

# Hiperverificação: Hyperflex Health & Ferramenta de verificação de pré-atualização

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## Introduction

Este documento descreve o processo para executar a ferramenta Hypercheck Health & Pre-Upgrade. Essa ferramenta é um utilitário para executar autoverificações proativas em sistemas hiperflex para garantir sua estabilidade e resiliência. Ele ajuda a automatizar uma lista de verificações de integridade e pré-atualização em sistemas hiperflex para economizar tempo durante operações de atualização e manutenção de hiperflex.

**NOTA:** Faça sempre o download da versão mais recente da ferramenta antes de usá-la. Como a ferramenta é aprimorada com frequência, o uso de versões mais antigas pode resultar na falta de verificações importantes.

## Sistemas HX suportados

- Versões hiperflex - 1.8, 2.0, 2.1, 2.5, 2.6, 3.0, 3.5, 4.0, 4.5
- Cluster padrão Hyperflex
- Cluster estendido hiperflex
- Cluster de borda hiperflex (2 nós, 3 nós e 4 nós)
- Suportado somente no cluster Hyperflex no VMWare ESXi

**NOTA:** Como executar o Hypercheck no cluster HyperV hiperflex, Visite -

<https://www.cisco.com/c/en/us/support/docs/hyperconverged-infrastructure/hyperflex-hx-data-platform/216027-hypercheck-hyperflex-health-pre-upgr.html>

## Quando usar

- Antes das atualizações do Hyperflex.
- Verificação de Integridade do Hyperflex antes e depois das Janelas de Manutenção

- Para identificar unidades/discos com falha.
- Ao trabalhar com o Cisco TAC
- Verificação de integridade pró-ativa a qualquer momento.

## How to Use

### HX versão 4.5

**Etapa 1.** SSH para a VM do controlador de armazenamento (SCVM) com o IP de gerenciamento de cluster (CMIP) que é o IP de conexão HX.

**Etapa 2.** Execute o comando "hypercheck"

```
admin:~$ hypercheck
```

**Etapa 3.** Insira a senha do administrador SCVM quando solicitado e, em seguida, insira a senha raiz do ESXI.

```
admin:~$ hypercheck
```

```
HX Health Check 4.5.0
```

```
Please enter below info of HX-Cluster:
```

```
Enter the HX-Cluster Admin Password:
```

```
Enter the ESX Root Password:
```

### HX versão 4.0 e inferior

**Etapa 1.** Baixe o Hyperflex-Hypercheck.zip da conta do Cisco github devnet [aqui](#). Obtenha a cópia mais recente que terá as melhorias e atualizações mais recentes.

*NOTA: Use apenas o script baixado da conta do Cisco github devnet.*

CiscoDevNet / Hyperflex-Hypercheck **1**

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Perform pro-active self checks on your Hyperflex cluster to ensure stability and resiliency Edit

Manage topics

12 commits 1 branch 0 releases 2 contributors MIT

Branch: master New pull request Create new file Upload files Find File **Clone or download** **2** Use SSH

Clone with HTTPS ? Use Git or checkout with SVN using the web URL.  
/CiscoDevNet/Hyperflex-Hypercheck.git 📄

Open in Desktop **Download ZIP**

avshukla Update ReadMe.txt		
HXTool.py	Update HXTool.py	
LICENSE.txt	initial version	
ReadMe.txt	Update ReadMe.txt	
TestInfo.txt	Update TestInfo.txt	
prettytable.py	initial version	<b>3</b> 3 days ago
progressbar.py	initial version	3 days ago

**Etapa 2.** Faça o upload para a VM do controlador de armazenamento (SCVM) com o IP de gerenciamento de cluster (CMIP)

Use seu método preferido - **scp/sftp/ftp/tftp** - para copiar o Hyperflex-Hypercheck.zip para o diretório **/tmp**

**Para MAC:**

Execute o SCP a partir da CLI (confirme se o Hyperflex-Hypercheck.zip está na mesma pasta a partir da qual você está executando o scp)

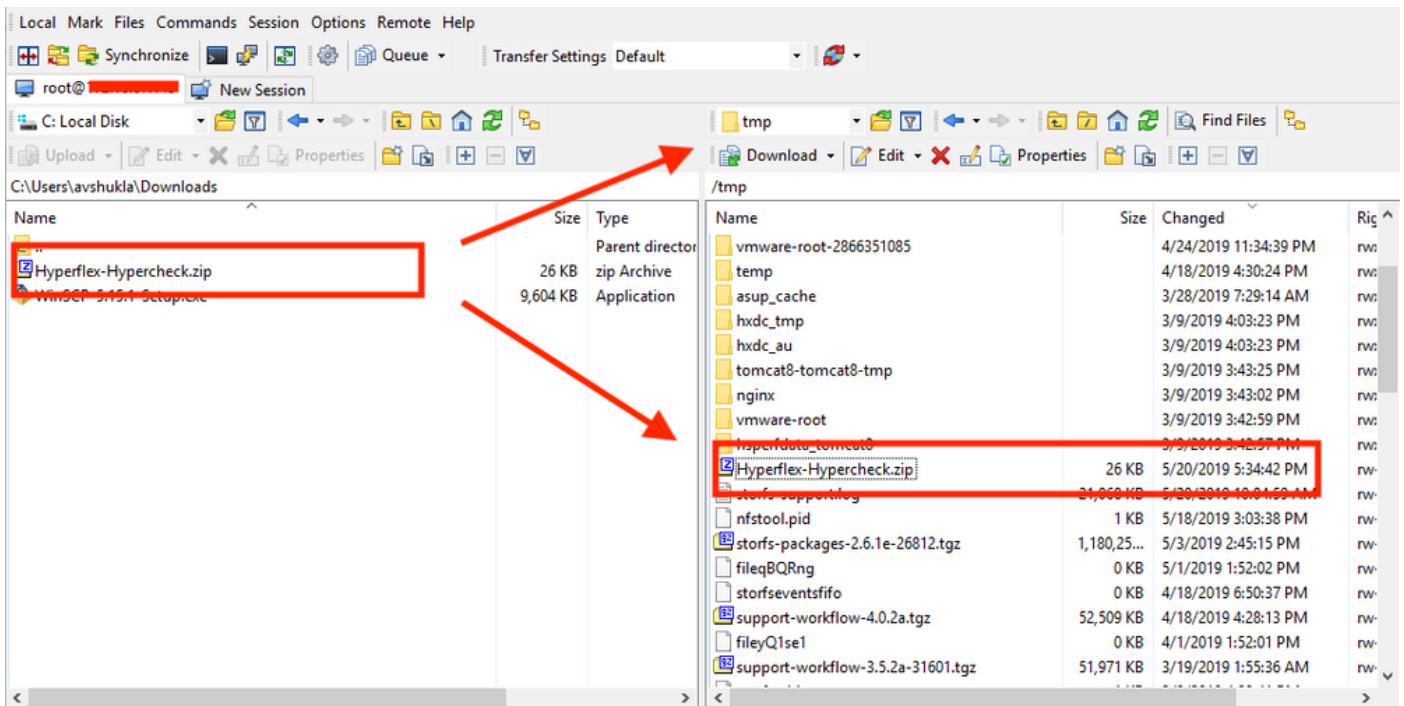
```
# scp Hyperflex-Hypercheck.zip root@<scvm-eth0:mgmtip>:/tmp/
```

Utilize o seguinte para identificar o IP de Gerenciamento de Cluster em seu ambiente HX - [manual do Hyperflex](#)

```
AVSHUKLA-M-Q13M:Downloads avshukla$ scp Hyperflex-Hypercheck.zip root@[REDACTED]:/tmp/
HyperFlex StorageController 3.5(2a)
root@[REDACTED]'s password:
Hyperflex-Hypercheck.zip                               100% 26KB 107.4KB/s 00:00
AVSHUKLA-M-Q13M:Downloads avshukla$
AVSHUKLA-M-Q13M:Downloads avshukla$
```

**Para Windows:**

Podemos usar o WINSOCP para transferir os arquivos conforme mostrado abaixo-



### Etapa 3. Extraia o conteúdo do Hyperflex-Hypercheck.zip

Digite `cd /tmp` para alterar para o diretório `/tmp`

```
root@SpringpathController7PVQWP6WV1:~# cd /tmp/
```

Digite `unzip Hyperflex-Hypercheck.zip` para extrair os arquivos

```
root@SpringpathController7PVQWP6WV1:/tmp# unzip Hyperflex-Hypercheck.zip
Archive:  Hyperflex-Hypercheck.zip
b61c59f7962b72902692ce70548ba3d760efdf06
  creating: Hyperflex-Hypercheck/
  inflating: Hyperflex-Hypercheck/HXTool.py
  inflating: Hyperflex-Hypercheck/LICENSE.txt
  inflating: Hyperflex-Hypercheck/ReadMe.txt
  inflating: Hyperflex-Hypercheck/TestInfo.txt
  inflating: Hyperflex-Hypercheck/prettytable.py
  inflating: Hyperflex-Hypercheck/progressbar.py
root@SpringpathController7PVQWP6WV1:/tmp#
```

### Etapa 4. Executar o script do Python HXTool

Digite `cd Hyperflex-Hypercheck` para ir para o diretório `Hyperflex-Hypercheck`

```
root@SpringpathControllerABCDE01234:/tmp# cd Hyperflex-Hypercheck
```

Digite `python HXTool.py` para executar o script

```
root@SpringpathControllerABCDE01234:/tmp/Hyperflex-Hypercheck# python HXTool.py
```

### Etapa 5. Insira a senha raiz do SCVM quando solicitado

```
Please enter below info of HX-Cluster:
Enter the HX-Cluster Root Password:
Enter the ESX Root Password:
```

**NOTA:** Para interromper a execução do script, use a tecla [CTRL+Z] e ela será interrompida imediatamente

**Etapa 6.** A ferramenta Hyperflex-Hypercheck inicia suas verificações. A conclusão da execução levará de 3 a 10 minutos, dependendo do número de nós convergentes no cluster

**Passo 7.** Obtenha um relatório das saídas do script. Você pode obtê-lo como mostrado abaixo,

O arquivo tar do relatório de hiperverificação é salvo em `/var/log/springpath` e `/tmp/Hyperflex-Hypercheck`. Assim, você pode fazer o download do pacote tar em `/var/log/springpath` ou `/tmp/Hyperflex-Hypercheck`. Como alternativa, você pode simplesmente gerar e carregar um pacote de suporte a storfs que também conterà o tar do relatório de hiperverificação.

Exemplo de arquivo tar de relatório - `HX_Report_2020_08_30_10_43_50.tar` é copiado para o caminho: `/var/log/springpath`

Digite `ls -l | grep HX_Report` para revisar os arquivos criados pela ferramenta Hyperflex-Hypercheck

Under `/var/log/springpath`,

```
root@SpringpathControllerABCDE01234:/var/log/springpath# ls -l | grep HX_Report
-rw-r--r-- 1 root root 380K Sep 23 15:41 HX_Report_2020_08_30_10_43_50.tar
root@SpringpathControllerABCDE01234:/var/log/springpath#
```

Under `/tmp/Hyperflex-Hypercheck`,

```
root@SpringpathControllerABCDE01234:/tmp/Hyperflex-Hypercheck# ls
HX_Report_2020_08_30_10_43_50.tar  prettytable.py  HX_Report_2020_08_30_10_43_50  TestInfo.txt
progressbar.py
HXTool.py  prettytable.pyc  ReadMe.txt  progressbar.pyc  LICENSE.txt
root@SpringpathControllerABCDE01234:/tmp/Hyperflex-Hypercheck#
```

Arquivos e registros no pacote de log do Hypercheck-

```
root@SpringpathControllerABCDE01234:/tmp/Hyperflex-Hypercheck# ls HX_Report_2020_08_30_10_43_50/
HX_Tool_2020-08-30_10-43-50.log
HX_Tool_Main_Report_2020-08-30_10-54-34.txt
HX_Tool_Summary.json
```

**Etapa 8.** Exporte `HX_YYY_MM_DD_HH_MM_SS.tar` e compartilhe-o com o TAC.

Use seu método preferido para exportar os registros de Hypercheck usando `scp/sftp/ftp/tftp` do SCVM ou você pode simplesmente fazer o download do pacote de suporte de storfs que conterà o pacote tar `HX_Report`.

## Entendendo as saídas/verificações realizadas

### Verificações efetuadas por verificação de hiperfrequência

As seguintes verificações são efetuadas pela ferramenta Hyperflex-Hyperchecktool

**Hyperflex Checks:** (Below checks are performed on all the storage controller VMs)  
**Cluster services check** - Verifies the status of storfs, stMgr and stNodeMgr services

**Enospc state check** - Checks if the cluster space usage is above the warning threshold or no

**Zookeeper check** - Checks whether the Zookeeper is running or no

**Exhibitor check** - Verifies the status of the Exhibitor service which manages the ZK

**System Disks Usage** - Checks if /sda1, var/stv and /var/zookeeper is less than 80%

**HDD health check** - Reports if you have any blacklisted disk in your cluster

**DNS check** - Checks whether DNS is configured and reachable

**vCenter reachability check** - Checks whether the vCenter is reachable on the required ports

**Timestamp check** - Checks if all the controller VMs have the exact same time

**NTP sync check** - Checks whether NTP is reachable from the storage controller VMs and synced

**Check package & versions** - Checks for packages and versions on Storage Controller VMs

**Check Iptables count** - Checks for Iptables count on and ensure it is same on all Storage Controller VMs.

**Extra pnodes check** - Looks for any extra/duplicate pnode entries in the cluster

**Out of memory check** - Checks through the log files if the cluster had any oom event

**Supported vSphere versions** - Shows all the vSphere Versions supported with your current HXDP version

**Permissions for /tmp** - Checks if the /tmp permissions are set correctly

**Check Cluster Policy** - Checks the Configured Cluster Policy

**Check springpath keystore.jceks file** - Check if All the SCVM have same keystore file

**SED Capable** - Checks if the cluster is SED Capable

**SED Enabled** - Checks if Encryption is enabled in the Cluster

**USB-0 Check** - If Encryption is enabled, Checks that USB0 interface is present on all the SCVMs

**SED 5100/5200 Drive Check** - If we have Micron SED 5100 drives and version is below 3.5.2b, we wont be able to replace or add new 5200 drives

**Disk Lock Check** - If Encryption is enabled, Checks for any Locked drives

**Network Checks** - Checks the connectivity in Storage network

**Check ZK-Cleanup-Script** - Checks to identify ZKTxnCleanUp Script

**Replication Checks** - If replication is enabled, we check the local and remote network connectivity (HX 4.5 Only)

**Stretched Cluster Checks** - Checked the latency between the sites and the witness VM (HX 4.5 Only)

**ESXi Checks:** (Below checks are performed on each ESXi node)

**HX User Account check** - Verifies if the HXUser is created on all the esxi hosts and has admin rights

**vMotion enabled check** - Checks if the vMotion network is configued

**Check for ESXi Failback timer** - Check for ESXi Failback timer on ESXi host

**Check connectivity between vmk1 and eth1** - Checks the connectivity between the Mgmt and Storage network

**No extra controller vm folders check** - Checks for duplicate Controller SCVM Folders

**VMware Tools location check** - Checks for Non default VMware Tools location

**vfat Disk Usage check** - Checks for vfat Disk Usage

**Check /tmp usage** - Checking for /tmp usage

**Compute Node Checks** - All the ESXi checks are also performed on Compute nodes (HX 4.5 Only)

## Exemplo de saída de hiperverificação de um cluster estendido de 4 nós

Please enter below info of HX-Cluster:

Enter the HX-Cluster Root Password:

Enter the ESX Root Password:

Cluster Name: HX-10-Stretched

Site-100

Site-97

Cluster Type: STRETCH\_CLUSTER

SSH connection established to HX Node: 192.168.53.135

SSH connection established to HX Node: 192.168.53.136

SSH connection established to HX Node: 192.168.53.137

SSH connection established to HX Node: 192.168.53.138

HX Cluster Nodes:

Nodes	IP Address	HostName
1	14.39.53.134	SpringpathControllerOHCWUK9X3N
2	14.39.53.135	SpringpathController37MHMEIBCY
3	14.39.53.136	SpringpathControllerDWRWWIBFLF
4	14.39.53.137	SpringpathControllerWB4UNXDKX3

SSH connection established to ESX Host: 14.39.53.133  
SSH connection established to ESX Host: 14.39.53.130  
SSH connection established to ESX Host: 14.39.53.132  
SSH connection established to ESX Host: 14.39.53.131

HX Controller: 192.168.53.135

Cluster services check [#####] COMPLETED  
ZooKeeper & Exhibitor check [#####] COMPLETED  
HDD health check [#####] COMPLETED  
Pre-Upgrade Check [#####] COMPLETED  
Network check [#####] COMPLETED

HX Controller: 192.168.53.136

Cluster services check [#####] COMPLETED  
ZooKeeper & Exhibitor check [#####] COMPLETED  
HDD health check [#####] COMPLETED  
Pre-Upgrade Check [#####] COMPLETED  
Network check [#####] COMPLETED

HX Controller: 192.168.53.137

Cluster services check [#####] COMPLETED  
ZooKeeper & Exhibitor check [#####] COMPLETED  
HDD health check [#####] COMPLETED  
Pre-Upgrade Check [#####] COMPLETED  
Network check [#####] COMPLETED

HX Controller: 192.168.53.138

Cluster services check [#####] COMPLETED  
ZooKeeper & Exhibitor check [#####] COMPLETED  
HDD health check [#####] COMPLETED  
Pre-Upgrade Check [#####] COMPLETED  
Network check [#####] COMPLETED

HX Controller: 192.168.53.135

Test Summary:

Name	Result	Comments
Cluster services check running on each node.	PASS	Checks storfs, stMgr, sstNodeMgr service
Enospc state check is above threshold.	PASS	Checks if the cluster storage utilization

Zookeeper check	PASS	Checks if Zookeeper service is running.
Exhibitor check	PASS	Checks if Exhibitor in running.
System Disks Usage is less than 80%.	PASS	Checks if /sdal, var/stv and /var/zookeeper
HDD Health check state.	PASS	Checks if any drive is in blacklisted state.
DNS check	PASS	Checks if configured DNS is reachable.
vCenter reachability check using PING.	PASS	Checks if vCenter is network reachable
Timestamp check Nodes.	PASS	Checks if the timestamp is same across all
NTP sync check server.	PASS	Checks if the NTP is synced with NTP
Check package & versions on each node.	PASS	Checks for count and version of HX packages
Check Iptables count nodes.	PASS	Checks if the IP Table count matches on all
Extra pnodes check	PASS	Checks for any stale Node entry.
Memory usage check	PASS	Checks for available memory more than 2GB.
Incidence of OOM in the log file Memory Condition.	PASS	Checks for any previous incidence of Out Of
Supported vSphere versions	6.0.0-U3	Prints the supported ESXi versions.
	6.5.0-U1	
	6.5.0-U2	
	6.5.0-U3	
	6.7.0-UGA	
	6.7.0-U1	



```

|                                     | 6.7.0-U2 |
|                                     | 6.7.0-U3 |
+-----+-----+-----+
-----+
| Check permissions for /tmp          | PASS      | Checks if the /tmp permissions are set
correctly.                            |
+-----+-----+-----+
-----+
| Check Cluster Policy                | Lenient   | Checks the Configured Cluster Policy
|
+-----+-----+-----+
-----+
| Check springpath_keystore.jceks file | PASS      | All the SCVM have same keystore file.
|
+-----+-----+-----+
-----+
| SED Capable                        | NO        | Checks if the cluster is SED Capable.
|
+-----+-----+-----+
-----+
| Check Witness Reachability          | PASS      | Checks Witness VM IP address is reachable.
|
+-----+-----+-----+
-----+
| Check ZK-Cleanup-Script             | PASS      | Checks to identify ZKTxnCleanUp Script. |
+-----+-----+-----+
-----+
HX Controller: 192.168.53.136 Test Summary: +-----+
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
Result | Comments | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Cluster services check | PASS | Checks storfs,
stMgr, sstNodeMgr service running on each node. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Enospc state check |
PASS | Checks if the cluster storage utilization is above threshold. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Zookeeper check | PASS | Checks if Zookeeper service is running. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Exhibitor check | PASS | Checks if Exhibitor in running. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| System Disks
Usage | PASS | Checks if /sda1, var/stv and /var/zookeeper is less than 80%. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| HDD Health check | PASS | Checks if any drive is in blacklisted state. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| DNS check | PASS | Checks if configured DNS is reachable. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| vCenter reachability check | PASS | Checks if vCenter is network reachable using PING. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Timestamp check | PASS | Checks if the timestamp is same across all Nodes. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| NTP sync check | PASS | Checks if the NTP is synced with NTP server. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check package & versions | PASS | Checks for count and version of HX
packages on each node. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check Iptables count | PASS | Checks if the IP
Table count matches on all nodes. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Extra pnodes check | PASS | Checks
for any stale Node entry. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Memory usage check | PASS | Checks for
available memory more than 2GB. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Incidence of OOM in the log file |
PASS | Checks for any previous incidence of Out Of Memory Condition. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
Supported vSphere versions | 6.0.0-U3 | Prints the supported ESXi versions. | | | 6.5.0-U1 | | |

```

```

| 6.5.0-U2 | | | 6.5.0-U3 | | | 6.7.0-UGA | | | 6.7.0-U1 | | | 6.7.0-U2 | | | 6.7.0-U3
| | +-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+ | Check permissions for /tmp | PASS | Checks if the /tmp permissions
are set correctly. | +-----+-----+-----+-----+-----+-----+-----+
-----+ | Check Cluster Policy | Lenient | Checks the
Configured Cluster Policy | +-----+-----+-----+-----+-----+-----+
-----+ | Check springpath_keystore.jceks file | PASS
| All the SCVM have same keystore file. | +-----+-----+-----+-----+-----+
-----+ | SED Capable | NO | Checks if
the cluster is SED Capable. | +-----+-----+-----+-----+-----+-----+
-----+ | Check Witness Reachability | PASS | Checks
Witness VM IP address is reachable. | +-----+-----+-----+-----+-----+
-----+
| Check ZK-Cleanup-Script | PASS | Checks to identify ZKTxnCleanUp Script. |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+ HX Controller: 192.168.53.137 Test Summary: +-----+-----+-----+
-----+ | Name |
Result | Comments | +-----+-----+-----+-----+-----+-----+-----+
-----+ | Cluster services check | PASS | Checks storfs,
stMgr, sstNodeMgr service running on each node. | +-----+-----+-----+
-----+ | Enospc state check |
PASS | Checks if the cluster storage utilization is above threshold. | +-----+
-----+ |
Zookeeper check | PASS | Checks if Zookeeper service is running. | +-----+
-----+ |
Exhibitor check | PASS | Checks if Exhibitor in running. | +-----+-----+
-----+ | System Disks
Usage | PASS | Checks if /sda1, var/stv and /var/zookeeper is less than 80%. | +-----
-----+ |
HDD Health check | PASS | Checks if any drive is in blacklisted state. | +-----
-----+ |
DNS check | PASS | Checks if configured DNS is reachable. | +-----+-----+
-----+ |
vCenter reachability check | PASS | Checks if vCenter is network reachable using PING. | +-----
-----+ |
Timestamp check | PASS | Checks if the timestamp is same across all Nodes. | +--
-----+ |
NTP sync check | PASS | Checks if the NTP is synced with NTP server. | +--
-----+ |
Check package & versions | PASS | Checks for count and version of HX
packages on each node. | +-----+-----+-----+-----+-----+-----+
-----+ | Check Iptables count | PASS | Checks if the IP
Table count matches on all nodes. | +-----+-----+-----+-----+-----+
-----+ | Extra pnodes check | PASS | Checks
for any stale Node entry. | +-----+-----+-----+-----+-----+-----+
-----+ | Memory usage check | PASS | Checks for
available memory more than 2GB. | +-----+-----+-----+-----+-----+
-----+ | Incidence of OOM in the log file |
PASS | Checks for any previous incidence of Out Of Memory Condition. | +-----
-----+ |
Supported vSphere versions | 6.0.0-U3 | Prints the supported ESXi versions. | | 6.5.0-U1 | | |
| 6.5.0-U2 | | | 6.5.0-U3 | | | 6.7.0-UGA | | | 6.7.0-U1 | | | 6.7.0-U2 | | | 6.7.0-U3
| | +-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+ | Check permissions for /tmp | PASS | Checks if the /tmp permissions
are set correctly. | +-----+-----+-----+-----+-----+-----+-----+
-----+ | Check Cluster Policy | Lenient | Checks the
Configured Cluster Policy | +-----+-----+-----+-----+-----+-----+
-----+ | Check springpath_keystore.jceks file | PASS
| All the SCVM have same keystore file. | +-----+-----+-----+-----+-----+
-----+ | SED Capable | NO | Checks if
the cluster is SED Capable. | +-----+-----+-----+-----+-----+-----+
-----+ | Check Witness Reachability | PASS | Checks
Witness VM IP address is reachable. | +-----+-----+-----+-----+-----+
-----+

```

```

| Check ZK-Cleanup-Script | PASS | Checks to identify ZKTxnCleanUp Script. |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+ HX Controller: 192.168.53.138 Test Summary: +-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
Result | Comments | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Cluster services check | PASS | Checks storfs,
stMgr, sstNodeMgr service running on each node. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Enospc state check |
PASS | Checks if the cluster storage utilization is above threshold. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Zookeeper check | PASS | Checks if Zookeeper service is running. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Exhibitor check | PASS | Checks if Exhibitor in running. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| System Disks
Usage | PASS | Checks if /sda1, var/stv and /var/zookeeper is less than 80%. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| HDD Health check | PASS | Checks if any drive is in blacklisted state. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| DNS check | PASS | Checks if configured DNS is reachable. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| vCenter reachability check | PASS | Checks if vCenter is network reachable using PING. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Timestamp check | PASS | Checks if the timestamp is same across all Nodes. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| NTP sync check | PASS | Checks if the NTP is synced with NTP server. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check package & versions | PASS | Checks for count and version of HX
packages on each node. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check Iptables count | PASS | Checks if the IP
Table count matches on all nodes. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Extra pnodes check | PASS | Checks
for any stale Node entry. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Memory usage check | PASS | Checks for
available memory more than 2GB. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Incidence of OOM in the log file |
PASS | Checks for any previous incidence of Out Of Memory Condition. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Supported vSphere versions | 6.0.0-U3 | Prints the supported ESXi versions. | | 6.5.0-U1 | | |
| 6.5.0-U2 | | | 6.5.0-U3 | | | 6.7.0-UGA | | | 6.7.0-U1 | | | 6.7.0-U2 | | | 6.7.0-U3
| | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check permissions for /tmp | PASS | Checks if the /tmp permissions
are set correctly. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check Cluster Policy | Lenient | Checks the
Configured Cluster Policy | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check springpath_keystore.jceks file | PASS
| All the SCVM have same keystore file. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| SED Capable | NO | Checks if
the cluster is SED Capable. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check Witness Reachability | FAIL | Checks
Witness VM IP address is reachable. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Check ZK-Cleanup-Script | PASS | Checks to identify ZKTxnCleanUp Script. |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

```

##### Network check:
##### ESX vmk0:
14.39.53.130, 14.39.53.131, 14.39.53.132, 14.39.53.133 ESX vmk1: 192.168.53.130, 192.168.53.131,
192.168.53.132, 192.168.53.133 SCVM eth0: 14.39.53.134, 14.39.53.135, 14.39.53.136, 14.39.53.137
SCVM eth1: 192.168.53.135, 192.168.53.136, 192.168.53.137, 192.168.53.138 ESX Host: 14.39.53.130
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
--+ | Name | Result | Comments | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| HX User Account check | PASS | Checks if HXUSER is
present. | +-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| vMotion enabled check | PASS | Checks if vMotion is enabled on the host. | +-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

```

-----+
| Check for ESXI Failback timer | PASS | Checks for ESXi FAILBACK timer set to 30000ms. | +-----
-----+ |
Check vmk1 ping to eth1 | PASS | Checks Network between ESXi vmk1 and SCVM eth1. | +-----
-----+ | No
extra controller vm folders check | PASS | Checks for duplicate Controller SCVM Folders. | +-----
-----+ |
VMware Tools location check | PASS | Checks for Non default VMware Tools location. | +-----
-----+ | vfat
Disk Usage check | PASS | Checks for vfat Disk Usage. | +-----
-----+ | Check /tmp usage | PASS |
Checking for /tmp usage. | +-----
-----+ ESX Host: 14.39.53.131 +-----+
-----+ | Name | Result | Comments | +-----
-----+ | HX
User Account check | PASS | Checks if HXUSER is present. | +-----
-----+ | vMotion enabled check | PASS |
Checks if vMotion is enabled on the host. | +-----
-----+ | Check for ESXI Failback timer | PASS | Checks
for ESXi FAILBACK timer set to 30000ms. | +-----
-----+ | Check vmk1 ping to eth1 | PASS | Checks Network
between ESXi vmk1 and SCVM eth1. | +-----
-----+ | No extra controller vm folders check | PASS | Checks
for duplicate Controller SCVM Folders. | +-----
-----+ | VMware Tools location check | PASS | Checks for
Non default VMware Tools location. | +-----
-----+ | vfat Disk Usage check | PASS | Checks for vfat Disk
Usage. | +-----
-----+ | Check /tmp usage | PASS | Checking for /tmp usage. | +-----
-----+ ESX Host: 14.39.53.132
-----+
-----+ | Name | Result | Comments | +-----
-----+ | HX User Account check | PASS | Checks if HXUSER is
present. | +-----
-----+ | vMotion enabled check | PASS | Checks if vMotion is enabled on the host. | +-----
-----+
| Check for ESXI Failback timer | PASS | Checks for ESXi FAILBACK timer set to 30000ms. | +-----
-----+ |
Check vmk1 ping to eth1 | PASS | Checks Network between ESXi vmk1 and SCVM eth1. | +-----
-----+ | No
extra controller vm folders check | PASS | Checks for duplicate Controller SCVM Folders. | +-----
-----+ |
VMware Tools location check | PASS | Checks for Non default VMware Tools location. | +-----
-----+ | vfat
Disk Usage check | PASS | Checks for vfat Disk Usage. | +-----
-----+ | Check /tmp usage | PASS |
Checking for /tmp usage. | +-----
-----+ Main Report File: HX_Tool_Main_Report_2020-08-26_09-54-59.txt
Report tar file: HX_Report_2020_08_26_09_43_18.tar Report file copied to path:
/var/log/springpath Release Notes: https://www.cisco.com/c/en/us/support/hyperconverged-systems/hyperflex-hx-data-platform-software/products-release-notes-list.html Upgrade Guides:
https://www.cisco.com/c/en/us/support/hyperconverged-systems/hyperflex-hx-data-platform-software/products-installation-guides-list.html Note: 1) If upgrading to HX 4.0(2a), please
review the following link and perform workaroud - https://tinyurl.com/wc7j5qp 2) Please check
the status of Compute nodes manually, script only verifies the config on the converged nodes. 3)
Hypercheck doesnt perform FAILOVER TEST, so please ensure that the upstream is configured for
network connectivity for JUMBO or NORMAL MTU size as needed.

```

## Analisar a saída da ferramenta - Próximas etapas

- A ferramenta automatiza o processo de execução de comandos manuais em sistemas Hyperflex.

- Se a ferramenta executar **OK** e fornecer **PASS** em todos os testes. O sistema HX é bom para todas as verificações que o script executou.
- Em situações em que a ferramenta **FALHA** em algumas verificações ou não é executada com êxito, você pode usar os comandos CLI (listados abaixo) para executar as mesmas verificações no Hyperflex System feitas pelo script Manually.
- A ferramenta **NÃO** verifica se há advertências antigas/novas/abertas/resolvidas e, portanto, é altamente recomendável rever as **Notas de versão do Hyperflex e os Guias de atualização** antes de qualquer atividade de atualização ou manutenção.

**OBSERVAÇÃO: NÃO abra um caso no TAC porque o script não pôde ser executado. Execute os comandos manualmente, identifique o problema e abra um SR para o problema identificado.**

## Comandos CLI

### No Hyperflex SCVM-

SSH to All Hyperflex SCVMs-

```
# service_status.sh

# sysmtool --ns cluster --cmd enospcinfo

# echo srvr | nc 0 2181

# pidof exhibitor

# stcli disk list --ip <Corresponding ESXi Mgmt IP Address> |grep -B 2 -A 8 blacklisted

# stcli services dns show (and ping the IPs listed)

# ping <vCenter IP Address>

# date ; compare the time on all SCVMs. They should ideally be identical

# stcli services ntp show

# stcli cleaner info

# ntpq -p -4

# dpkg -l | grep -i springpath

# iptables -L -n | wc -l

# stcli cluster info

# df -h ; check that /var/stv should be less than 80%

# zgrep -i "out of memory" /var/log/springpath/debug-storfs.*

# ping -I eth0 <eth0> of all SCVMs

# ping -I eth1 <eth1> of all SCVMs

# "ls -ld /tmp" check for 775 and 777

# stcli cluster info | grep -i 'clusterAccessPolicy:' | head -1
```

```
# md5sum /etc/springpath/secure/springpath_keystore.jceks
# cat /etc/springpath/sed_capability.conf
# cat /etc/springpath/sed.conf
# cat /var/log/springpath/diskslotmap-v2.txt
# stcli cluster info | grep dataZkIp (ping dataZkIp for latency)
```

## Em sistemas ESXi-

SSH to all ESXi hosts

```
# esxcli system account list
# esxcli network firewall ruleset list | grep -i vMotion
# esxcli software vib list | grep -i spring
# esxcfg-vmknic -l ; confirm that vMotion VMK2 is created
# vmkping -I vmk1 <eth1> of all SCVMs
# cd /vmfs/volumes/Springpath-XXXXXXXXXX ; Ensure that it has only one Folder that has the
Storage Controller VM
# df -h | grep vfat ; Ensure dir has free space
```