



Dell S3100 Series Networking Switch Instruction Manual

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Release Notes

This document contains information about open and resolved issues, and operational information specific to the Dell Networking operating software (OS) and the S3100 Series platform.

Current Release Version: 9.14(2.16)

Release Date: 2022-08-19

Previous Release Version: 9.14(2.14)



NOTE: This document may contain language that is not consistent with current guidelines of Dell Technologies. There are plans to update this document over subsequent releases to revise the language accordingly.

Incorrect behavior or unexpected caveats are listed as the Problem Report (PR) numbers within the appropriate sections. For more information on hardware and software features, commands, and capabilities, refer to the Dell Networking support website at: <https://www.dell.com/support>

Document Revision History

Table 1. Revision History

Date	Description
2022-08	Initial release.

Requirements

The following requirements apply to the S3100 Series.

Hardware Requirements

The following table lists the Dell S3100 Series hardware requirements.

Table 2. System Hardware Requirements

Platforms	Hardware Requirements
S3124 chassis	<ul style="list-style-type: none">• Twenty-four Gigabit Ethernet 10/100/1000BASE-T RJ-45 ports that support auto-negotiation for speed, flow control, and duplex.• Two SFP 1G combo ports.• Two SFP+ 10G ports.• 20G expansion slot that supports an optional small form-factor pluggable plus (SFP+) or 10GBase-T module.• Two fixed mini Serial Attached SCSI (mini-SAS) stacking ports HG[21] to connect up to twelve S3100 series switches.

S3124F chassis	<ul style="list-style-type: none"> • Twenty-four Gigabit Ethernet 100BASEFX/1000BASE-X SFP ports. • Two 1G copper combo ports. • Two SFP+ 10G ports. • 20G expansion slot that supports an optional small form-factor pluggable plus (SFP+) or 10GBase-T module. • Two fixed mini Serial Attached SCSI (mini-SAS) stacking ports HG[21] to connect up to twelve S3100 series switches.
S3124P chassis	<ul style="list-style-type: none"> • Twenty-four Gigabit Ethernet 10/100/1000BASE-T RJ-45 ports for copper that support auto-negotiation for speed, flow control, and duplex. • Two SFP 1G combo ports. • Two SFP+ 10G ports. • Supports PoE+. • 20G expansion slot that supports an optional small form-factor pluggable plus (SFP+) or 10GBase-T module. • Two fixed mini Serial Attached SCSI (mini-SAS) stacking ports HG[21] to connect up to twelve S3100 series switches.
S3148P chassis	<ul style="list-style-type: none"> • Forty-eight Gigabit Ethernet 10BASE-T, 100BASE-TX, 1000BASE-T RJ-45 ports that support auto-negotiation for speed, flow control, and duplex. • Two SFP 1G combo ports. • Two SFP+ 10G ports. • Supports PoE+. • 20G expansion slot that supports an optional small form-factor pluggable plus (SFP+) or 10GBase-T module. • Two fixed mini Serial Attached SCSI (mini-SAS) stacking ports HG[21] to connect up to twelve S3100 series switches.
S3148 chassis	<ul style="list-style-type: none"> • Forty-eight Gigabit Ethernet 10BASE-T, 100BASE-TX, 1000BASE-T RJ-45 ports that support auto-negotiation for speed, flow control, and duplex. • Two SFP 1G combo ports. • Two SFP+ 10G ports. • 20G expansion slot that supports an optional small form-factor pluggable plus (SFP+) or 10GBase-T module. • Two fixed mini Serial Attached SCSI (mini-SAS) stacking ports HG[21] to connect up to twelve S3100 series switches.

Software Requirements

The following table lists the Dell S3100 Series software requirements:

Table 3. System Software Requirements

Software	Minimum Release Requirement
Dell Networking OS	9.14(2.16)

New Dell Networking OS Version 9.14(2.16) Features

The following features are integrated into the Dell Networking 9.14.2 branch through this release: None

Restrictions

- Prerequisite steps to upgrade the Dell Networking OS from earlier version to 9.14.2.0 or later:

1. Uninstall the older version of the Open Automation (OA) package
2. Upgrade the Dell Networking OS to 9.14.2.0 or later version
3. Install the following OA packages from the respective upgraded version:
 - a. Smart Scripts
 - b. Puppet
 - c. Open management infrastructure (OMI)
 - d. SNMP MIB

Prerequisite steps to downgrade the Dell Networking OS from 9.14.2.0 or later to the earlier version:

1. Uninstall the OA package of 9.14.2.0 or later version
2. Downgrade the Dell Networking OS to an earlier version
3. Install the respective OA package from an earlier version

For more information about installing, uninstalling and upgrading the Dell Networking OS and OA package, refer the respective Dell System Release Notes.

- If you downgrade the Dell Networking OS version from 9.14.2.16 to 9.11.0.0 or any older versions, the system displays the following error message even though there is no functional impact:

```
CDB boot error: C.cdb file format
```

Before downgrading, save the current configuration and then remove the CDB files (confd _ cdb . tar . gz .version and confd_cdb.tar.gz). To remove the files, use the following steps:

```
DellEMC # write memory
```

```
DellEMC # delete flash://confd_cdb.tar.gz.version
```

```
DellEMC # delete flash://confd_cdb.tar.gz
```

```
DellEMC # reload
```

- While deploying the system in the normal-reload mode in BMP configuration, use the ip ssh server enable command at the beginning of the startup configuration if the write memory command is used at the end of the configuration.
- REST API does not support AAA authentication.

- The following features are not available in the Dell Networking OS from version 9.7(0.0):
 - PIM ECMP
 - Static IGMP join (ip igmp static-group)
 - IGMP querier timeout configuration (ip igmp queriertimeout)
 - IGMP group join limit (ip igmp group join-limit)
- Half-Duplex mode is not supported.
- When FRRP is enabled in a VLT domain, no flavor of Spanning tree should concurrently be enabled on the nodes of that specific VLT domain. In essence FRRP and xSTP should not co-exist in a VLT environment.

Changes to Default Behavior and CLI Syntax

- From 9.14(2.4P1) onwards, a new nand chip ships on the S3100 series switch. This chip supports the new U Boot version 5.2.1.10.

Documentation Corrections

This section describes the errors identified in the current release of the Dell Networking OS.

- The router bgp command allows you to configure only one L3 interface with an IPv4 address. The Configuration guide does not mention this limitation and will be corrected in the next release of the guide.

Deferred Issues

Issues that appear in this section were reported in a previous version of Dell Networking OS version as open, but have since been deferred. Deferred issues are the issues that are found to be invalid, not reproducible, or not scheduled for resolution. Deferred issues are reported using the following definitions.

Category	Description
PR#	Problem Report number that identifies the issue.
Severity	<p>S1 — Crash: A software crash occurs in the kernel or a running process that requires a restart of AFM, the router, switch, or process.</p> <p>S2 — Critical: An issue that renders the system or a major feature unusable, which can have a pervasive impact on the system or network, and for which there is no work-around acceptable to the customer.</p> <p>S3 — Major: An issue that affects the functionality of a major feature or negatively affects the network for which there exists a work-around that is acceptable to the customer.</p> <p>S4 — Minor: A cosmetic issue or an issue in a minor feature with little or no network impact for which there might be a work-around.</p>
Synopsis	Synopsis is the title or short description of the issue.
Release Notes	Release Notes description contains more detailed information about the issue.
Work around	<p>Work around describes a mechanism for circumventing, avoiding, or recovering from the issue. It might not be a permanent solution.</p> <p>Issues listed in the “Closed Caveats” section should not be present, and the work-around is unnecessary, as the version of code for which this release note is documented has resolved the caveat.</p>

Deferred S3100 series 9.14(2.0) Software Issues

Issues that appear in this section were reported in Dell Networking OS version 9.14(2.0) as open, but have since been deferred. Deferred caveats are those that are found to be invalid, not reproducible, or not scheduled for resolution. None.

Fixed Issues

Fixed issues are reported using the following definitions.

Category	Description
PR#	Problem Report number that identifies the issue.
Severity	<p>S1 — Crash: A software crash occurs in the kernel or a running process that requires a restart of AFM, the router, switch, or process.</p> <p>S2 — Critical: An issue that renders the system or a major feature unusable, which can have a pervasive impact on the system or network, and for which there is no work-around acceptable to the customer.</p> <p>S3 — Major: An issue that affects the functionality of a major feature or negatively effects the network for which there exists a work-around that is acceptable to the customer.</p> <p>S4 — Minor: A cosmetic issue or an issue in a minor feature with little or no network impact for which there might be a work-around.</p>
Synopsis	Synopsis is the title or short description of the issue.
Release Notes	Release Notes description contains more detailed information about the issue.
Work around	Work around describes a mechanism for circumventing, avoiding, or recovering from the issue. It might not be a permanent solution. Issues listed in the “Closed Caveats” section should not be present, and the work-around is unnecessary, as the version of code for which this release note is documented has resolved the issue.

Fixed S3100 Series 9.14(2.16) Software Issues



NOTE: Dell Networking OS 9.14(2.16) includes fixes for caveats addressed in the previous 9.14 releases. See the respective release notes documentation for the list of caveats fixed in the earlier 9.14 releases.

The following caveats have been fixed in Dell Networking OS version 9.14(2.16):

PR# 170307

Severity: Sev 3

Synopsis: In certain scenarios, when SSH daemon crashes the switch becomes inaccessible.

Release Notes: In certain scenarios, when SSH daemon crashes the switch becomes inaccessible.

Workaround: None.

Known Issues

Known issues are reported using the following definitions.

Category	Description
PR#	Problem Report number that identifies the issue
Severity	<p>S1 — Crash: A software crash occurs in the kernel or a running process that requires a restart of AFM, the router, switch, or process.</p> <p>S2 — Critical: An issue that renders the system or a major feature unusable, which can have a pervasive impact on the system or network, and for which there is no work-around acceptable to the customer.</p> <p>S3 — Major: An issue that affects the functionality of a major feature or negatively affects the network for which there exists a work-around that is acceptable to the customer.</p> <p>S4 — Minor: A cosmetic issue or an issue in a minor feature with little or no network impact for which there might be a work-around.</p>
Synopsis	Synopsis is the title or short description of the issue.
Release Notes	Release Notes description contains more detailed information about the issue.
Work around	<p>Work around describes a mechanism for circumventing, avoiding, or recovering from the issue. It might not be a permanent solution.</p> <p>Issues listed in the “Closed Caveats” section should not be present, and the work-around is unnecessary, as the version of code for which this release note is documented has resolved the caveat.</p>

Known S3100 Series 9.14(2.16) Software Issues

The following caveats are open in Dell Networking OS version 9.14(2.16): None.

Upgrade Instructions

The following upgrades are available for the Dell Networking operating system (OS) on S3100 series switches:

1. Upgrade the Dell Networking OS image on S3100 series switches.
2. Upgrade the UBoot from Dell Networking OS.
3. Upgrade the CPLD image.
4. Upgrade the PoE controller.

Upgrading the Operating Software Image

Upgrade the OS image on S3100 series switches by following the procedure in this section.



NOTE: The configurations shown here are examples only and are not intended to duplicate any real

system or network.



NOTE: If you installed the Open Automation (OA) package on the S3100 series switch, Dell Networking strongly recommends uninstalling the OA package before you upgrade the Dell Networking OS image. Then reinstall a compatible OA package. In this way, the system installs enhancements and uninstalls incompatible OA packages after the Dell Networking OS upgrade.



NOTE: Dell Networking strongly recommends using the Management Interface to upgrade the new image in both BMP mode and the Upgrade System CLI. Using front-end ports takes more time (approximately 25 minutes) to download and install new image due to the large file size.



NOTE: If you are using bare metal provisioning (BMP), see the Bare Metal Provisioning chapter in the Open Automation Guide.

1. Save the running configuration on the switch.

EXEC Privilege mode

```
write memory
```

2. Back up your startup configuration to a secure location (for example, an FTP server as shown here).

EXEC Privilege mode

```
copy startup-config destination
```

```
DellEMC# copy running-config ftp:
```

```
Address or name of remote host []: 10.10.10.10
```

```
Destination file name [startup-config]: startup-config
```

```
User name to login remote host: host
```

```
Password to login remote host: xxxx
```

```
!
```

```
5179 bytes successfully copied
```

```
DellEMC#
```

3. Upgrade the Dell Networking OS on a S3100 series switch.

EXEC Privilege mode

```
upgrade system {flash: | ftp: | nfsmount: | scp: | stack-unit: | tftp:| usbflash:} fileurl [.
```



Where {flash: | ftp: | scp: | tftp:| usbflash:} file-url specifies the file transfer method and location of the software image file used to upgrade the S3100 series, and is in one of the following formats:

- flash://directory-path/filename – Copy from flash file system.
- ftp://user-id:password@host-ip/file-path – Copy from remote (IPv4 or IPv6) file system.
- nfsmount://mount-point/filepath – Copy from NFS mount file system.
- scp://user-id:password@host-ip/file-path – Copy from remote (IPv4 or IPv6) file system.
- stack-unit: – Synchronize image to the specified stack unit.
- tftp://host-ip/file-path – Copy from remote (IPv4 or IPv6) file system.

- `usbflash://directory-path/filename` – Copy from USB flash file system.



NOTE: Dell Networking recommends using FTP to copy the new image with the upgrade system and due to the large file size.

```
DellEMC#upgrade system ftp: a:
```

Address or name of remote host []: 192.168.1.1

Source file name []: FTOS-S3100-9.14.2.16.bin

```
User name to login remote host: ftpuser
```

Password to login remote host:

|||||

--

```
50155103 bytes successfully copied
```

System image upgrade completed successfully.

4. In case of a stack setup, upgrade the Dell Networking OS for the stacked units.

EXEC Privilege mode

```
upgrade system stack-unit [1-12 | all] [A: | B:]
```

If A: is specified in the command, the Dell Networking OS version present in Management unit's A: partition will be pushed to the stack units. If B: is specified in the command, the Management unit's B: will be pushed to the stack units. Upgrade of stack units can be done on individual units by specifying the unit id [1–12] or on all units by using all in the command.

```
DellEMC#upgrade system stack-unit all A:
```

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	5
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.....

[illegible]

Image upgraded to all

DellEMC#

5. Verify the Dell Networking OS has been upgraded correctly in the upgraded flash partition

EXEC Privilege mode

```
show boot system stack-unit [1-12 | all]
```

The Dell Networking OS versions present in A: and B: can be viewed for individual units by specifying the stack unit id [1–12] in the command or for all the stack units by specifying all in the command.

```
DellEMC#show boot system stack-unit all
```

Current system image information in the system:

Type	Boot	Type	A	B
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	18
19	19	19	19	19
20	20	20	20	20
21	21	21	21	21
22	22	22	22	22
23	23	23	23	23
24	24	24	24	24
25	25	25	25	25
26	26	26	26	26
27	27	27	27	27
28	28	28	28	28
29	29	29	29	29
30	30	30	30	30
31	31	31	31	31
32	32	32	32	32
33	33	33	33	33
34	34	34	34	34
35	35	35	35	35
36	36	36	36	36
37	37	37	37	37
38	38	38	38	38
39	39	39	39	39
40	40	40	40	40
41	41	41	41	41
42	42	42	42	42
43	43	43	43	43
44	44	44	44	44
45	45	45	45	45
46	46	46	46	46
47	47	47	47	47
48	48	48	48	48
49	49	49	49	49
50	50	50	50	50
51	51	51	51	51
52	52	52	52	52
53	53	53	53	53
54	54	54	54	54
55	55	55	55	55
56	56	56	56	56
57	57	57	57	57
58	58	58	58	58
59	59	59	59	59
60	60	60	60	60
61	61	61	61	61
62	62	62	62	62
63	63	63	63	63
64	64	64	64	64
65	65	65	65	65
66	66	66	66	66
67	67	67	67	67
68	68	68	68	68
69	69	69	69	69
70	70	70	70	70
71	71	71	71	71
72	72	72	72	72
73	73	73	73	73
74	74	74	74	74
75	75	75	75	75
76	76	76	76	76
77	77	77	77	77
78	78	78	78	78
79	79	79	79	79
80	80	80	80	80
81	81	81	81	81
82	82	82	82	82
83	83	83	83	83
84	84	84	84	84
85	85	85	85	85
86	86	86	86	86
87	87	87	87	87

```
stack-unit 1 FLASH BOOT 9.14(2.16) 9.14(2.14) [boot]
```

```
stack-unit 2 FLASH BOOT 9.14(2.16) 9.14(2.14) [boot]
```

```
stack-unit 3 FLASH BOOT 9.14(2.16) 9.14(2.14) [boot]
```

```
stack-unit 4 is not present.
```

```
stack-unit 5 is not present.
```

```
stack-unit 6 is not present.
```

```
stack-unit 7 is not present.
```

```
stack-unit 8 is not present.
```

```
stack-unit 9 is not present.
```

```
stack-unit 10 is not present.
```

```
stack-unit 11 is not present.
```

```
stack-unit 12 is not present.
```

```
DellEMC#
```

6. Change the primary boot parameter to the upgraded partition (A: or B:).

```
CONFIGURATION mode boot system stack-unit {1-12 | all} {default | primary | secondary} {flash:  
ftp://file-url | system: {A: | B:} | tftp://file-url }.
```



```
DellEMC(conf)#boot system stack-unit all primary system: a:
```

```
DellEMC(conf)#
```

7. Save the upgrade configuration so that it is retained after a reload.

EXEC Privilege mode

```
write memory
```

```
DellEMC#write memory
```

```
!!!
```

```
Feb 21 17:01:33: %STKUNIT2-M:CP %FILEMGR-5-FILESAVED: Copied running-config to
```

```
startup-config in flash by default
```

```
..Synchronizing data to peer stack-unit
```

```
!!!!!!!!!!!!!!!!!!!!
```

```
DellEMC#
```

8. Reload the switch so that the Dell Networking OS image is retrieved from flash. EXEC Privilege mode

```
reload
```

```
DellEMC#reload
```

```
Proceed with reload [confirm yes/no]: yes...
```

9. Verify that the switch is upgraded to the latest Dell Networking OS version.

EXEC Privilege mode

```
show version
```

```
DellEMC#show version
```

```
Dell EMC Real Time Operating System Software
```

```
Dell EMC Operating System Version: 2.0
```

```
Dell EMC Application Software Version: 9.14(2.16)
```

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Build Time: Mon Feb 21 11:34:10 2022

Build Path: /build/build01/SW/SRC

Dell EMC Networking OS uptime is 1 hour(s), 31 minute(s)

System image file is "system://A"

System Type: S3124P

Control Processor: Broadcom 56340 (ver A0) with 2 Gbytes (2147483648 bytes) of
memory, core(s) 1.

1G bytes of boot flash memory.

1 52-port GE/TE (S3100)

1 28-port GE/TE (S3100)

1 28-port GE/TE (S3100)

96 GigabitEthernet/IEEE 802.3 interface(s)

8 Ten GigabitEthernet/IEEE 802.3 interface(s)

DellEMC#

10. . Check if all the stack units are online after reload.

EXEC Privilege mode

```
show system brief
```

DellEMC#show system brief

Stack MAC : 00:11:33:44:77:86

Reload-Type : normal-reload [Next boot : normal-reload]

-- Stack Info --

Unit	UnitType	Status	ReqTyp	CurTyp	Version	Ports
------	----------	--------	--------	--------	---------	-------

1	Member	online	S3148	S3148	9.14(2.16)	54
---	--------	--------	-------	-------	------------	----

2	Management	online	S3124P	S3124P	9.14(2.16)	30
---	------------	--------	--------	--------	------------	----

3	Standby	online	S3124F	S3124F	9.14(2.16)	30
---	---------	--------	--------	--------	------------	----

Upgrade the UBoot from Dell Networking OS

1. To upgrade the UBoot from Dell Networking OS, perform the following steps:

Upgrade the S3100 Series Boot Flash (UBoot) image.

EXEC Privilege mode

```
upgrade boot bootflash-image stack-unit [ | all] [booted | flash: | ftp: | scp: | tftp: | us:
```

Dell Networking OS version 9.14(2.16) requires S3100 Series Boot Flash (UBoot) image version 5.2.1.10. The booted option is used to upgrade the Boot Flash (UBoot) image to the image version packed with the loaded Dell Networking OS image. The Boot Flash (UBoot) image version packed with the loaded Dell Networking OS can be found using the show os version command in EXEC Privilege mode.

To upgrade the Boot Flash image of all stack-units, the option all can be used.

DellEMC#upgrade boot bootflash-image stack-unit all booted

Current Boot information in the system:

=====

Card BootFlash Current Version New Version

Unit1 Boot Flash 5.2.1.8 5.2.1.10

Unit2 Boot Flash 5.2.1.8 5.2.1.10

Unit3 Boot Flash 5.2.1.8 5.2.1.10

* Warning - Upgrading boot flash is inherently risky and should only *

* be attempted when necessary. A failure at this upgrade may cause *

* a board RMA. Proceed with caution ! *

Proceed Boot Flash image for all units [yes/no]: yes

!!!!.I.!!

Bootflash image upgrade for all completed successfully.

DellEMC#

DellEMC#show system brief

Stack MAC : 00:11:33:44:77:86

Reload-Type : normal-reload [Next boot : normal-reload]

-- Stack Info --

Unit UnitType Status ReqTyp CurTyp Version Ports

1 Member online S3148 S3148 9.14(2.16) 54

2 Management online S3124P S3124P 9.14(2.16) 30

3 Standby online S3124F S3124F 9.14(2.16) 30

2. Reload the unit.

EXEC Privilege mode

reload

3. Verify the UBoot image. EXEC Privilege mode

show system stack-unit

DellEMC #show system stack-unit 1

-- Unit 1 --

Unit Type : Management Unit

Status : online

Next Boot : online

Required Type : S3124F - 28-port GE/TE (S3100)

Current Type : S3124F - 28-port GE/TE (S3100)

Master priority : 0

Hardware Rev : 5.0

Num Ports : 30

Up Time : 4 min, 27 sec

Dell EMC Networking OS Version : 9.14(2.16)

Jumbo Capable : yes

POE Capable : no

FIPS Mode : disabled

Boot Flash : 5.2.1.10

Boot Selector : Present

Memory Size : 2147483648 bytes

Temperature : 38C

Voltage : ok

Serial Number :

Part Number : Rev

Vendor Id :

Date Code :

Country Code :

Piece Part ID : N/A

PPID Revision : N/A

Service Tag : N/A

Expr Svc Code : N/A

Auto Reboot : disabled

Burned In MAC : f8:10:16:17:18:17

No Of MACs : 3

-- Module 1 --

Status : not present

-- Power Supplies --

Unit Bay Status Type FanStatus FanSpeed(rpm)

1 1 up AC up 0

1 2 absent absent 0

-- Fan Status --

Unit Bay TrayStatus Fan1 Speed Fan2 Speed

1 1 up up 6956 up 7058

Speed in RPM

DellEMC#

Upgrading the CPLD

The S3100 series with the Dell Networking OS Version 9.14(2.16) requires System CPLD revision 24



NOTE: If your CPLD revisions are higher than the ones shown here, DO NOT make any changes. If you have questions regarding the CPLD revision, contact technical support:

Verify that a CPLD upgrade is required

Use the following command to identify the CPLD version:

```
DellEMC#show revision
-- Stack unit 1 --
S3124F SYSTEM CPLD : 24
DellEMC#
```

Use the following command to view CPLD version that is associated with the Dell Networking OS image:

```
DellEMC#show os-version
RELEASE IMAGE INFORMATION :
-----
Platform Version Size ReleaseTime
S-Series:S3100 9.14(2.16) 50155103 Feb 21 2022 12:52:25
TARGET IMAGE INFORMATION :
-----
Type Version Target checksum
runtime 9.14(2.16) Control Processor passed
BOOT IMAGE INFORMATION :
-----
Type Version Target checksum
boot flash 5.2.1.6 Control Processor passed
FPGA IMAGE INFORMATION :
-----
Card FPGA Name Version
stack-unit 1 S3148 SYSTEM CPLD 24
PoE-CONTROLLER IMAGE INFORMATION
-----
Type Version
PoE Controller 2.65
DellEMC#
```

Upgrading the CPLD Image



NOTE: The upgrade fpga image stack-unit 1 booted command is hidden when using the FPGA Upgrade feature in the CLI. However, it is a supported command and is accepted when entered as documented.



NOTE: Ensure that the UBoot version is 5.2.1.8 or above. You can verify this version using show system stack-unit 1 command.

To upgrade the CPLD image on S3100 Series, follow these steps:

1. Upgrade the CPLD image.

EXEC Privilege mode

```
upgrade fpga-image stack-unit booted
```

```
DellEMC#upgrade fpga-image stack-unit 1 booted
```

```
Current information for the system:
```

```
=====
```

```
Card Device Name Current Version New Version
```

```
-----
```

```
Unit1 S3124F SYSTEM CPLD 23 24
```

```

*****
* Warning - Upgrading FPGA is inherently risky and should *
* only be attempted when necessary. A failure at this upgrade may *
* cause a board RMA. Proceed with caution ! *
*****
*****
* When the upgrade has successfully completed, the system will *
* be automatically rebooted to reload the upgraded components. *
*****

Upgrade image for stack-unit 1 [yes/no]: yes
System fpga upgrade in progress!!! Please do NOT power off the unit!!!

Upgrade result :

=====

Unit 1 System fpga upgrade in progress.

It will take a few minutes for the upgrade to complete.

Unit 1 will auto reboot once the the upgrade is complete.

Please do NOT power off or reload the unit!!!

```

- The system reboots automatically and waits for the Dell prompt. The CPLD version can be verified using show revision command output.

EXEC Privilege mode

```
show revision
```

```
DellEMC#show revision
```

```
-- Stack unit 1 --
```

```
S3124F SYSTEM CPLD : 24
```

```
DellEMC#
```



NOTE: Do not power off the system while FPGA upgrade is in progress. For any queries, contact technical support



NOTE: When you upgrade the standby and member units of CPLD, the following message displays in the management unit. The unit automatically reboots once the upgrade is complete and joins the stack with the upgraded CPLD.

```
DellEMC#upgrade fpga-image stack-unit 3 booted
```

```
Current information for the system:
```

```
=====
```

```
Card Device Name Current Version New Version
```

```
-----
```

```
Unit3 S3124F SYSTEM CPLD 23 24
```

```
*****
```

```

* Warning - Upgrading FPGA is inherently risky and should *
* only be attempted when necessary. A failure at this upgrade may *

```


* cause a board RMA. Proceed with caution ! *

* When the upgrade has successfully completed, the system will *

* be automatically rebooted to reload the upgraded components. *

Upgrade image for stack-unit 3 [yes/no]: yes

System fpga upgrade in progress!!! Please do NOT power off the unit!!!

Upgrade result :

=====

Unit 3 System fpga upgrade in progress.

It will take a few minutes for the upgrade to complete.

Unit 3 will auto reboot once the the upgrade is complete.

Please do NOT power off or reload the unit!!!

DellEMC#

Upgrading the PoE Controller

Upgrade the PoE controller image on a stack unit of the S3100 series switch.

1. Upgrade the PoE controller image on a specified stack unit.

EXEC Privilege mode

upgrade poe-controller stack-unit unit-number

DellEMC#upgrade poe-controller stack-unit 1

Current PoE-Controller information in the system:

=====

Stack Unit Current Version New Version

1 2.65 2.65

* Warning - Upgrading PoE Controller should only be attempted *

* when necessary. Stack-unit will be reset automatically after *

* upgrade. PoE to all ports of the unit would be suspended until *

* upgrade completes and unit gets reloaded successfully. Please do not*

* Reset/Powercycle or Reload. Proceed with caution ! *

Upgrade PoE Controller Firmware for stack-unit 1 ? [yes/no]: yes

PoE Controller upgrade in progress. Please do NOT POWER-OFF the card.

!

Upgrade result :

=====

Slot 1 PoE Controller FirmWare upgrade successful. Resetting the stack-unit.

DellEMC#

Support Resources

The following support resources are available for the S3100 Series.

Documentation Resources

For information about using the S3100 Series, see the following documents at <http://www.dell.com/support>:

- Dell Networking S3100 Series Installation Guide
- Quick Start Guide
- Dell Command Line Reference Guide for the S3100 Series
- Dell Configuration Guide for the S3100 Series

For more information about hardware features and capabilities, see the Dell Networking website at <https://www.dellemc.com/networking>.

Issues

Incorrect behavior or unexpected caveats are listed in order of Problem Report (PR) number within the appropriate sections.

Finding Documentation

This document contains operational information specific to the S3100 Series.

- For information about using the S3100 Series, see the documents at <http://www.dell.com/support>.
- For more information about hardware features and capabilities, see the Dell Networking website at <https://www.dellemc.com/networking>.

Contacting Dell



NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues: Go to www.dell.com/support.

Notes, cautions, and warnings



NOTE: A *NOTE* indicates important information that helps you make better use of your product.



CAUTION: A *CAUTION* indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



WARNING: A **WARNING** indicates a potential for property damage, personal injury, or death.

cfcf



Documents / Resources

	<p>Dell S3100 Series Networking Switch [pdf] Instruction Manual S3124, S3124F, S3124P, S3148P, S3148, S3100 Series Networking Switch, Networking Switch , Switch</p>
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References

- [Computers, Monitors & Technology Solutions | Dell USA](#)
- [Support | Dell US](#)
- [Support | Dell US](#)
- [Dell Networking Solutions | Dell USA](#)
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- [Computers, Monitors & Technology Solutions | Dell USA](#)
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