

# HyperFlex logs explained

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## Introduction

This document will be an inclusive list of which log files should be referenced for various processes and troubleshooting of various issues.

**Tip:** If you aren't sure what log file to look at, you can do a long listing of all files in the log directory and sort by time to see the last logs written to! Use the command **ls -lah**. For live troubleshooting, you may want to run **ls -lahtr /var/log/springpath** to see which log file was edited most recently at the bottom of the list.

```
root@SpringpathControllerG9ES5WGWDG:/var/log/springpath# ls -lah
total 433M
-rw-r----- 1 root adm 123M Sep 28 16:15 stat-storfs.log
-rw-r----- 1 root adm 63M Sep 28 16:14 debug-storfs.log
-rw-rw-rw- 1 root root 50M Sep 28 16:14 stNodeMgr.log
-rw-r----- 1 root adm 47M Sep 28 16:15 debug-cipmonitor.log
-rw-r----- 1 root adm 41M Sep 28 16:15 stat-scvmlclient.log
-rw-rw-rw- 1 root root 22M Sep 28 16:14 stMgr.log
```

## HyperFlex Installation

Topic	Log File	Notes
Troubleshooting GUI	<code>/var/log/springpath/hxinstaller.log</code>	The log contains all of the API's fired from client to server and their payload/responses
Troubleshooting Backend	<code>/var/log/springpath/hxinstaller.log</code>	GO Lang Server

Host Related Issues	/var/log/springpath/ucs_logs/ucs_automation C:\ProgramData\Cisco\HyperFlex\Install\Log /var/log/hostd.log /var/run/log/vmkernel.log /var/run/log/scvmclient.log	UCSM Failure Hyper-V ESXi ESXi ESXi Datastore mounts
Deploy and Create/Expand Failures	/var/log/tomact7/catalina.out	Tomcat logs. Tomcat versions may differ across versions
ESXi Agent Manager	/var/log/springpath/stDeploy.out /var/log/springpath/stBootstrapGuiBackend.log /var/log/springpath/springpath_validation.log C:\Program Files\VMware\VCenter Server\vpdx\scripts	Thrift Failures REST Failures Validation Services ESXi Agent Manager user fails to log in to VC

## HyperFlex Upgrades

Log File	Notes
/var/log/springpath/stMgr.log	Check on all controller VM's when cluster upgrade fails
/var/log/springpath/stUpgradeSvc.log	All backend logs
/var/log/tomcat7/catalina.out	REST Logs
/var/log/springpath/springpath_validation.log	Validations

## HyperFlex Bootstrapping

Log File	Notes
/var/log/springpath/stMgr.log	ESXi Cluster
/var/log/springpath/stUpgradeSvc.log	Hyper-V Cluster

## HX Connect

Log File	Notes
/var/log/springpath/hxmanager.log	GUI Logs All URL requests are logged. To also enable response logging, edit: /opt/springpath/storfs-mgmt-ui/config/config.json LogHttpRequest and/or LogHttpResponse to "true" restart hxmanager **remember to turn off, else logging is too verbose

## HX & Intersight

Log File	Notes
/opt/partner/cisco-hxdc-run/hxdc_current/bin/hxdp	Intersight Binary
/opt/partner/cisco-hxdc-run/hxdc_current/version	Current Version
/nfs/system/hx_device_connector/db/connector.db	Cloud Connection Information
/var/log/springpath/hx_device_connector.log	grep for "HX_PLAT"

## Network Logs

Log File	Notes
/var/log/springpath/ucs_logs	Rack Unit Log

## Data Replication

Log File	Notes
/var/log/springpath/stDataSvcMgr.log	
/var/log/springpathdebug-replsvc.log	
/var/log/springpathdebug-repl-cipmonitor.log	
/var/log/springpathreplicationNetworkConfig.log	
/var/log/springpath/debug-storfs.log	

## Stretch Cluster

Log File	Notes
/opt/springpath/config/stretch.tunes	Install & Deploy

## HX Plugin

Log File	Notes
/var/log/vmware/vsphere-client/logs/vsphere_client_virgo.log	vCenter Log
/var/log/spingpath/stMgr.log	STCTL

## Audit Logs

Log File	Notes
/var/log/springpath/audit-rest.log	REST
/var/log/vmware-vsphere-client/logs/vsphere_client_virg.log	Plugin
/var/log/shell.log	Stcli

## Core REST APIs / AAA

Log File	Notes
/var/log/nginx/ssl-access.log	Nginx
/var/log/tomcat8/catalina.out	Tomcat. Tomcat versions may change between HX versions
/var/log/springpath/stMgr.log	StMgr
/var/log/springpath/hxSvcMgr.log	HxSvcMgr
/var/log/springpath/hxHyperVSvcMgr.log	HxHyperVSvcMgr
/var/log/springpath/audit-rest.log	
/var/log/springpath/aaa.log	Debug log of AAA subsystem

## ASUP

Log File	Notes
/var/log/springpath/asupcl.log	

## Data at Rest Encryption

Topic	Log File	Notes
REST API's	/var/log/springpath/hxmanager.log	Logs the calls that are made from the browser to the GUI proxy server that is forwarded to the REST server
	/var/log/tomcat7/catalina.out	Logs the REST server calls. Tomcat versions may change between HX versions
		all calls are proxied through NGINX & hxmanager (go-server) to actual web-server (ex: tomcat)
	/var/log/springpath/hxmanager.log	HX Manager (go-server)
	/varlog/nginx/*.log	Nginx Logs
	/etc/nginx/conf.d/springpath.conf	Nginx conf file, look for routings
	/var/log/tomcat7/catalina.out	Tomcat
SED Server/PPP	/var/log/springpath/hxmanager.log	grep SED
	/var/log/springpath/stMgr.log   cut -c 1-40	REST API Calls stMgr service APIs
SED Client	/var/log/springpath/stevents.log	Events that start with Encryption grep for enable-security, modify-security, disable-security, secure-drives, rescan-inventory, secure-erase
	/var/log/springpath/encryption.log	
Debugging UCSM Logs	/usr/share/springpath/stevents.logs	Reports current SED state (Capable, Enabled, Locked)
	/var/log/syslog	
DME		-Verify that lstorageLocal or lstorageRemote sent as part of OobStorageConfig -Search for "drive security" or "KMIP" to find errors logged in DME code -If using remote policy and OOB CIMC Mgmt IP is configured, make sure ConfigMgmtIpRules stage ran -Search logs after receiving "OobStorageConfigFSM" or "AdminOobStorageConfigFSM" stimulus -Check if route addition failure is reported as part of ConfigMgmtIpRules -Check for XML starting with "lock-operation" in case of Enable/Modify/Disable Unlock Operation
	BladeAG	-Check for XML starting with "clear-secure-drive", "enable-security-on-jbod", "secure-drive-group", "clear-secure-foreign, config-drive" <i>NOTE: Last 2 XML checks for UCSM specific issues, all are for UCSM and certificate management issues</i>
CIMC	/obfl/obfl-log*	

/var/log/messages\*

grep'ing for "storage" extracts the lines written by  
storaged and by mcserver involving storaged  
-contains the first 5000 lines written by storaged and  
by mcserver involving storaged

/var/log/storaged\_startup\_log.txt

-search for same keywords as with bladeAG  
-during certificate create, search for "cert" to see if  
there is a further log indicating the reason for failure