَارَخَلَا نِيَيِعَتِ يَرَايِتَخَالَا نَمَ . 7. يُف حضوُم وَهُ امْكِنَاتُ NCS لِا ئِلَى MSE لِا نَمَ ةَفَاضِلَا رُؤُصَلَا.



يوناثل MSE ىلإ Cisco Prime NCS

اذه تمت ،نآلا. ئيساسألا MSE VA ۋەفاضا تمت هنأ ئېلاتلا ۋاشلا ۋەطقل حضوت order to steps in MSE va:

- يف حضوم وە امك نېوكتلل طابترالا قوف رقناو، "يوناثل مداخلا" دومع عقوم ددح. ۋەرۈشلە.

Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server	Mobility Service		
						Name	Admin Status	Service Status
mse1	Cisco Mobility Services Engine - Virtual Appliance	10.10.10.12	7.2.103.0	Reachable	N/A (Click here to configure)	Context Aware Service	Enabled	Up
						wIPS Service	Disabled	Down
						MSAP Service	Disabled	Down

- يوناثل زاھجلا مسا: ويرانىسلا اذه يف نېوكتلا عم ئيوناثل MSE VA ۋەفاضا [mse2] - يوناثل رورملا ۋەملک [10.10.10.13] - * ئيوناثل IP ناونع

لی ووط راظتن ای طایتحا عون [يودی وا يئاقلت] - لش فلارا زواجت عون [يصنلدا دادع] الـ MSE، قئاڭو لى عجرا وأ تامولعملار زمر قوف رقنا. ظفح ئقطقطل اطاعالا لىع بلغتلل مزل اذى رم الـ.

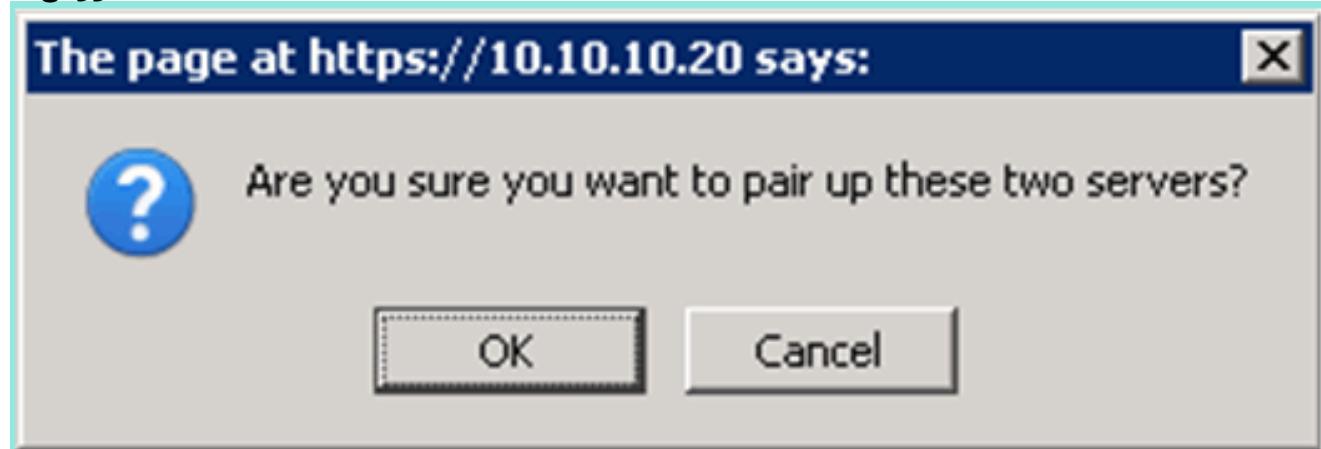
HA Configuration : mse1

Services > Mobility Services Engines > System > Services High Availability > Configure High Availability Parameters

Configure High Availability Parameters

Primary Health Monitor IP	10.10.10.12
Secondary Device Name	<input type="text" value="mse2"/>
Secondary IP Address	<input type="text" value="10.10.10.13"/>
Secondary Password ⓘ	<input type="password" value="*****"/>
Failover Type ⓘ	Automatic <input type="button" value="▼"/>
Fallback Type ⓘ	Manual <input type="button" value="▼"/>
Long Failover Wait ⓘ	<input type="text" value="10"/> seconds
<input type="button" value="Save"/>	

3. يف حضوم وە امك نانثا جوازى نأ بلاتي NCS لى امدىن ۋەققەط ۋەرسىلە.



ياف حضوم وە امك نىيوكىتلى ئاشنال ناوث عىضب NCS قرغتسى ۋەرسىلە.

Please Wait. High Availability configuration is being created at the Primary and Secondary servers. This will take a few seconds...

• • • • •

وە امك (L-MSE-7.0-K9) طېشىت صىخىرت بىلەتت ئيوناڭلى VA تىنالى اذى NCS بىلەت يف حضوم ۋەرسىلە.

The page at https://10.10.10.20 says:



Secondary MSE needs to be activated with a Virtual Appliance license. Add a license and save the config.

OK

4. يف حضوم وه امك يوناثلا طيشنل صيخرتلا فلم عقوم ددح وقف اوم قوف رقنا. ٥. ٦. ٧. ٨. ٩. ١٠.

HA Configuration : mse1

Services > Mobility Services Engines > System > Services High Availability > Configure High Availability Parameters

Configuration

Primary Health Monitor IP	10.10.10.12
Secondary Device Name	mse2
Secondary IP Address	10.10.10.13
Secondary Password ⓘ	*****
Secondary Platform UDI	AIR-MSE-VA-K9:V01:mse2_666f2046-5699-11e1-b1b1-0050566
Secondary Activation Status	Not Activated
Activate Secondary with License	<input type="text"/> <input type="button" value="Browse..."/>
Failover Type ⓘ	Automatic <input type="button" value="▼"/>
Fallback Type ⓘ	Manual <input type="button" value="▼"/>
Long Failover Wait ⓘ	10 <input type="text"/> seconds
<input type="button" value="Save"/> <input type="button" value="Delete"/>	

5. يف حضوم وه امك نيوكتلا لامكال ظفح قوف رقنا، ٦. يوناثلا MSE VA طيشنل درجمب ٧. ٨. ٩. ١٠.

HA Configuration : mse1

Services > Mobility Services Engines > System > Services High Availability > Configure High Availability Parameters

Configuration

Primary Health Monitor IP	10.10.10.12
Secondary Device Name	mse2
Secondary IP Address	10.10.10.13
Secondary Password ⓘ	*****
Secondary Platform UDI	AIR-MSE-VA-K9:V01:mse2_666f2046-5699-11e1-b1b1-005
Secondary Activation Status	Activated
Delete Secondary Activation license ⓘ	<input type="checkbox"/>
Failover Type ⓘ	Automatic
Fallback Type ⓘ	Manual
Long Failover Wait ⓘ	10 seconds

Buttons:

6. ثيچ ۋىشلىك NCS ضرۇت. لقنتلى تامدۇن كەرم > لقنتلى تامدۇن > مىنابىل دومۇل يىف يۇناشلى MSE رەھە ئىوناڭلى:

Mobility Services Engines							Select a command		
	Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server	Mobility Service		
							Name	Admin Status	Service Status
	mse1	Cisco Mobility Services Engine - Virtual Appliance	10.10.10.11	7.2.103.0	Reachable	mse2	Context Aware Service wIPS Service MSAP Service	Enabled Disabled Disabled	Up Down Down

7. يىف حضۇم وە امك ئىلا ئەچاتىلى HA > تامدۇن ئىلا > NCS ئىلا لقتنى، ئەلچىن ئەلچىن ئەلچىن.

The screenshot shows the Cisco Prime Network Control System interface. In the top navigation bar, 'Services' is selected. On the right side of the main content area, there is a sidebar with several options: 'Mobility Services', 'Mobility Services Engines', 'Synchronize Services', 'Synchronization History', 'High Availability' (which is highlighted with a red box), 'Context Aware Notifications', 'MSAP', and 'Identity Services'. The 'High Availability' section contains a table with columns for 'Secondary Server Name' and 'Secondary HM IP Address'. The table has one row: 'mse2' and '10.10.10.13'. The 'Version' column shows '7.2.10'.

يۇ حىضموم وە امك و جوز ئەتساوب ئېلاحل ئادىھلار ئىرلەنگىمى، HA ۋە لاحىف ۋەرۈصلە.

The screenshot shows the Cisco Prime Network Control System interface. The left sidebar is expanded to show 'System' and its sub-options: 'General Properties', 'Active Sessions', 'Trap Destinations', 'Advanced Parameters', 'Logs', 'Services High Availability' (which is expanded to show 'HA Configuration' and 'HA Status'), 'Accounts' (with 'Users' and 'Groups'), and 'Status' (with 'Server Events', 'Audit Logs', 'NCS Alarms', and 'NCS Events'). The 'HA Status' option is currently selected. The main content area displays 'HA Configuration : mse1' and 'Current High Availability Status'. It shows the following status information:

Status	Active
Heartbeats	Up
Data Replication	Up
Mean Heartbeat Response Time	6 msec

Below this, there is an 'Events Log' table:

Event Description	Generated By	Timestamp	Remarks
Active	Primary	2012-Feb-14, 00:22:26 UTC	-
Heartbeats have been setup successfully	Primary	2012-Feb-14, 00:19:00 UTC	-
Primary and secondary server synchronization in progress	Primary	2012-Feb-14, 00:18:56 UTC	-
Configuration successfully created	Primary	2012-Feb-14, 00:18:56 UTC	-

A 'Refresh Status' button is located at the bottom of the log table.

NCS رفوت. قىئاقد عضب لىثامتمىلا تانايىبلالا خسنى و ئېلىلولالا ئەنمازىملا دادعى قرغىتسىي دق يۇ حىضموم وە امك لىماكلىاب اطاشن HA جوز نوكىيىتىح مدقىتلل ئىۋىملا ئېسەنلە ئەراشى ۋەرۈصلە.

The screenshot shows the 'Current High Availability Status' table from the Cisco Prime interface. The table includes the following data:

Status	Primary and secondary server synchronization in progress (68% complete)	
Heartbeats	Up	
Data Replication	Setting up	
Mean Heartbeat Response Time	108 msec	

جاخىللا اذه حىضوى. Gethainfo وە HA قىلعتىملى 7.2 رادصىلا MSE جمانرب عم دىدج رەمأ لاخدا مەت يۇناتىلما ئىساسلى:

```
[root@mse1 ~]#gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----  
Base high availability configuration for this server  
-----
```

```
Server role: Primary  
Health Monitor IP Address: 10.10.10.12  
Virtual IP Address: 10.10.10.11  
Version: 7.2.103.0  
UDI: AIR-MSE-VA-K9:V01:mse1  
Number of paired peers: 1
```

```
-----  
Peer configuration#: 1  
-----
```

```
Health Monitor IP Address 10.10.10.13  
Virtual IP Address: 10.10.10.11  
Version: 7.2.103.0  
UDI: AIR-MSE-VA-K9:V01:mse2_666f2046-5699-11e1-b1b1-0050568901d9  
Failover type: Manual  
Fallback type: Manual  
Failover wait time (seconds): 10  
Instance database name: mseos3s  
Instance database port: 1624  
Dataguard configuration name: dg_mse3  
Primary database alias: mseop3s  
Direct connect used: No  
Heartbeat status: Up  
Current state: PRIMARY_ACTIVE
```

```
[root@mse2 ~]#gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----  
Base high availability configuration for this server  
-----
```

```
Server role: Secondary  
Health Monitor IP Address: 10.10.10.13  
Virtual IP Address: Not Applicable for a secondary  
Version: 7.2.103.0  
UDI: AIR-MSE-VA-K9:V01:mse2  
Number of paired peers: 1
```

```
-----  
Peer configuration#: 1  
-----
```

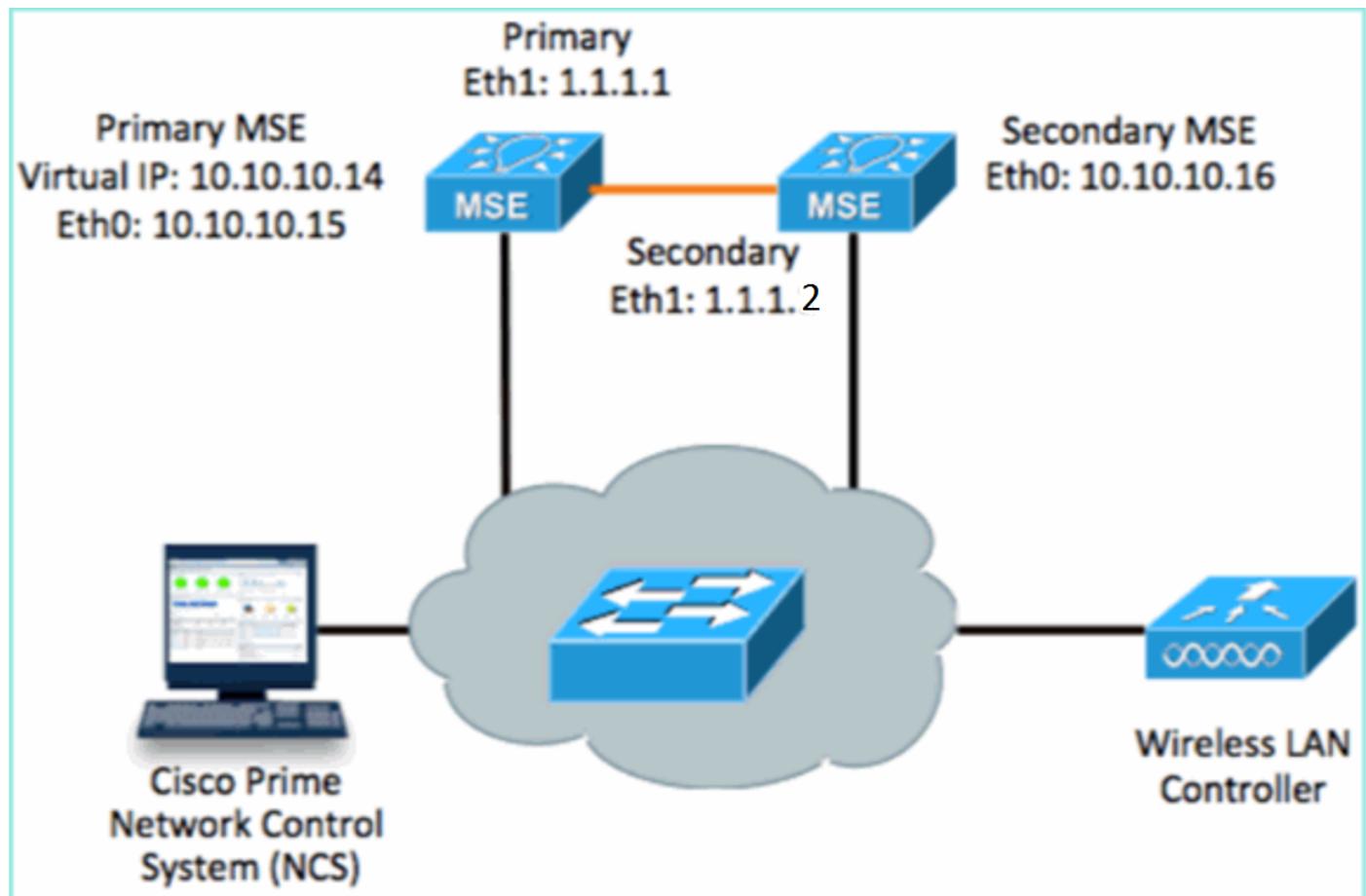
```
Health Monitor IP Address 10.10.10.12  
Virtual IP Address: 10.10.10.11  
Version: 7.2.103.0  
UDI: AIR-MSE-VA-K9:V01:mse1_d5972642-5696-11e1-bd0c-0050568901d6  
Failover type: Manual  
Fallback type: Manual  
Failover wait time (seconds): 10  
Instance database name: mseos3  
Instance database port: 1524  
Dataguard configuration name: dg_mse3  
Primary database alias: mseop3s
```

```
Direct connect used: No  
Heartbeat status: Up  
Current state: SECONDARY_ACTIVE
```

رشابملا لاصتالا ع (HA) رفوتلار ئەت

مادختسرا رشابملا لاصتالا نىوكتىلىسى نىجىف، كېشلىپ لىصتمىلا MSE HA مىدختسى لىلقتىلىع اذى دعاسى نا نكمىو. ئىوناڭلاو ئىسالا MSE مداخنىيپ رشابم لېكىلا لاصتا تاقوأولىڭاملا تانايىبلا خسندۇ ئەقىاف ئەعرسى ئاتاققا يىف لوصولا ئەنمزا يىضارتفالا دىعەتمىلا صەقەللىرىنى، ويغانىسىلى ادھەل ئەپسەنلىپ. لاطۇغلىلا فاشتكا يىف حضورىم وە امك، ئەجاؤلا ئىلع يۇناث رشۇمپ يېلۋالا يىئايزىفلا (MSE) طەاسو لىل ئەجاؤل كىل IP ناونع رفوت مىزلىي. رشابملا لاصتالى مىدختىسىم ETH1 نا ئەجەل 5 لىكشىلە.

رشابملا لاصتالا ع 5 لىكشىلە: MSE HA



1. دادعىللىيىصنلا جمانربلا نىم نىوكتىلا سخلم. يىسالا MSE دادعا:

```
-----BEGIN-----  
Host name=mse3355-1  
Role=1 [Primary]  
Health Monitor Interface=eth0  
Direct connect interface=eth1  
Virtual IP Address=10.10.10.14  
Virtual IP Netmask=255.255.255.0  
Eth1 IP address=1.1.1.1  
Eth1 network mask=255.0.0.0  
Default Gateway =10.10.10.1  
-----END-----
```

2. دادعىللىيىصنلا جمانربلا نىم نىوكتىلا سخلم. يۇناثلا MSE دادعا:

```
-----BEGIN-----  
Host name=mse3355-2  
Role=2 [Secondary]
```

```

Health Monitor Interface=eth0
Direct connect interface=eth1
Eth0 IP Address 10.10.10.16
Eth0 network mask=255.255.255.0
Default Gateway=10.10.10.1
Eth1 IP address=1.1.1.2,
Eth1 network mask=255.0.0.0
-----END-----

```

3. ئەقبا سلە ئەلەمألا عجاو). روصىلە يەھىزوم وە امك NCS ىلى يىساسألا ئەفاضا بىمەنلىكىنلىد ىلى عجرا وانى يوكىتلى.

The screenshot shows the Cisco Prime Network Control System (NCS) interface. The top navigation bar includes 'Cisco Prime Network Control System' logo, 'Virtual Domain: ROOT-DOMAIN', 'root', and 'Log Out'. Below the navigation bar, there are tabs: Home, Monitor, Configure, Services, Reports, and Administration. The 'Services' tab is currently selected. Under 'Services', the 'Mobility Services Engines' option is chosen. The main content area displays a table titled 'Mobility Services Engines' with the following columns: Device Name, Device Type, IP Address, Version, Reachability Status, and Secondary Server. One entry is listed:

<input type="checkbox"/>	Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server
<input type="checkbox"/>	mse3355-1	Cisco 3355 Mobility Services Engine	10.10.10.14	7.2.103.0	Reachable	N/A (Click here to configure)

4. زاهىجلا مسالىخ دادعى لجأ نم. يۇناثلا مىداخىلا نىيوكىت > NCS ىلى لىقتىن، يۇناثلا MSE > يۇناثلا مىداخىلا نىيوكىت > [10.10.10.16] - يۇناثلا IP ناونع [MSE3355-2] - يۇناثلا يەھىزوم وە امك ظفح قوف روصىلە.

Cisco Prime Network Control System

Virtual Domain: ROOT-

Home Monitor ▾ Configure ▾ Services ▾ Reports ▾ Administration ▾

System

- General Properties
- Active Sessions
- Trap Destinations
- Advanced Parameters
- Logs
- Services High Availability
 - HA Configuration
 - HA Status
- Accounts
 - Users
 - Groups
- Status
 - Server Events
 - Audit Logs

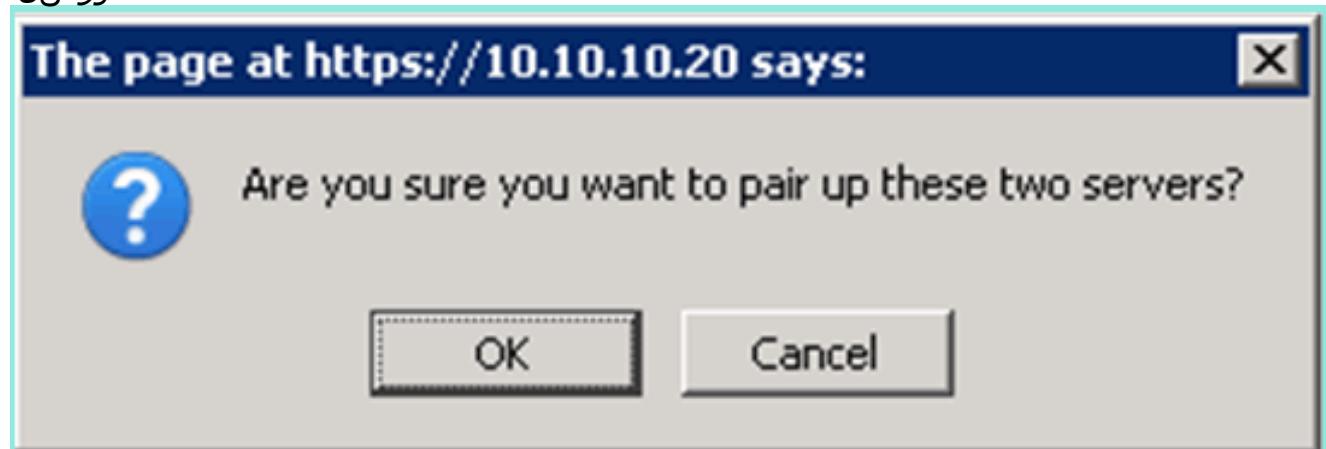
HA Configuration : mse3355-1
Services > Mobility Services Engines > System > Services High Availability

Configure High Availability Parameters

Primary Health Monitor IP	10.10.10.15
Secondary Device Name	mse3355-2
Secondary IP Address	10.10.10.16
Secondary Password	*****
Failover Type	Manual
Fallback Type	Manual
Long Failover Wait	10 seconds

Save

5. يف حضوم وہ امک MSEs نانثا نم جو زلا تدکا تدقق طریقہ روصلہ.



یف حضوم وہ امک یوناٹلا مداخلا نیوکت ڈفاصیل ظحل NCS قرغتسی روصلہ.

Please Wait. High Availability configuration is being created at the Primary and Secondary servers. This will take a few seconds...

• • • • •

6. يف حضوم وہ امک ڈفچ قوف رقنا. HA ناملمع یلع تارییغت یا عارجاب مق، لامتکالا دنع روصلہ.

HA Configuration : mse3355-1

Services > Mobility Services Engines > System > Services High Availability > Configure High Availability Parameters

Configuration

Primary Health Monitor IP	10.10.10.15
Secondary Device Name	mse3355-2
Secondary IP Address	10.10.10.16
Secondary Password ⓘ	*****
Secondary Platform UDI	AIR-MSE-3355-K9:V01:KQ:
Failover Type ⓘ	Manual
Fallback Type ⓘ	Manual
Long Failover Wait ⓘ	10 seconds

Save

Delete

Switchover

7. يف حضوم وہ امک دیջل ا HA جو زل یل عفلا تقولا یف مدق تل ل HA ۃ لاح ضرع ا ۃ روص ل ا.

CISCO Network Control System

Virtual Domain: ROOT-DOMAIN root Log Out

Home Monitor Configure Services Reports Administration

System HA Configuration : mse3355-1
Services > Mobility Services Engines > System > Services High Availability > Current High Availability Status

Current High Availability Status

Status	Primary and secondary server synchronization in progress (66% complete)
Heartbeats	Up
Data Replication	Setting up
Mean Heartbeat Response Time	8 millisec

Events Log

Event Description	Generated By	Timestamp	Remarks
Configuration updated	Primary	2012-Feb-15, 20:10:56 UTC	Failover mode set to AUTOMATIC.
Heartbeats have been setup successfully	Primary	2012-Feb-15, 20:10:11 UTC	-
Primary and secondary server synchronization in progress	Primary	2012-Feb-15, 20:10:09 UTC	-
Configuration successfully created	Primary	2012-Feb-15, 20:10:09 UTC	-

Refresh Status

8. نم دکأث و Services > Mobility Services > Mobility Services Engines، یف حضوم وہ امک NCS یل ا لقتن ا MSE (Direct Connect) HA یل ا NCS ۃ فاض ا ۃ روص ل ا.

Cisco Prime Network Control System		Virtual Domain: ROOT-DOMAIN							
Home Monitor ▾ Configure ▾ Services ▾ Reports ▾ Administration ▾		root ▾ Log Out		Change Password					
Mobility Services Engines									
Services > Mobility Services Engines									
<input type="checkbox"/>	Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server			
<input type="checkbox"/>	mse3355-1	Cisco 3355 Mobility Services Engine	10.10.10.14	7.2.103.0	Reachable	mse3355-2			

جتانل اانه. gethainfo رمألا مادختساب دي كأتل ا ظحالم اضيأ نكمي ، مكحتلا ةدحو نمو.
يونا ثل او يس اس الـ:

```
[root@mse3355-1 ~]#gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----
Base high availability configuration for this server
-----
```

```
Server role: Primary
Health Monitor IP Address: 10.10.10.15
Virtual IP Address: 10.10.10.14
Version: 7.2.103.0
UDI: AIR-MSE-3355-K9:V01:KQ37xx
Number of paired peers: 1
```

```
-----
Peer configuration#: 1
-----
```

```
Health Monitor IP Address 10.10.10.16
Virtual IP Address: 10.10.10.14
Version: 7.2.103.0
UDI: AIR-MSE-3355-K9:V01:KQ45xx
Failover type: Automatic
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3s
Instance database port: 1624
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: Yes
Heartbeat status: Up
Current state: PRIMARY_ACTIVE
```

```
[root@mse3355-2 ~]#gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----
Base high availability configuration for this server
-----
```

```
Server role: Secondary
```

```
Health Monitor IP Address: 10.10.10.16
Virtual IP Address: Not Applicable for a secondary
Version: 7.2.103.0
UDI: AIR-MSE-3355-K9:V01:KQ45xx
Number of paired peers: 1
```

```
-----
```

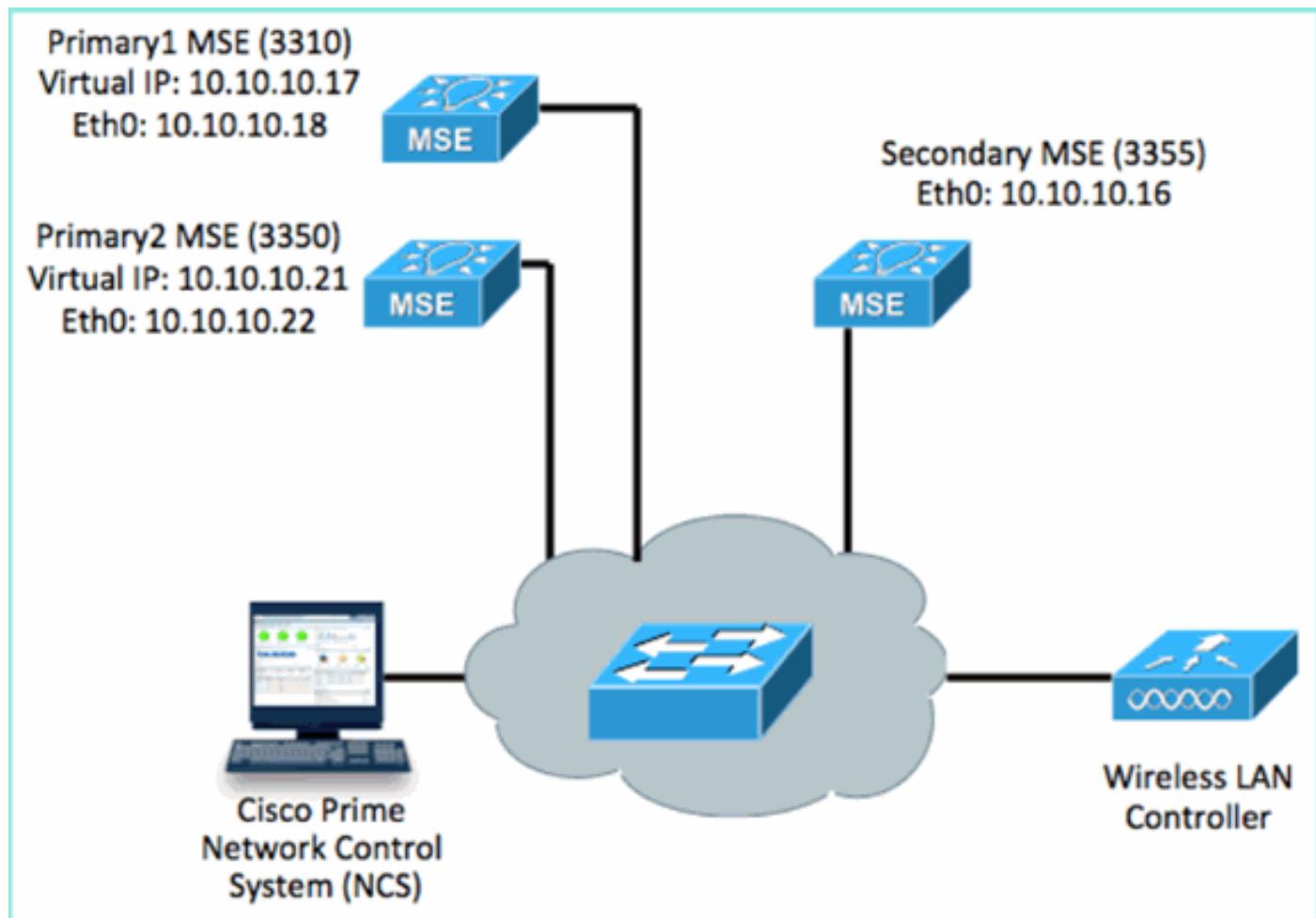
```
Peer configuration#: 1
```

```
-----
```

```
Health Monitor IP Address 10.10.10.15
Virtual IP Address: 10.10.10.14
Version: 7.2.103.0
UDI: AIR-MSE-3355-K9:V01:KQ37xx
Failover type: Automatic
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: Yes
Heartbeat status: Up
Current state: SECONDARY_ACTIVE
```

ي داملا زاهج لل HA نيوكت ويرانيس MSE

يأ، MSE-3355 ل زوچم اذه 2:1. وه HA نيوكت يف يصقألا دحلا، جوازتللا ۃفوفصم ىلا ادانتسا يف رشابملالا لاصتالا قبطنی ال. MSE-3310 و MSE-3350 تدناس عيطةتسی، یوناث عرضو یف ويرانيسلا اذه.



1. ويرانيس حيضوتل ٥ ذه ئم دخ نم دح او لك نويوكتب مق:

MSE-3310 (Primary1)

Server role: Primary

Health Monitor IP Address (Eth0): 10.10.10.17

Virtual IP Address: 10.10.10.18

Eth1 - Not Applicable

MSE-3350 (Primary2)

Server role: Primary

Health Monitor IP Address: 10.10.10.22

Virtual IP Address: 10.10.10.21

Eth1 - Not Applicable

MSE-3355 (Secondary)

Server role: Secondary

Health Monitor IP Address: 10.10.10.16

Virtual IP Address: Not Applicable for a secondary

2. وه امك NCS تاكبشنلى 2 Primary و Primary1 فضاً، تاکبشن عيجم نويوكت دعوب يف حضوم روصلا.

The screenshot shows the Cisco Prime Network Control System (NCS) interface. The top navigation bar includes Home, Monitor, Configure, Services, Reports, and Administration. The Services dropdown is expanded, showing Mobility Services Engines. The main content area displays a table of MSEs. The table has columns for Device Name, Device Type, IP Address, Version, Reachability Status, and Secondary Server. Two rows are visible: one for mse3350 (Cisco 3350 Mobility Services Engine, IP 10.10.10.21, Version 7.2.103.0, Reachable, Secondary Server N/A) and one for mse3310 (Cisco 3310 Mobility Services Engine, IP 10.10.10.18, Version 7.2.103.0, Reachable, Secondary Server N/A). Each row has a checkbox in the first column and a 'Configure' link in the last column.

	Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server
	mse3350	Cisco 3350 Mobility Services Engine	10.10.10.21	7.2.103.0	Reachable	N/A (Click here to configure)
	mse3310	Cisco 3310 Mobility Services Engine	10.10.10.18	7.2.103.0	Reachable	N/A (Click here to configure)

3. MSEs نم يأب أدبا. (ةقباسلى ٤لثمةلا يف حضوم وه امك) يوناثلا مداخللا نويوكتل رقنا يف حضوم وه امك ٤يساسألا روصلا.

Reachability Status	Secondary Server
Reachable	N/A (Click here to configure)
Reachable	N/A (Click here to configure) 

4. IP [MSE-3355-2] لاثمل ا ليبس ىلع :يوناثلا زاهجلامسا: يوناثلا MSE تاددم لخدأ يف حضوم وه امك ظفح قوف رقنـاـةـيـقـبـتـمـلـاـ تـامـلـعـمـلـاـ لـمـكـأـ[10.10.10.16] - يوناثلا روصـلـاـ.

HA Configuration : mse3350
 Services > Mobility Services Engines > System > Services High Availability > Configure High Availability Parameters

Configuration

Primary Health Monitor IP	10.10.10.22
Secondary Device Name	mse3355-2
Secondary IP Address	10.10.10.16
Secondary Password <small>(i)</small>	*****
Secondary Platform UDI	AIR-MSE-3355-K9:V01:KQ4
Failover Type <small>(i)</small>	Manual
Fallback Type <small>(i)</small>	Manual
Long Failover Wait <small>(i)</small>	10 seconds
<input type="button" value="Save"/> <input type="button" value="Delete"/> <input type="button" value="Switchover"/>	

5. يف حضوم وه امك لـوـأـلـاـ يـونـاثـلـاـ لـاخـدـالـاـ نـيـوـكـتـ مـنـيـ يـتـحـ ةـزـيـجـ وـةـظـحلـ رـظـتنـاـ رـوـصـلـاـ.

Please Wait. High Availability configuration is being created at the Primary and Secondary servers. This will take a few seconds...

• • • •

6. يف حضوم وه امك يس اس أ MSE ل وآل يونا ثلا م داخلا ةفاضا نم دكأ ن. روصلا.

Mobility Services Engines						
Services > Mobility Services Engines						
<input type="checkbox"/>	Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server
<input type="checkbox"/>	mse3350	Cisco 3350 Mobility Services Engine	10.10.10.21	7.2.103.0	Reachable	mse3355-2
<input type="checkbox"/>	mse3310	Cisco 3310 Mobility Services Engine	10.10.10.18	7.2.103.0	Reachable	N/A (Click here to configure)

7. يف حضوم وه امك يناثلا يس اس أ MSE ل 6 ىل 3 نم تاوطلخا ررك. روصلا.

Mobility Services Engines						
Services > Mobility Services Engines						
<input type="checkbox"/>	Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server
<input type="checkbox"/>	mse3350	Cisco 3350 Mobility Services Engine	10.10.10.21	7.2.103.0	Reachable	mse3355-2
<input type="checkbox"/>	mse3310	Cisco 3310 Mobility Services Engine	10.10.10.18	7.2.103.0	Reachable	N/A (Click here to configure)

8. يف حضوم وه امك يناثلا يس اس أ MSE ل HA تاملع مادختساب عاهن. روصلا.

HA Configuration : mse3310

Services > Mobility Services Engines > System > Services High Availability > **Configure High Availability Parameters**

Configure High Availability Parameters

Primary Health Monitor IP 10.10.10.17

Secondary Device Name mse3355-2

Secondary IP Address 10.10.10.16

Secondary Password  ·····

Failover Type 

Fallback Type 

Long Failover Wait  seconds

9. يف حضوم وہ امک تادادع إلا ظفحا
رةوصلنا.

HA Configuration : mse3310

Services > Mobility Services Engines > System > Services High Availability > **Configure High Availability Parameters**

Configuration

Primary Health Monitor IP 10.10.10.17

Secondary Device Name mse3355-2

Secondary IP Address 10.10.10.16

Secondary Password  ·····

Secondary Platform UDI AIR-MSE-3355-K9:V01:KQ

Failover Type 

Fallback Type 

Long Failover Wait  seconds

10. يف حضوم وہ امک ئيساسلى MSE تامدخت نم لىك مدققت ئلاح نم ققحت
رةوصلنا.

Cisco Prime Network Control System

Virtual Domain: ROOT-DOMAIN root Log Out

Home Monitor Configure Services Reports Administration

System

HA Configuration : mse3310
Services > Mobility Services Engine > System > Services High Availability > Current High Availability Status

Current High Availability Status

Status	Primary and secondary server synchronization in progress (60% complete)
Heartbeats	Up
Data Replication	Setting up
Mean Heartbeat Response Time	8 msec

Events Log

Event Description	Generated By	Timestamp
Heartbeats have been setup successfully	Primary	2012-Feb-17, 20:54:36 UTC
Primary and secondary server synchronization in progress	Primary	2012-Feb-17, 20:54:32 UTC
Configuration successfully created	Primary	2012-Feb-17, 20:54:32 UTC

Refresh Status

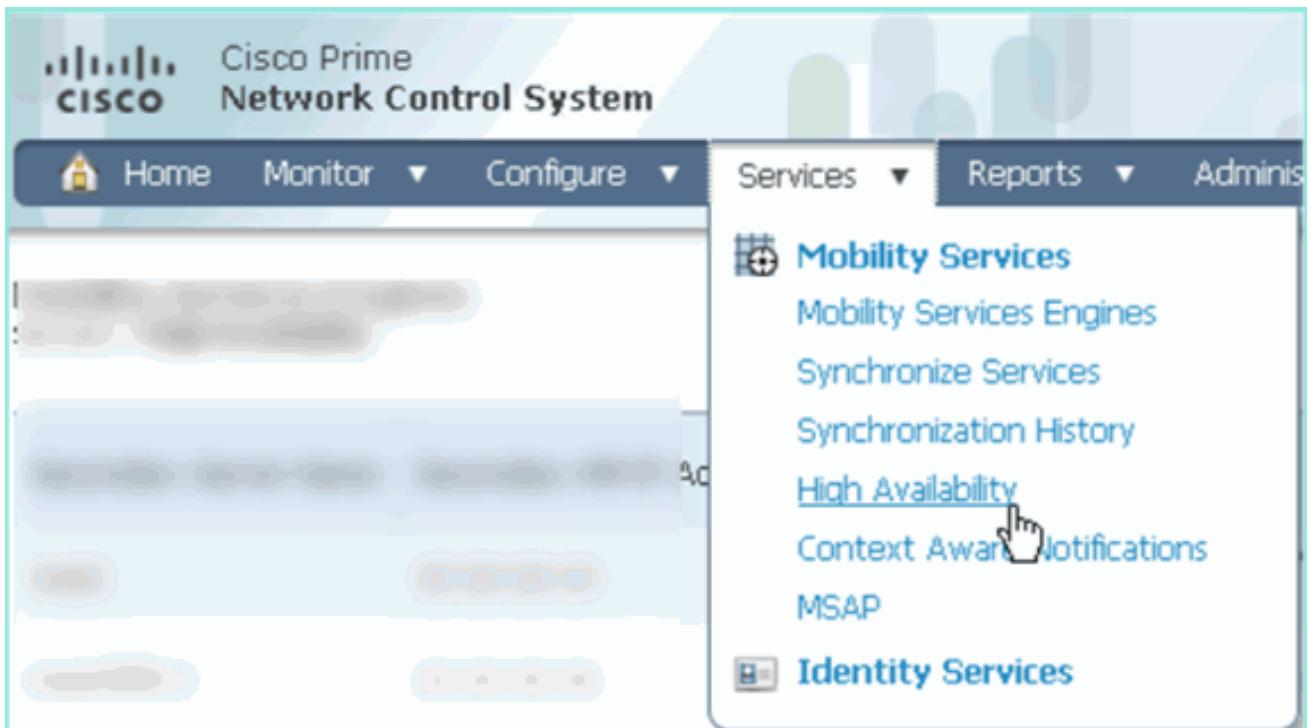
11. حضوم وہ امک یوناٹ لا MSE مادختساب2 و 1 میس اس الیا Primary نم لک دادعا نم دکاٹ یف روصلا.

Mobility Services Engines

Services > Mobility Services Engines

<input type="checkbox"/>	Device Name	Device Type	IP Address	Version	Reachability Status	Secondary Server
<input type="checkbox"/>	mse3350	Cisco 3350 Mobility Services Engine	10.10.10.21	7.2.103.0	Reachable	mse3355-2
<input type="checkbox"/>	mse3310	Cisco 3310 Mobility Services Engine	10.10.10.18	7.2.103.0	Reachable	mse3355-2

12. یف حضوم وہ امک لاع رفوت رت خا، لقنتلا تامدح > تامدح > NCS یل ا لقتنا روصلا.



و MSE-3310 و MSE-3350 زارطلل يوناث لدعه زارطلل 2:1 ديكأت مث هنأ ظحال يف حضوم واه امك روصلا.

Mobility Services Engines				Associated Primary Mobility Service Engines		
Secondary Server Name	Secondary HM IP Address	Secondary Device Type	Version	Device Name	Device Type	Heartbeats
mse3355-2	10.10.10.16	Cisco 3355 Mobility Services Engine	7.2.103.0	mse3310	Cisco 3310 Mobility Services Engine	Up
				mse3350	Cisco 3350 Mobility Services Engine	Up

لـا امـدـعـ ةـثـالـثـ لـكـ نـمـ مـكـحـتـلـلـ ةـيـفـرـطـ ةـدـحـولـاـ نـمـ جـاتـنـاـ ةـنـيـعـ اـنـهـ gethainfo:

```
[root@mse3355-2 ~]#gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----
Base high availability configuration for this server
-----
```

```
Server role: Secondary
Health Monitor IP Address: 10.10.10.16
Virtual IP Address: Not Applicable for a secondary
Version: 7.2.103.0
UDI: AIR-MSE-3355-K9:V01:KQ45xx
Number of paired peers: 2
```

```
-----
Peer configuration#: 1
-----
```

```

Health Monitor IP Address 10.10.10.22
Virtual IP Address: 10.10.10.21
Version: 7.2.103.0
UDI: AIR-MSE-3350-K9:V01:MXQ839xx
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Up
Current state: SECONDARY_ACTIVE

```

Peer configuration#: 2

```

Health Monitor IP Address 10.10.10.17
Virtual IP Address: 10.10.10.18
Version: 7.2.103.0
UDI: AIR-MSE-3310-K9:V01:FTX140xx
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos4
Instance database port: 1525
Dataguard configuration name: dg_mse4
Primary database alias: mseop4s
Direct connect used: No
Heartbeat status: Up
Current state: SECONDARY_ACTIVE

```

نم لکل لمک طاشنک ۋە لاحىلا رەظى NCS يىھىي ئەنلا قىقدىتلى MSE-3310 و MSE-3350 ھەممۇم وە امك روصىلار.

The screenshot shows the Cisco Prime Network Control System (NCS) interface. The top navigation bar includes Home, Monitor, Configure, Services, Reports, and Administration. The left sidebar under the 'System' tab is expanded, showing General Properties, Active Sessions, Trap Destinations, Advanced Parameters, Logs, Services High Availability (with HA Configuration and HA Status selected), Accounts (Users and Groups), and Status (Server Events and Audit Logs). The main content area displays the 'HA Configuration : mse3310' page, which is part of the 'Services > Mobility Services Engines > System > Services High Availability > Current High Availability Status' hierarchy. The 'Current High Availability Status' table shows the following data:

	Status	Active
Heartbeats	Up	
Data Replication	Up	
Mean Heartbeat Response Time	5 millisec	

Below this is the 'Events Log' table:

Event Description	Generated By
Active	Primary
Heartbeats have been setup successfully	Primary
Primary and secondary server synchronization in progress	Primary
Configuration successfully created	Primary

Cisco Prime Network Control System

Home Monitor Configure Services Reports Administration

System

- General Properties
- Active Sessions
- Trap Destinations
- Advanced Parameters
- Logs
- Services High Availability
 - HA Configuration
 - HA Status**
- Accounts
 - Users
 - Groups
- Status
 - Server Events
 - Audit Logs

HA Configuration : mse3350
Services > Mobility Services Engines > System > Services High Availability > Current High Availability Status

Current High Availability Status

Status	Active
Heartbeats	Up
Data Replication	Up
Mean Heartbeat Response Time	4 msec

Events Log

Event Description	Generated By
Active	Primary
Heartbeats have been setup successfully	Primary
Primary and secondary server synchronization in progress	Primary
Configuration successfully created	Primary

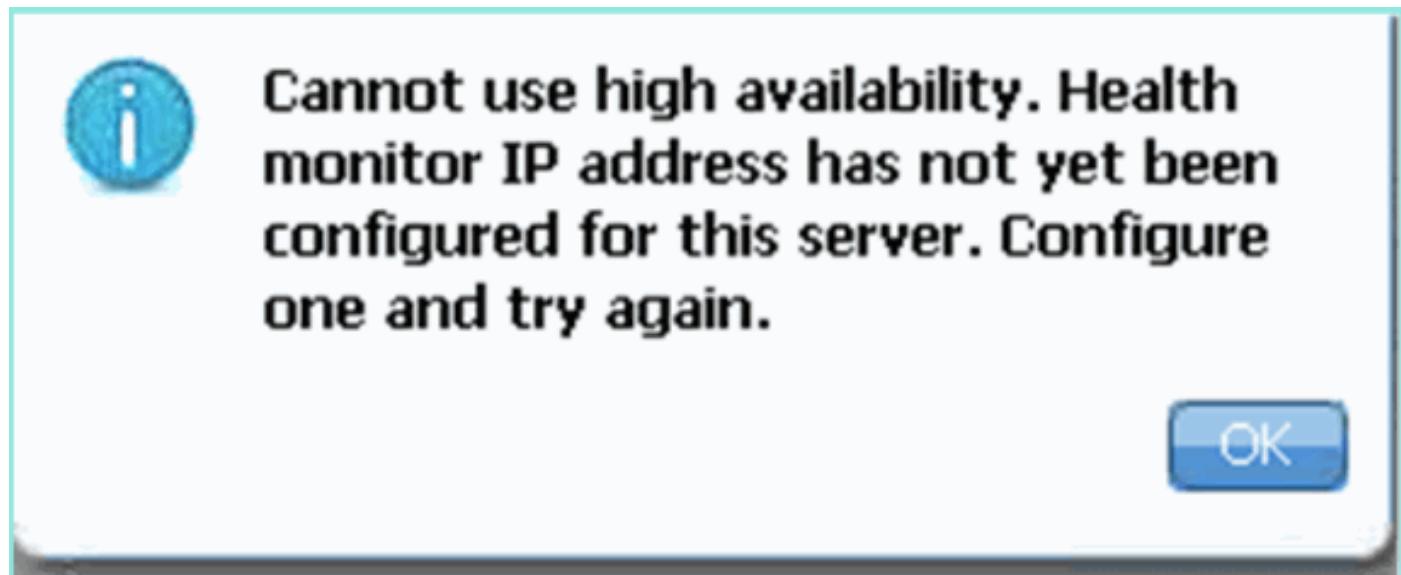
ةحصلا نم ققحتلا

نيوكتلا اذه ةحص نم ققحتلل ءارجاً ايلاح دجوي ال.

يف ئيساسألا لكاشملالح

اھالص او نيوكتلا ءاطخاً فاشكتسال اھمادختس اك نكمي تامولعم مسقلالا اذه رفوي

ةروصلالا يف حضوم وھ امك هجوم ئيورك نكمي ،يوناثلal MSE رشوفم ئفاضا دنع.

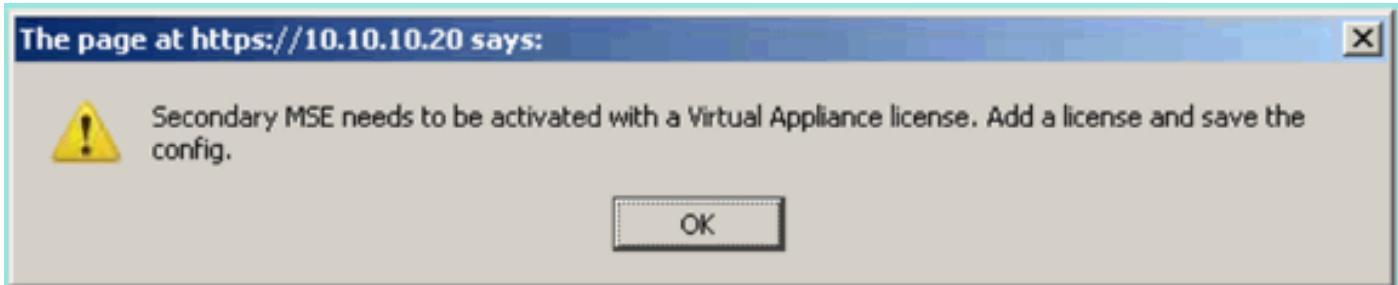


يصنلالا دادعلالا جمانرب ءانثأ ئلكلشم كانه ناك ،نكمملالا نم

- بسانملالا ئكبسلىلا تادادعإ نم ققحتلل getServerInfo رمألا ليغشت بمق.
- /init.d/msed start.
- (/mse/setup/setup.sh) رمألا مزل اذا يرخأ ئرم يصنلالا دادعلالا جمانرب لالخ نم ليغشتلىاب مق.

ياهنلا يف ظفحلاو.

دنع NCS بـلـاطـتـف ،ـالـاوـ (L-MSE-7.0-K9) طـيـشـنـتـلـا صـيـخـرـتـ MSE بـصـاخـلـا VA بـلـطـتـتـ اـمـكـ اـمـكـ هـتـفـاـضـ اوـ MSE VA بـصـاخـلـا طـيـشـنـتـلـا صـيـخـرـتـ لـىـلـعـ لوـصـحـلـاـ .ـيـونـاـثـلـاـ MSE VAـهـرـوـصـلـاـ يـفـ حـضـوـمـ وـهـ .ـ



فـاقـيـابـ مـقـ ،ـكـلـذـلـ لـمـاـكـ لـكـشـبـ تـامـدـخـلـاـ فـاقـيـاـ نـمـ دـكـأـتـ .ـرـوـدـلـيـدـبـتـ ةـلـاحـ يـفـ
ىـرـخـأـ ةـرـمـ يـصـنـلـاـ دـادـعـاـ جـمـانـرـبـ لـيـغـشـتـبـ مـقـ مـثـ .ـرـمـأـلـاـ مـاـدـخـتـسـاـبـ تـامـدـخـلـاـ
(/mse/setup/setup.sh)ـهـرـوـصـلـاـ يـفـ حـضـوـمـ وـهـ اـمـكـ .ـ

```
Applying High Availability configuration  
*** User has switched roles for this MSE. MSE must be stopped before switching roles.  
*** Please stop MSE and then re-run setup.sh.  
ERROR: One or more of the requested configurations was not applied.  
Role=2, Health Monitor Interface=eth0, Direct connect interface=none  
Success  
[root@mse2 setup]#
```

ةـدـيـفـمـ تـامـوـلـعـمـ اـذـهـ رـفـوـيـ .ـMSEـ مـىـلـعـ HAـ تـامـوـلـعـمـ مـقـ
اهـتـبـقـاـرـمـ وـأـهـحـالـصـ اوـاهـرـيـيـغـتـ وـHAـ ةـلـاحـ ءـاطـخـاـ فـاشـكـتـسـأـ يـفـ

```
[root@mse3355-2 ~]#gethainfo  
  
Health Monitor is running. Retrieving HA related information  
  
-----  
Base high availability configuration for this server  
-----  
  
Server role: Secondary  
Health Monitor IP Address: 10.10.10.16  
Virtual IP Address: Not Applicable for a secondary  
Version: 7.2.103.0  
UDI: AIR-MSE-3355-K9:V01:KQ45xx  
Number of paired peers: 2  
  
-----  
Peer configuration#: 1  
-----  
  
Health Monitor IP Address 10.10.10.22  
Virtual IP Address: 10.10.10.21  
Version: 7.2.103.0  
UDI: AIR-MSE-3350-K9:V01:MXQ839xx  
Failover type: Manual  
Fallback type: Manual  
Failover wait time (seconds): 10
```

```

Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Up
Current state: SECONDARY_ACTIVE

```

Peer configuration#: 2

```

Health Monitor IP Address 10.10.10.17
Virtual IP Address: 10.10.10.18
Version: 7.2.103.0
UDI: AIR-MSE-3310-K9:V01:FTX140xx
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos4
Instance database port: 1525
Dataguard configuration name: dg_mse4
Primary database alias: mseop4s
Direct connect used: No
Heartbeat status: Up
Current state: SECONDARY_ACTIVE

```

ةيُفر ةيناكما ىلع لوصح لـ ئار ةرادا ةادأ يه NCS HA ضرع ٽقيرط نإف ،كـلـذـىـلـإـ ةـفـاضـإـلـابـ رـوـصـلـاـ يـفـ حـضـومـ وـهـ اـمـكـ لـجـأـ نـمـ HA دـادـعـإـلـ.

The screenshot shows the Cisco Prime Network Control System interface. The top navigation bar includes Home, Monitor, Configure, Services, Reports, and Administration. The left sidebar has a tree view under System, with HA Status selected. The main content area displays HA Configuration details for mse3310, including Current High Availability Status (Status: Primary and secondary server synchronization in progress (60% complete), Heartbeats: Up, Data Replication: Setting up, Mean Heartbeat Response Time: 8 msec) and an Events Log table. The Events Log table has columns for Event Description, Generated By, and Timestamp, listing three events: 'Heartbeats have been setup successfully' (Primary, 2012-Feb-17, 20:54:36 UTC), 'Primary and secondary server synchronization in progress' (Primary, 2012-Feb-17, 20:54:32 UTC), and 'Configuration successfully created' (Primary, 2012-Feb-17, 20:54:32 UTC). A Refresh Status button is at the bottom of the log table.

Event Description	Generated By	Timestamp
Heartbeats have been setup successfully	Primary	2012-Feb-17, 20:54:36 UTC
Primary and secondary server synchronization in progress	Primary	2012-Feb-17, 20:54:32 UTC
Configuration successfully created	Primary	2012-Feb-17, 20:54:32 UTC

لاطعألا ةهجاوم/لشفل زواجت ويرانيس

مـكـحـتـلـاـ لـجـأـ نـمـ ،ـطـقـفـ لـاطـعـأـلاـ ةـهـجـاـومـ ىـلـعـ ةـيـوـدـيـلـاـ ةـرـدـقـلـاـ لـاطـعـأـلاـ ةـهـجـاـومـ ٽـلـاحـ يـفـ فـقـوـمـلـاـ لـضـفـأـ لـكـشـبـ.

مالتسالل زهاج يوناثل او قوف يس اسألا

روصلـاـ يـفـ حـضـومـ وـهـ اـمـكـ ىـلـعـ ةـلـاحـلـاـ نـإـفـ ،ـهـلـيـغـشـتـوـ MSEـ HAـ نـيـوـكـتـ درـجـمـبـ:

Current High Availability Status

Status	Active
Heartbeats	Up
Data Replication	Up
Mean Heartbeat Response Time	12 millsec

Events Log

Event Description	Generated By	Timestamp
Active	Primary	2015-Mar-08, 12:50:17 CET
Heartbeats have been setup successfully	Primary	2015-Mar-08, 12:39:17 CET
Primary and secondary server synchronization in progress	Primary	2015-Mar-08, 12:39:13 CET
Configuration successfully created	Primary	2015-Mar-08, 12:39:11 CET

يُسألا MSE بـ `getServerinfo` و `getChainInfo` مِنْ يَلِي امْيَف:

```
[root@NicoMSE ~]# getserverinfo
Health Monitor is running
Retrieving MSE Services status.
MSE services are up, getting the status

-----
Server Config
-----

Product name: Cisco Mobility Service Engine
Version: 8.0.110.0
Health Monitor Ip Address: 10.48.39.238
High Availability Role: 1
Hw Version: V01
Hw Product Identifier: AIR-MSE-VA-K9
Hw Serial Number: NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
HTTPS: null
Legacy Port: 8001
Log Modules: -1
Log Level: INFO
Days to keep events: 2
Session timeout in mins: 30
DB backup in days: 2

-----
Services
-----

Service Name: Context Aware Service
Service Version: 8.0.1.79
Admin Status: Disabled
Operation Status: Down

Service Name: WIPS
Service Version: 3.0.8155.0
Admin Status: Enabled
```

Operation Status: Up

Service Name: Mobile Concierge Service

Service Version: 5.0.1.23

Admin Status: Disabled

Operation Status: Down

Service Name: CMX Analytics

Service Version: 3.0.1.68

Admin Status: Disabled

Operation Status: Down

Service Name: CMX Connect & Engage

Service Version: 1.0.0.29

Admin Status: Disabled

Operation Status: Down

Service Name: HTTP Proxy Service

Service Version: 1.0.0.1

Admin Status: Disabled

Operation Status: Down

Server Monitor

Server start time: Sun Mar 08 12:40:32 CET 2015

Server current time: Sun Mar 08 14:04:30 CET 2015

Server timezone: Europe/Brussels

Server timezone offset (mins): 60

Restarts: 1

Used Memory (MB): 197

Allocated Memory (MB): 989

Max Memory (MB): 989

DB disk size (MB): 17191

Active Sessions

Session ID: 5672

Session User ID: 1

Session IP Address: 10.48.39.238

Session start time: Sun Mar 08 12:44:54 CET 2015

Session last access time: Sun Mar 08 14:03:46 CET 2015

Default Trap Destinations

Trap Destination - 1

IP Address: 10.48.39.225

Last Updated: Sun Mar 08 12:34:12 CET 2015

[root@NicoMSE ~]# gethainfo

Health Monitor is running. Retrieving HA related information

Base high availability configuration for this server

```
Server role: Primary
Health Monitor IP Address: 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Number of paired peers: 1
```

```
-----
Peer configuration#: 1
-----
```

```
Health Monitor IP Address 10.48.39.240
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3s
Instance database port: 1624
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Up
Current state: PRIMARY_ACTIVE
```

يوناثل ا لاجمل ةبسنلاب كي و:

```
[root@NicoMSE2 ~]# getserverinfo
Health Monitor is running
Retrieving MSE Services status.
MSE services are up and in DORMANT mode, getting the status
```

```
-----
Server Config
-----
```

```
Product name: Cisco Mobility Service Engine
Version: 8.0.110.0
Health Monitor Ip Address: 10.48.39.240
High Availability Role: 2
Hw Version: V01
Hw Product Identifier: AIR-MSE-VA-K9
Hw Serial Number: NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
HTTPS: null
Legacy Port: 8001
Log Modules: -1
Log Level: INFO
Days to keep events: 2
Session timeout in mins: 30
DB backup in days: 2
```

```
-----
Services
-----
```

```
Service Name: Context Aware Service
Service Version: 8.0.1.79
Admin Status: Disabled
Operation Status: Down
```

```
Service Name: WIPS
Service Version: 3.0.8155.0
Admin Status: Enabled
Operation Status: Up
```

```
Service Name: Mobile Concierge Service
Service Version: 5.0.1.23
Admin Status: Disabled
Operation Status: Down
```

```
Service Name: CMX Analytics
Service Version: 3.0.1.68
Admin Status: Disabled
Operation Status: Down
```

```
Service Name: CMX Connect & Engage
Service Version: 1.0.0.29
Admin Status: Disabled
Operation Status: Down
```

```
Service Name: HTTP Proxy Service
Service Version: 1.0.0.1
Admin Status: Disabled
Operation Status: Down
```

```
-----
Server Monitor
-----
```

```
Server start time: Sun Mar 08 12:50:04 CET 2015
Server current time: Sun Mar 08 14:04:32 CET 2015
Server timezone: Europe/Brussels
Server timezone offset (mins): 60
Restarts: null
Used Memory (MB): 188
Allocated Memory (MB): 989
Max Memory (MB): 989
DB disk size (MB): 17191
[root@NicoMSE2 ~]# gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----
Base high availability configuration for this server
-----
```

```
Server role: Secondary
Health Monitor IP Address: 10.48.39.240
Virtual IP Address: Not Applicable for a secondary
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Number of paired peers: 1
```

```
-----
Peer configuration#: 1
-----
```

```
Health Monitor IP Address 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Failover type: Manual
Fallback type: Manual
```

```

Failover wait time (seconds): 10
Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Up
Current state: SECONDARY_ACTIVE

```

ةيوناثلا ىلشفل

ةيساسأ ةينب prime يف ليكشت HA لـ MSE ايوه تقلطأ ، ايودي تقلع تقطق طو و switchover.

هـؤـاعـدـتـسـا مـتـ يـذـلـاـ_ـلـشـفـلـ زـواـجـتـ ىـلـاـ نـيـمـداـخـلـاـ الـكـ ىـلـعـ GetInfo لـوحـتـيـسـ ،ـقـئـافـ ـعـرسـبـ وـ يـلـوـأـلـاـ وـفـنـيـاـثـيـجـ:

```

[root@NicoMSE ~]# gethainfo

Health Monitor is running. Retrieving HA related information

-----
Base high availability configuration for this server
-----

Server role: Primary
Health Monitor IP Address: 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Number of paired peers: 1

-----
Peer configuration#: 1
-----

Health Monitor IP Address 10.48.39.240
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3s
Instance database port: 1624
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Down
Current state: FAILOVER_INVOKED

```

ةيوناثلا ىلشفل

```

[root@NicoMSE2 ~]# gethainfo

Health Monitor is running. Retrieving HA related information

-----
```

```
Base high availability configuration for this server
-----
Server role: Secondary
Health Monitor IP Address: 10.48.39.240
Virtual IP Address: Not Applicable for a secondary
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Number of paired peers: 1
```

```
-----  
Peer configuration#: 1  
-----
```

```
Health Monitor IP Address 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Down
Current state: FAILOVER_INVOOKED
```

يـف ةـروصـلـا هـذـهـ يـرـتـسـ، لـشـفـلـا زـواـجـتـ لـمـتـكـيـ نـأـ درـجـمـبـ

Status

Instance is in failover active state

Events Log

Event Description	Generated By
Instance is in failover active state	Secondary
Failover invoked; starting application instance	Secondary
Failover has been invoked. Reconfiguring instance database	Secondary
Failover invoked; shutting down primary instance	Secondary

يـسـاسـأـلـا وـفـنـيـاـثـيـجـلـا :

```
[root@NicoMSE ~]# gethainfo

Health Monitor is not running. Following information is from the last saved configuration
-----
Base high availability configuration for this server
-----
```

```
Server role: Primary
Health Monitor IP Address: 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Number of paired peers: 1
```

```
-----
Peer configuration#: 1
-----
```

```
Health Monitor IP Address 10.48.39.240
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3s
Instance database port: 1624
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Last shutdown state: FAILOVER_ACTIVE
```

يوناثل:

```
[root@NicomSE2 ~]# gethainfo
Health Monitor is running. Retrieving HA related information
-----
Base high availability configuration for this server
-----
Server role: Secondary
Health Monitor IP Address: 10.48.39.240
Virtual IP Address: Not Applicable for a secondary
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Number of paired peers: 1
```

```
-----
Peer configuration#: 1
-----
```

```
Health Monitor IP Address 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Down
Current state: FAILOVER_ACTIVE
```

يوناثل MSE رشوفم نوکی و هنم عاهتنالا مت دق لشفل زجاجت نوکی ۃلحرملا ہذہ یفو امامت الوئسم.

لیوحتلاب مایقلا دنع فقوتت يسیئرلا MSE ىلع ڈوجوملا تامدخل نأ ىلا ڈراش إلاردرجت
(لفسأ ىلا ھھي جوت متى يذلا يساسألا MSE رش فملل يقي قح ثدح ڈاکاحم لجأ نم) يوديل

اي عي بط رمألا لازى ال اهتللاح "ءاهنإ" مت يس، ةيساسألا ڈي طايتحالا ڈخسنلا راضحاب تمدق اذا
رهظيو هب لومعم وہ امك اي ونا ثو

يساسألا ىلا ڈوعلا يف لشفلا

ىلعألا ىلا يساسألا عاجراب موقت نأ كيلع بجي، ڈوعلا يف لشفت نأ لباق.

وھتمنم" كلذ دعب اهتللاح و:

```
[root@NicoMSE ~]# gethainfo

Health Monitor is running. Retrieving HA related information

-----
Base high availability configuration for this server
-----

Server role: Primary
Health Monitor IP Address: 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Number of paired peers: 1

-----
Peer configuration#: 1
-----

Health Monitor IP Address 10.48.39.240
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3s
Instance database port: 1624
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Down
Current state: TERMINATED
ي وھ "FaultBack Active" يف نيم سقلالا الک لاخدا متى، Prime نم ءاعادتسا دنع
ي وھ "FailOver Active").
```

يساسألا وفن ياثي جلا :

```
[root@NicoMSE ~]# gethainfo

Health Monitor is running. Retrieving HA related information

-----
Base high availability configuration for this server
-----
```

```
Server role: Primary
Health Monitor IP Address: 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Number of paired peers: 1
```

```
-----
Peer configuration#: 1
-----
```

```
Health Monitor IP Address 10.48.39.240
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3s
Instance database port: 1624
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Down
Current state: FAILBACK_ACTIVE
```

يُناثل وفنياً ثالث:

```
[root@NicoMSE2 ~]# gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----
Base high availability configuration for this server
-----
```

```
Server role: Secondary
Health Monitor IP Address: 10.48.39.240
Virtual IP Address: Not Applicable for a secondary
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66
Number of paired peers: 1
```

```
-----
Peer configuration#: 1
-----
```

```
Health Monitor IP Address 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Down
Current state: FAILBACK_ACTIVE
```

يُنثر صرعي Prime هذه روصلاً:

Event Description**Generated By****Fallback in progress; starting primary database instance****Secondary**

ىلإ ئرخاً ۋرم تانايىبلە لقنب الوغشم لازىي ال يۇناثلا نكلىو لاطعألا عاجرا ۋېلىم مامتى دىن دىسەسلا رەھظىي، يىسەسلا:

```
gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----  
Base high availability configuration for this server  
-----
```

```
Server role: Primary  
Health Monitor IP Address: 10.48.39.238  
Virtual IP Address: 10.48.39.224  
Version: 8.0.110.0  
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63  
Number of paired peers: 1
```

```
-----  
Peer configuration#: 1  
-----
```

```
Health Monitor IP Address 10.48.39.240  
Virtual IP Address: 10.48.39.224  
Version: 8.0.110.0  
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66  
Failover type: Manual  
Failback type: Manual  
Failover wait time (seconds): 10  
Instance database name: mseos3s  
Instance database port: 1624  
Dataguard configuration name: dg_mse3  
Primary database alias: mseop3s  
Direct connect used: No  
Heartbeat status: Up  
Current state: FAILBACK_COMPLETE
```

يۇناثلا ضرعىل:

```
[root@NicoMSE2 ~]# gethainfo
```

```
Health Monitor is running. Retrieving HA related information
```

```
-----  
Base high availability configuration for this server  
-----
```

```
Server role: Secondary  
Health Monitor IP Address: 10.48.39.240  
Virtual IP Address: Not Applicable for a secondary  
Version: 8.0.110.0  
UDI: AIR-MSE-VA-K9:V01:NicoMSE2_1c6b1940-b6a5-11e4-b017-005056993b66  
Number of paired peers: 1
```

Peer configuration#: 1

```
Health Monitor IP Address 10.48.39.238
Virtual IP Address: 10.48.39.224
Version: 8.0.110.0
UDI: AIR-MSE-VA-K9:V01:NicoMSE_b950a7c0-b68c-11e4-99d9-005056993b63
Failover type: Manual
Fallback type: Manual
Failover wait time (seconds): 10
Instance database name: mseos3
Instance database port: 1524
Dataguard configuration name: dg_mse3
Primary database alias: mseop3s
Direct connect used: No
Heartbeat status: Up
Current state: SECONDARY_ALONE
```

Prime يف حضوم وہ امک ۃلحرملہ ہذہ یف:

Current High Availability Status

Status	Primary instance is not synchronized with the secondary server. In progress.
Heartbeats	Up
Data Replication	Up
Mean Heartbeat Response Time	13 millisec

Events Log

Event Description	Generated By
Heartbeats have been setup successfully	Primary

و ۃسیاساً HA ۃللاح رهظت: ۃیلصلاؤا ۃللاحلا یلإ تالاحلا عیمج دوعت، اذہ لاماتکا دنع SESECONDARY_ACTIVE و Prime HA ۃللمع لثム.

HA State Matrix

Primary_Active	نوكتو ۃیسیئر نوكت ام دنع ۃیسیاساً (MSE) مجھلا ۃطسوتم ۃمدخ ۃللاح ماری ام یلعل عیش لکو ۃلؤوس م
طشن یوناث	لؤوس ملہ سیل نکلو ۃجاحلا دنع یمویلا ۃماقیلا لدبیل ۃیوناثلا ۃللاحلا ۃجاحلا دنع ۃمہملا یلولوتل زہاج (دعب وہ ۃیسیاساً)
یذلـا_لـشـفـلـا زـواـجـتـ	MSE نأ یأ، لـشـفـلـا زـواـجـتـ ثـودـحـ دـنـعـ لـیـغـشـتـلـا یـتـدقـعـ الـکـ یـفـ حـضـومـ وـہـ اـمـکـ ۃیسیاساً نـانـایـبـ ۃـدـعـاـقـ لـیـمـحـتـلـ اـهـتـامـدـخـ لـیـغـشـتـ اـدـبـتـ ۃـیـونـاثـلـاـ
ھـؤـاعـدـتـسـاـمـتـ	یـونـاثـلـاـ یـحـصـلـاـ فـرـصـلـاـ رـاعـسـاـ رـشـفـمـ رـبـتـعـیـ لـشـفـلـاـ زـواـجـتـلـ ۃـیـئـاـہـنـلـاـ ۃـلـاحـلـاـ دقـ ۃـیـسـیـاسـاـ یـحـصـلـاـ فـرـصـلـاـ رـاعـسـاـ رـشـفـمـ نـوـکـیـ اـمـنـیـبـ "لـیـغـشـتـلـلـ اـزـہـاجـ" ضـفـخـنـاـ
زـواـجـتـ	یـہـ نـوـکـتـ الـ اـمـدـنـعـ وـہـ لـطـعـمـ اـہـنـوـکـ دـعـبـ تـامـدـخـلـاـ عـمـ دـوـعـتـ یـتـلـاـ مـدـقـعـ ۃـلـاحـ لـیـغـشـتـ ۃـدـاعـاـ دـنـعـ ۃـیـسـیـاسـاـ ۃـلـاحـ نـوـکـتـ نـأـ نـکـمـیـ کـلـذـلـ (لـوـلـؤـوسـ مـلـاـ ۃـدـقـعـلـاـ
طـشـنـلـاـلـشـفـلـاـ	طـبـارـنـأـ اـضـیـأـ یـنـعـیـ اـذـہـوـ (یـوـنـاثـلـاـ مـسـیـ ۃـلـاحـ نـوـکـیـ اـلـوـتـامـدـخـلـاـ) لـیـغـشـتـلـاـ ۃـدـاعـاـبـ مـوـقـیـ مـسـیـ ۃـلـاحـ نـاـکـ اـذـاـ) لـیـغـشـتـلـاـ دـیـقـ نـوـکـیـ الـ دـقـ لـیـغـشـتـلـاـ ۃـدـاعـاـبـ مـوـقـیـ مـسـیـ ۃـلـاحـ نـاـکـ اـذـاـ) لـیـغـشـتـلـاـ دـیـقـ نـوـکـیـ الـ دـقـ
ھـؤـاهـنـاـمـتـ	(بـحـسـ نـکـمـیـ الـ ۃـطـاسـبـبـ وـہـ اـلـاـثـمـلـاـ لـیـبـسـ یـلـعـ)

FailedBack_Active	لشفل زواجت سكعيل لـ HA يه هذه تسيل ، لشفل زواجت سكعيل تانايبل ادعاق خسن نآلا متى . ايلاح ثدي هنأو عجارتل اعادتسا مت هنأ ينعمي يسأساً يلإ "يوناث" نم
FailedBack_Complete	لارت ال اهنكلو ئيل وؤسملا عضولـا دوعت امدنع ئيساسـاً لـ HA دقعلا ئلاح دادرتسـا ئيلمع عارجـا دنع ئيوناثـا (MSE) مجحـلا ئطسوـتم ئرادـلا ئمدـخ ئلاح ئلاح ليـمحـت يـف رـارـمـتـسـالـا عـمـ نـكـلـوـلـيـغـشـتـلـا دـيـقـ يـسـاسـاـًـاـ نـوكـيـوـلـاطـعـاـلـاـ تـانـايـبـلـاـ

هـدوـيـونـاثـلـاـ مـيـلـعـ اـهـفـاقـيـاـ وـأـيـوـدـيـ تـامـدـخـلـاـ دـيـهـمـتـ دـاعـابـ تـمـقـ اذاـ ئـلاحـلـاـ لـيـغـشـتـ مـتـيـ

يـلـوـتـتـ نـلـ اـهـنـأـ يـنـعـيـ اـهـدـهـوـ .ـ ايـيـاـقـلـتـ لـاطـعـاـلـاـ عـاجـراـ/ـلـاطـعـاـلـاـ زـواـجـتـ ئـلاحـ يـفـ رـخـاـلـاـ عـئـارـ لـيـغـشـتـ فـاقـيـاـ

يـوـدـيـ فـقـوـتـلـاـ تـقـوـرـيـحـتـ مـتـ هـنـأـ اـرـظـنـ ئـهـمـلـاـ

نم مـهـمـ عـئـاقـوـوـتـ اـظـحـاـلـ

- مامـتـ اـدـعـبـ اـرـوفـ لـشـفـلـلـ هـيـجـوـتـ ئـدـاعـاـ ئـيلـمـعـ ثـودـحـ يـفـ بـبـسـتـلـاـ مـدـعـ ئـيـاغـلـلـ مـهـمـلـاـ نـمـ
- تيـبـثـتـلـ ئـقـيـقـدـ 30ـ يـلـاـ تـانـايـبـلـاـ دـعـاوـقـ جـاتـحـتـ حـيـحـصـ سـكـعـلـاـوـ لـشـفـلـاـ زـواـجـتـ ئـيلـمـعـ
- يـهـ HAـ يـهـ base-ha-config.propertiesـ inـ /opt/mse/health-monitor/resources/configـ مـدـخـتـسـاـ)ـ ايـوـدـيـ اـهـرـيـحـتـ مـتـيـ نـأـ اـهـبـ دـصـقـيـ مـلـ كـلـذـعـمـوـ(/ـ setup.shـ كـشـلـاـ ئـلاحـ يـفـ اـهـارـتـ نـأـ كـنـكـمـيـ نـكـلـ وـ(ـ كـلـذـ نـمـ اـلـدـبـ
- يـهـ كـلـذـبـ مـاـيـقـلـلـ ئـدـيـحـوـلـاـ ئـفـيـظـنـلـاـ ئـقـيـرـطـلـاـ .ـ ايـوـدـيـ HAـ رسـكـ ضـرـتـفـمـلـاـ نـمـ نـكـيـ مـلـ
- يـفـ setup.shـ لـيـغـشـتـ)ـ يـرـخـاـ ئـقـيـرـطـ يـأـ .ـ هـانـأـ Primeـ نـمـ ئـيـونـاثـلـاـ قـوـسـلـاـ رـاعـسـاـ رـشـفـذـحـ ئـلاحـلـاـ زـاهـجـوـتـانـايـبـلـاـ ئـدـعـاـقـ رـسـكـتـسـ (ـ...ـ ipـ رـيـيـغـتـ ،ـ تـيـبـثـتـ ئـلـازـاـ ،ـ يـسـاسـاـ هـلـعـجـلـ يـوـنـاثـلـاـ نـمـ اـلـكـ تـيـبـثـتـ ئـدـاعـاـ يـلـاـ جـاتـحـتـ نـأـ لـمـتـحـمـلـاـ نـمـوـ

اـحـالـصـ اوـ فـاشـكـتـسـأـ

نـوكـيـ.*ـقـحـصـلـاـ ئـبـقـارـمـ عـمـ /opt/mse/log/hmـ لـيـلـدـ نـمـضـ HAـ ئـلـصـلـاـ تـاـذـ تـالـجـسـلـاـ ظـفـحـ مـتـيـ يـسـاسـاـلـاـ لـجـسـلـاـ فـلـمـ وـهـ لـجـسـلـاـ

(ـغـامـدـلـاـ مـاـسـقـنـاـ ئـلاحـ)ـ نـاـطـشـنـ يـوـنـاثـلـاـوـ يـسـاسـاـلـاـ نـمـ لـكـ :ـ ئـلـكـشـمـلـاـ

1. نـوكـيـسـ .ـ ئـيـونـاثـلـاـ يـلـعـ (ـVIPـ)ـ ئـرـهـاـظـلـاـ IPـ ئـهـجـاـوـ لـيـغـشـتـ فـاقـيـابـ مـقـ down

2. يـوـنـاثـلـاـ يـفـ تـامـدـخـلـاـ لـيـغـشـتـ ئـدـاعـاـ MSEـ

ـقـمـدـخـلـاـ لـيـغـشـتـ فـاقـيـاـ

ـقـمـدـخـلـاـ جـذـوـمـنـ لـيـغـشـتـ عـدـبـ

نـمـ يـسـاسـاـلـاـ رـادـصـاـلـاـ عـمـ يـرـخـاـ ئـرـمـ ئـنـمـازـمـلـاـ يـفـ أـدـبـ دـقـ يـوـنـاثـلـاـ جـمـانـرـبـلـاـ نـاـكـ اـذـاـ اـمـ قـقـحـتـ 3.ـ لـ ئـيـسـاسـاـلـاـ ئـيـنـبـلـاـ Primeـ

ـ ئـلـيـوـطـ ئـدـمـلـ X%ـ يـفـ دـوـجـوـمـ رـيـغـ HAـ لـ يـسـاسـاـلـاـ عـمـ ئـيـوـنـاثـلـاـ نـمـازـتـ :ـ ئـلـكـشـمـلـاـ

1. ئـيـوـنـاثـلـاـ ئـلـحـرـمـلـاـ يـفـ ئـمـدـخـلـاـ فـقـوـأـ

ـقـمـدـخـلـاـ لـيـغـشـتـ فـاقـيـاـ

2. /opt/mse/health-monitor/resources/config/advance-cconfig-<ip-address-of-

يوناثلا ىلع فلم `primary>.properties`.

مدع ۋەلچىلۇ لىصىو دق نوكىي نأ نكىمىي ھنإف، HA ئاشنى يىف لىكاشم كانھ لازت اىل تناناڭ اذى. ئيوناثلا ۋەلچىرملە يىف "تاناىيبلە"لىلد راتا ئىش لىك ۋەلچىلۇ نىيۇتىي ۋېچق قىفاوت `RM -rf /opt/data/*`

عىدبلىس اسألا ىلى Prime Infrastructure نم ھتفضلاب مۇق. ئيوناثلا ۋەلچىرملە لىيغىشت دعأ. ئىرخا ئەرم HA.

ھىلە لوصولى رەزىعت دىعب PI نم يوناثلا مىداخىلا فەذح رەزىعتى: ۋەلچىرملە

1. يىس اسألا يىف ۋەمدەلە فاقىياب مۇق.

2. يىس اسألا ىلى `/opt/mse/health-monitor/resources/config/advance-cconfig-<ip-address-of-primary>.properties` ۋەلازاب مۇق.

3. يىس اسألا ىلى ۋەمدەلە لىيغىشت ئەداعىاب مۇق.

4. ھتفضلاب دعأو PI نم يىس اسألا MSE فەذحى.

هـ لـ وـ لـ جـ رـ تـ لـ اـ هـ ذـ هـ

ةـ يـ لـ آـ لـ اـ تـ اـ يـ نـ قـ تـ لـ اـ نـ مـ مـ جـ مـ وـ عـ مـ اـ دـ خـ تـ سـ اـ بـ دـ نـ تـ سـ مـ لـ اـ اـ ذـ هـ تـ مـ جـ رـ تـ
لـ اـ عـ لـ اـ ءـ اـ حـ نـ اـ عـ يـ مـ جـ يـ فـ نـ يـ مـ دـ خـ تـ سـ مـ لـ لـ مـ عـ دـ ئـ وـ تـ حـ مـ يـ دـ قـ تـ لـ ةـ يـ رـ شـ بـ لـ اـ وـ
اـ مـ كـ ةـ قـ يـ قـ دـ نـ وـ كـ تـ نـ لـ ةـ يـ لـ آـ ةـ مـ جـ رـ تـ لـ ضـ فـ اـ نـ اـ ةـ ظـ حـ اـ لـ مـ ئـ جـ رـ يـ .ـ صـ اـ خـ لـ اـ مـ هـ تـ غـ لـ بـ
يـ لـ خـ تـ .ـ فـ رـ تـ حـ مـ مـ جـ رـ تـ مـ اـ هـ دـ قـ يـ يـ تـ لـ اـ ةـ يـ فـ اـ رـ تـ حـ اـ لـ اـ ةـ مـ جـ رـ تـ لـ اـ عـ مـ لـ اـ حـ لـ اـ وـ
ىـ لـ إـ أـ مـ ئـ اـ دـ عـ وـ جـ رـ لـ اـ بـ يـ صـ وـ تـ وـ تـ اـ مـ جـ رـ تـ لـ اـ هـ ذـ هـ ةـ قـ دـ نـ عـ اـ هـ تـ يـ لـ وـ ئـ سـ مـ
(رـ فـ وـ تـ مـ طـ بـ اـ رـ لـ اـ)ـ يـ لـ صـ أـ لـ اـ يـ زـ يـ لـ جـ نـ إـ لـ اـ دـ نـ تـ سـ مـ لـ اـ).