



TechPack: Stacking Switches - Erste Inbetriebnahme



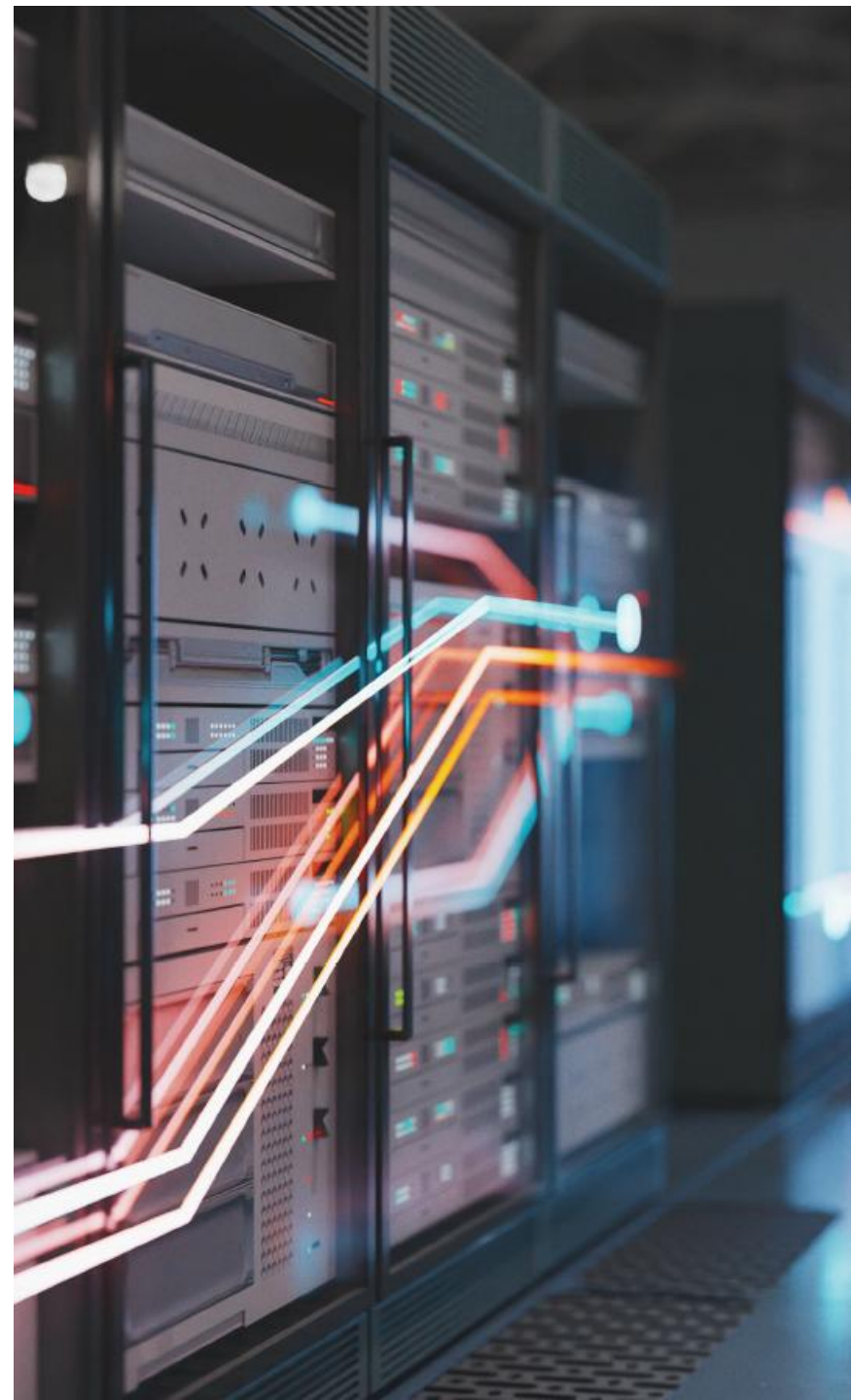
Moderator:

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12. Dezember 2025

■ Was erwartet Sie?

- **D-Link Stack Switch Portfolio Übersicht**
 - Smart Switches
 - Managed Switches
 - Managed Multi Gigabit
- **Stacking**
 - Grundüberlegungen
 - Konfiguration
- **Weitere (Grund-) Konfiguration**
- **Fragen?**





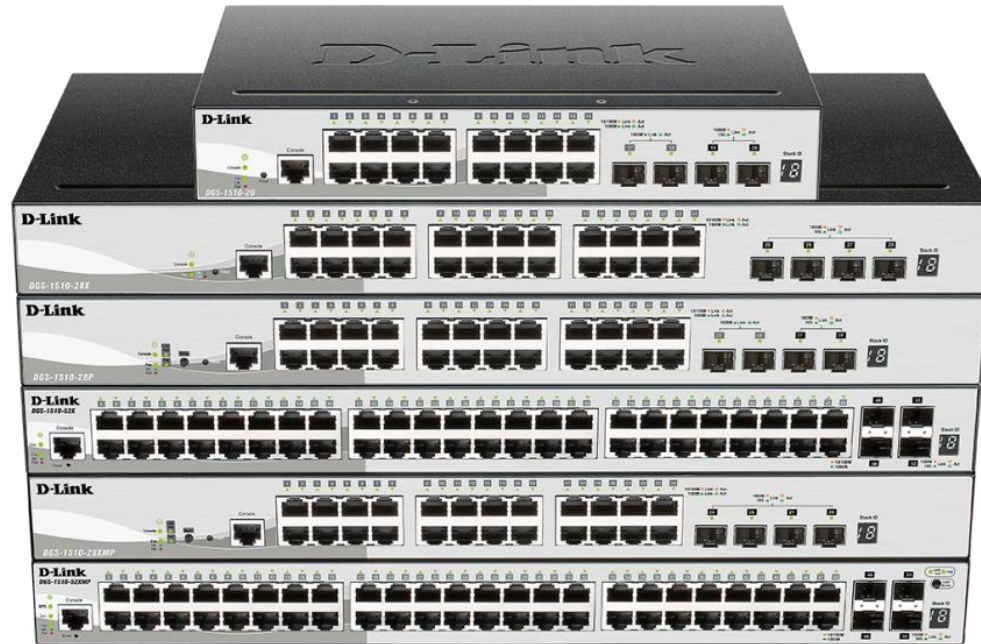
Stack Switch Portfolio Übersicht



■ DGS-1510

DGS-1510 Serie

DGS-1510-20
DGS-1510-28X
DGS-1510-28P
DGS-1510-52X
DGS-1510-28XMP
DGS-1510-52XMP



- 2 x 10G SFP+ Ports (4 x 10G SFP+ bei X Modellen)
- Stacking mit allen DGS-1510 Modellen
- Statisches Routing

■ DGS-1520

DGS-1520 Serie

DGS-1520-28
DGS-1520-28MP
DGS-1520-52
DGS-1520-52MP



- 4 x 2.5G PoE Ports (PoE Modelle)
- 2 x 10G RJ45
- 2 x 10G SFP+
- Stacking bis zu 8 Geräte / 80Gbps
- Redundantes Netzteil optional

DGS-1530

Q3/25

DGS-1530 Serie

DGS-1530-20
DGS-1530-28
DGS-1530-28P
DGS-1530-52
DGS-1530-52P



DGS-1530-20



DGS-1530-28S



DGS-1530-28



DGS-1530-52



DGS-1530-28P



DGS-1530-52P

- 4 x 10G SFP+
- Stacking mit allen DGS-1530 Modellen. Bis zu 9 Geräte. Max. 80Gbit/s Bandbreite
- Statisches Routing
- Management: Web, CLI, SNMP

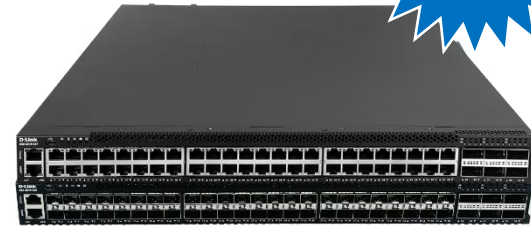
Managed Switches

DXS-3410-32SY
DXS-3410-32XY



4 x
25G

DXS-3610-54T
DXS-3610-54S



6 x
100G

DGS-3130-30TS
DGS-3130-30S
DGS-3130-30PS
DGS-3130-54TS
DGS-3130-54S
DGS-3130-54PS



DGS-3630-28TC
DGS-3630-28PC
DGS-3630-28SC
DGS-3630-52TC
DGS-3630-52PC



Multi-Gigabit

DMS-3130

- Physical stacking mit bis zu 4 x 25G Ports, maximal 9 Geräte
- Unterstützt u.a.: Dying Gasp, ERPS, 802.1ag, RIP, OSPF, VRRP
- 6KV Überspannungsschutz auf den 2.5/5G RJ45 Ports

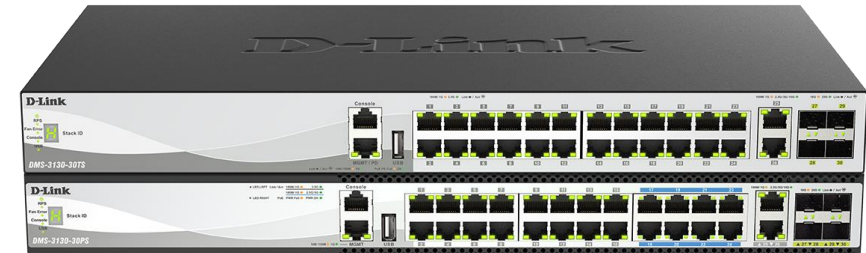
DMS-3130-30TS

24*2.5G + 2*10GE + 4*25G SFP28

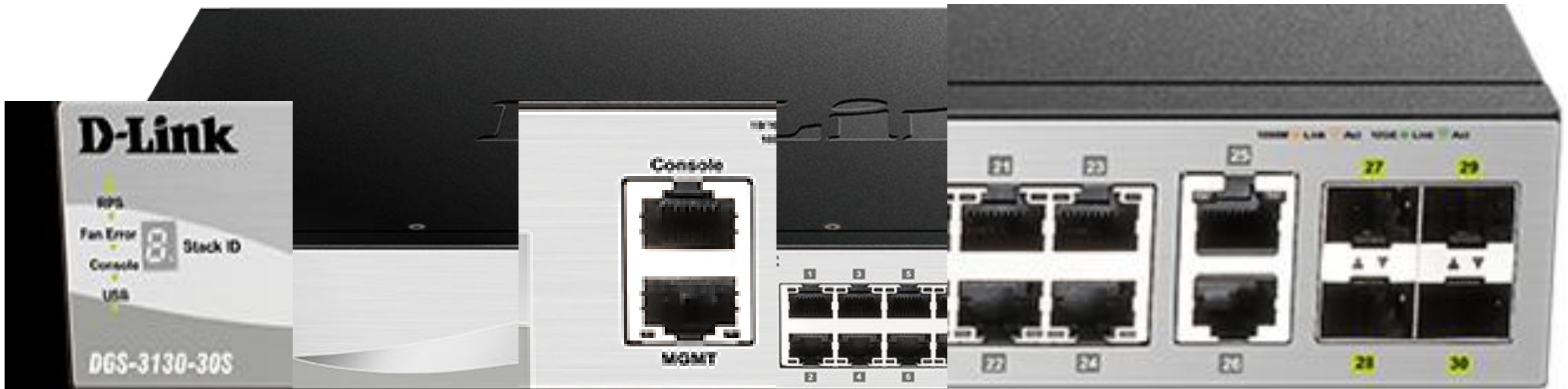
DMS-3130-30PS

16*2.5G PoE⁺ + 8*5G PoE + 2*10GE + 4*25G SFP28

4 x
25G



■ DGS-3130



Stack Anzeige

- 1 ... 9 - Nummerierung
- H - Master Switch
- h – Backup Master

- RS-232 Konsole
- Abgesetztes Management Netz (192.168.0.1)
- Beim 54 Port Modell auf der Rückseite!

- 2 x 10G RJ45
- 4 x SFP+
- Max. 80G Stacking Bandbreite

Stacking

Grundüberlegungen und Konfiguration



■ Stacking Grundüberlegungen

- Physikalisches zusammenschalten mehrerer Switch zu einer logischen Einheit
- Warum Stacking?
 - Einfaches Management mehrerer Geräte über eine Oberfläche
 - Verfügbarkeit / Redundanz
 - Redundante Backbone Anbindung (Backbone Stack oder LAG (Link Aggregation Group))
 - Redundante Anbindung von Servern

Stacking

Hohe Portdichten sind realisierbar z.B.:

- DXS-3610 - maximal 12 Geräte
→ Bis zu 576 x 10Gigabit Ports + 48 x 100G Ports
- DGS-3630 - maximal 9 Geräte
→ Bis zu 396 x 1Gigabit Ports + 18 x 10Gigabit Ports
- DGS-3130 - maximal 6 / 9 Geräte*
→ Bis zu 288 x 1Gigabit Ports + 24 x 10Gigabit Ports
- DGS-1510 - maximal 6 Geräte
→ Bis zu 324 x 1Gigabit Ports + 12 x 10Gigabit Ports

* Beim stacken der Modelle DGS-3130-30TS / 30S / 30PS betragen die Stacking Kosten 1 pro Gerät, es können maximalen 9 Geräte gestackt werden.
Beim stacken der Modelle DGS-3130-54TS / 54S / 54PS betragen die Stacking Kosten 2 pro Gerät, es können maximalen 6 Geräte gestackt werden.
Wenn verschiedene Modelle gestackt, darf die Gesamtanzahl der Stacking-Kosten 12 nicht übersteigen!
Zum Beispiel: 2 x DGS-3130-30TS (Stacking Kosten je 1) + 4 x DGS-3130-54TS (Stacking Kosten je 2) -> 2 x 1 + 4 x 2 = Gesamt Stacking Kosten 10.

■ Topologie Ring oder Chain

Ring Topologie

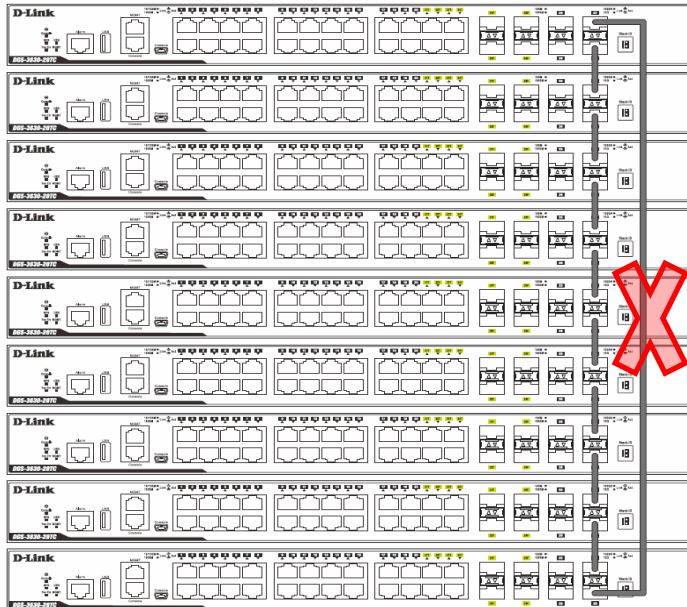


Figure 4-4 Duplex Ring stacking topology (SFP+)

Chain Topologie

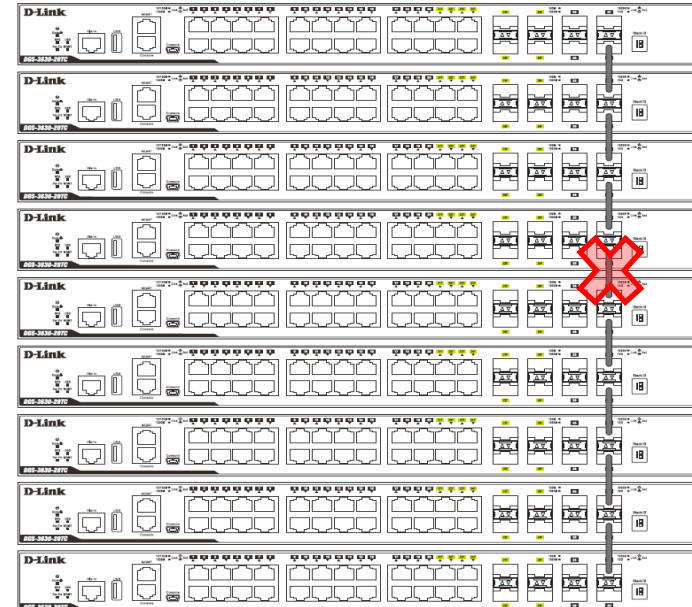


Figure 4-3 Duplex Chain stacking topology (SFP+)

1

2

- Doppelte Bandbreite (40 Gbit/s – bei 10G Ports)
- Redundanz

■ Stacking - Tipps

- **Stack immer als erstes einrichten!**
- Alle Mitglieder eines Stacks müssen mit der gleichen Firmware betrieben werden
- Stacking ist nur innerhalb einer Geräteklasse (z.B.: DGS-1510, DGS-3130 etc.) möglich
- Es wird empfohlen ein Ring-Stack zu bilden anstatt einer „Chain“ (Kette)
Doppelte Bandbreite + Redundanz
- Master-Switch und den Backup-Master sollten manuell konfiguriert werden (Box-ID, Priority)
Wichtig beim Austausch eines Switches bzw. einer Erweiterung



Connect to 192.168.0.1

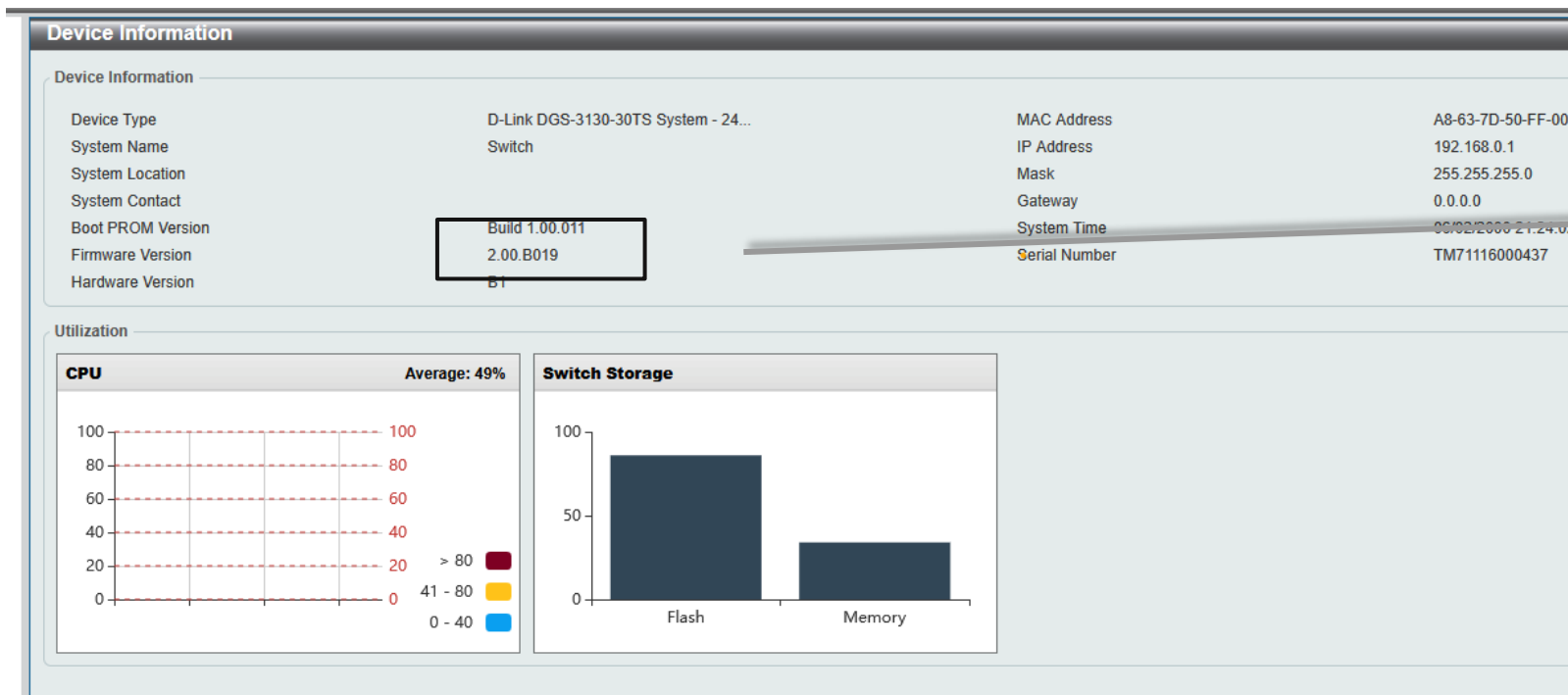


User Name

Password

Language ▾

Default IP: 10.90.90.90
(192.168.0.1 – MgmPort)
Benutzername: admin
Passwort: admin



Bitte überprüfen Sie die verwendete Firmware Version. Aktuelle Firmware finden Sie auf: [HTTPS://ftp.dlink.de](https://ftp.dlink.de)

Alle Switche benötigen die gleiche Firmware Version!



Save Tools English

Fuzzy Search

DGS-3130-30TS

System

Management

Command Logging

User Accounts Settings

Password Encryption

Password Recovery

Login Method

SNMP

RMON

Telnet/Web

Session Timeout

DHCP

DHCP Auto Configuration

DNS

IP Source Interface

File System

Stacking

Physical Stacking

Stacking Bandwidth

Virtual Stacking (SIM)

D-Link Discovery Protocol

SMTP Settings

Reboot Schedule Settings

PPPoE Circuit ID Insertion Settings

SD Card Management

L2 Features

L3 Features

QoS

ACL

Security

OAM

Physical Stacking

Stacking Mode

Enabled

Disabled

Trap State

Enabled

Disabled

Stack ID

Current Unit ID1New Box ID1

Priority

Current Unit ID1New PriorityChoose the priority...

My Box ID: 1Running-Config Synchronization to BK Master

Master Box ID: 1Status: -

BK Master Box ID: -Time Since Last Sync.: -

Stack Technology: Stacking Lite Ver 0.1Time Since Next Sync.: -

Topology: Duplex_Chain

Max Stack Co

Max Box Cour

Current Stack

Current Box C

Box ID	Module Name	Priority	MAC	PROM/Runtime Version	H/W Version	Switch Status	Box Cost
1	DGS-3130-30TS	0	A8-63-7D-50-FF-00	1.00.011/2.00.B019	B1	OK	1
2	--	-	--	--	-	Not Present	-
3	--	-	--	--	-	Not Present	-
4	--	-	--	--	-	Not Present	-
5	--	-	--	--	-	Not Present	-
6	--	-	--	--	-	Not Present	-
7	--	-	--	--	-	Not Present	-

Apply

Apply

Apply

Apply

Bitte wählen Sie im Menü:
Management -> Stacking
-> Physical StackingStacking aktivieren bevor
Verkabelung hergestellt
wird!
Erfordert NeustartÜbersicht der im Stack
vorhandenen Geräte

Stacking - Automatische Einstellung

D-Link
Building Networks for People

Stack ID: 1
Refresh Interval: 10 secs

Logged in as: administrator, ... Logout

Fuzzy Search

- DGS-3130-30TS
- System
- Management
 - Command Logging
 - User Accounts Settings
 - Password Encryption
 - Password Recovery
 - Login Method
- SNMP
- RMON
- Telnet/Web
- Session Timeout
- DHCP
 - DHCP Auto Configuration
- DNS
- IP Source Interface
- File System
- Stacking
 - Physical Stacking**
 - Stacking Bandwidth
- Virtual Stacking (SIM)
- D-Link Discovery Protocol
- SMTP Settings
- PPPoE Circuit ID Insertion Settings
- L2 Features
- L3 Features
 - QoS
 - ACL
- Security
 - OAM
- Monitoring
- Green

Physical Stacking

Physical Stacking: ☒ Enabled ☐ Disabled

Stack ID

Current Unit ID: 1 New Box ID: 1

Current Unit ID: 1 Priority: Choose the priority...

My Box ID: 1
Master ID: 1
BK Master ID: 2
Box Count: 2

Running-Config Synchronization to BK Master
Status: Stale
Time Since Last Sync.: -
Time Since Next Sync.: 1 secs

Box ID	Module Name	Priority	MAC	PROM/Runtime Version	H/W Version	Switch Status
1	DGS-3130-30TS	Unassigned	58-D5-6E-42-BF-80	1.00.005/1.01.B027	A1	OK
2	DGS-3130-54PS	Unassigned	00-AD-24-97-D6-80	1.00.006/1.01.B027	A1	OK
3	--	-	--	--	-	Not Present
4	--	-	--	--	-	Not Present
5	--	-	--	--	-	Not Present
6	--	-	--	--	-	Not Present
7	--	-	--	--	-	Not Present
8	--	-	--	--	-	Not Present
9	--	-	--	--	-	Not Present

Master Switch ID

Übersicht der im Stack vorhandenen Geräte



Stacking – Manuelle Einstellung

D-Link
Building Networks for People

Stack ID: 1
Refresh Interval: 10 secs

Logged in as: administrator, ... Logout

Fuzzy Search

- DGS-3130-54PS
- System
- Management
 - Command Logging
 - User Accounts Settings
 - Password Encryption
 - Password Recovery
 - Login Method
- SNMP
- RMON
- Telnet/Web
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- SMTP Settings
- PPPoE Circuit ID Insertion Settings
- L2 Features
- L3 Features
- QoS
- ACL
- Security
- OAM
- Monitoring
- Green

Physical Stacking

Physical Stacking ☒ Enabled ☐ Disabled

Stack ID

Current Unit ID: 1 New Box ID: 1

Current Unit ID: 1 Priority: Choose the priority...

My Box ID: 1
Master ID: 1
BK Master ID: 2
Box Count: 2

Running-Config Synchronization to BK Master
Status: Synchronized
Time Since Last Sync: 0 days 0 hrs 6 mins 12 secs

Box ID	Module Name	Priority	MAC	Switch Status
1	DGS-3130-54PS	15	00-AD-24-97-D6-80	OK
2	DGS-3130-30TS	10	58-D5-6E-42-BF-80	OK
3	--	-	--	Not Present
4	--	-	--	Not Present
5	--	-	--	Not Present
6	--	-	--	Not Present
7	--	-	--	Not Present
8	--	-	--	Not Present
9	--	-	--	Not Present



Beispiel – Einstellungen im Stack

D-Link
Building Networks for People

Stack ID: 1
Refresh Interval: 10 secs

Save Tools

Logged in as: administrator, ... Logout

Fuzzy Search

- DGS-3130-54PS
- System
 - System Information Settings
 - Peripheral Settings
 - Port Configuration
 - Port Settings**
 - Port Status
 - Port GBIC
 - Port Auto Negotiation
 - Error Disable Settings
 - Jumbo Frame
- PoE
- System Log
- Time and SNTP
 - Time Range
- Management
 - L2 Features
 - L3 Features
 - QoS
 - ACL
 - Security
 - OAM
 - Monitoring
 - Green

Port Settings

Port Settings

Unit: 1 From Port: eth1/0/1 To Port: eth1/0/1 Medium Type: RJ45 State: Enabled MDIX: Auto Flow Control: Off

Duplex: Auto Speed: Auto Capability Advertised: ☐ 10M ☐ 100M ☐ 1000M ☐ 10G Description: 64 chars ☐

Apply

Unit 1 Settings

Port	Link Status	State	MDIX	Flow Control		Duplex	Speed	Description
				Send	Receive			
eth1/0/1	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/2	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/3	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/4	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/5	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/6	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/7	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/8	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/9	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/10	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/11	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/12	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/13	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/14	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/15	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/16	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/17	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/18	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	
eth1/0/19	Down	Enabled	Auto-MDIX	off	off	Auto-duplex	Auto-speed	

Auswahl der grafischen Anzeige

Auswahl des zu konfigurierenden Switches

Speichern

Wichtig!
Nach erfolgreicher Einstellung unbedingt
Konfiguration speichern!
- für die default Config Pfad nicht verändern -

The screenshot shows the configuration interface for a DGS-3130-30TS device. At the top, there is a navigation bar with 'Save', 'Tools', and 'English' dropdown menus. On the right, it indicates 'Logged in as: administrator, ...' with a 'Logout' button. A 'Save Configuration' dialog box is open, showing a tree view on the left with folders for System, Management, L2 Features, L3 Features, QoS, ACL, Security, and CAM. The main area of the dialog is titled 'Save Configuration' and contains a 'File Path' input field with the text 'C:/config.cfg' and an 'Apply' button. A red arrow points from the 'Save' button in the top navigation bar to the 'Save Configuration' dialog box.

Save Configuration

File Path

Stacking - Tipps

- Stacking immer als erstes Konfigurieren.
 - Bei allen Geräten: Stacking einschalten -> reboot -> erst dann Stacking Verbindungen herstellen!
- Master-Switch und den Backup-Master manuell konfigurieren (Box-ID, Priority)
 - Alle Konfigurationen sind an die Box-ID gebunden. Achtung bei nachträglichen Änderungen der ID!

■ Weitere (Grund-) Konfiguration

- IP – Adresse an das Kunden Netz anpassen (L3 Features -> Interface -> IPv4 Interface).
Der Gesamte Stack wird über eine IP-Adresse verwaltet.
Nur der Management- / Konsolen Port auf dem Master Switch (H) ist aktiv.

The screenshot shows a web-based network management interface. The top navigation bar includes 'Save', 'Tools', 'English', and a user login status 'Logged in as: administrator, ...'. A 'Fuzzy Search' bar is located on the left. The left sidebar contains a tree view of the configuration hierarchy: 'System' (with sub-items like System Information Settings, Peripheral Settings, Port Configuration, Interfaces Description, System Log, Time and SNTP, Time Range, Switch Controller Settings), 'Management', 'L2 Features', 'L3 Features' (expanded, showing ARP, Gratuitous ARP, IPv6 Neighbor, and Interface), and 'Interface' (expanded, showing IPv4 Interface, IPv6 Interface, Loopback Interface, and Null Interface). The 'IPv4 Interface' page is active, showing a table with one entry for 'vlan1'. The table columns are Interface, State, IP Address, Secondary, and Link Status. The entry for 'vlan1' shows State as 'Enabled', IP Address as '10.90.90.91/255.0.0.0 (Manual)', Secondary as 'No', and Link Status as 'Down'. There are 'Apply' and 'Find' buttons at the top right of the table. Below the table, there are pagination controls showing '1/1' and a 'Go' button.

Save Tools English Logged in as: administrator, ...

Fuzzy Search

DGS-3130-30TS

System

- System Information Settings
- Peripheral Settings
- Port Configuration
- Interfaces Description
- System Log
- Time and SNTP
- Time Range
- Switch Controller Settings

Management

L2 Features

L3 Features

- ARP
- Gratuitous ARP
- IPv6 Neighbor
- Interface
 - IPv4 Interface**
 - IPv6 Interface
 - Loopback Interface
 - Null Interface

IPv4 Interface

IPv4 Interface

Interface VLAN (1-4094)

Apply Find

Total Entries: 1

Interface	State	IP Address	Secondary	Link Status	
vlan1	Enabled	10.90.90.91/255.0.0.0 (Manual)	No	Down	Edit Delete

1/1 < > 1 > > Go

■ Weitere (Grund-) Konfiguration

- User / Passwort festlegen (Management → User Account Settings)
Achtung – Es muss ein neuer User mit Privilege „15“ angelegt werden!

The screenshot shows a web-based configuration interface for a device. The top navigation bar includes 'Save', 'Tools', and 'English' dropdowns. On the right, it indicates the user is 'Logged in as: administrator, ...' with a 'Logout' link. A left sidebar contains a 'Fuzzy Search' box and a tree view with categories like 'System' and 'Management'. Under 'Management', 'User Accounts Settings' is selected. The main content area is titled 'User Accounts Settings' and has two tabs: 'User Management Settings' (active) and 'Session Table'. In the 'User Management Settings' tab, there are input fields for 'User Name' (containing 'admin'), 'Privilege (1-15)' (containing '15'), 'Password Type' (a dropdown menu showing 'Plain Text'), and 'Password' (a masked field with 15 dots). An 'Apply' button is located to the right of the password field. Below these fields, it says 'Total Entries: 0'. At the bottom, there is a table header with columns for 'User Name', 'Privilege', and 'Password'.

User Name	Privilege	Password
-----------	-----------	----------

■ Weitere (Grund-) Konfiguration

- Enable Passwort festlegen (Management → Login Method)
Optional – Notwendig für Konfiguration über Telnet / SSH / Konsole
- Login für Telnet / SSH / Konsole einschalten und Passwort festlegen.
Optional. Ohne Passwort kein Zugriff möglich auch wenn eingeschaltet!

The screenshot displays the configuration interface for a DGS-3130-30TS device. On the left is a navigation tree with a 'Fuzzy Search' bar. The 'Management' section is expanded, and 'Login Method' is selected. The main panel is titled 'Login Method' and contains three sections: 'Enable Password', 'Login Method', and 'Login Password'.

Enable Password

Level: 15 Password Type: Plain Text Password: [masked] [Apply]

Login Method

Application	Login Method	
Console	No Login	[Edit]
Telnet	Login	[Apply]
SSH	Login	[Edit]

Login Password

Application: Console Password Type: Plain Text Password: [empty] [Apply]

Application	Password
-------------	----------

Speichern

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Nach erfolgreicher Einstellung unbedingt
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The screenshot shows the configuration interface for a DGS-3130-30TS device. At the top, there is a navigation bar with 'Save', 'Tools', and 'English' dropdown menus. On the right, it indicates 'Logged in as: administrator, ...' with a 'Logout' button. A 'Save Configuration' dialog box is open, showing a tree view on the left with folders for System, Management, L2 Features, L3 Features, QoS, ACL, Security, and CAM. The main area of the dialog is titled 'Save Configuration' and contains a 'File Path' input field with the text 'C:/config.cfg' and an 'Apply' button. A red arrow points from the 'Save' button in the top navigation bar to the 'Save Configuration' dialog box.

Save Configuration

File Path

■ Kontakt



Rufen Sie uns gerne an, wenn Sie Unterstützung bei der Wahl passender Produkte benötigen:

Tel. 06196 / 77 99-500

oder senden Sie uns eine E-Mail an:

dce-vertriebsanfrage@dlink.com

Weitere Informationen finden Sie ebenfalls unter:

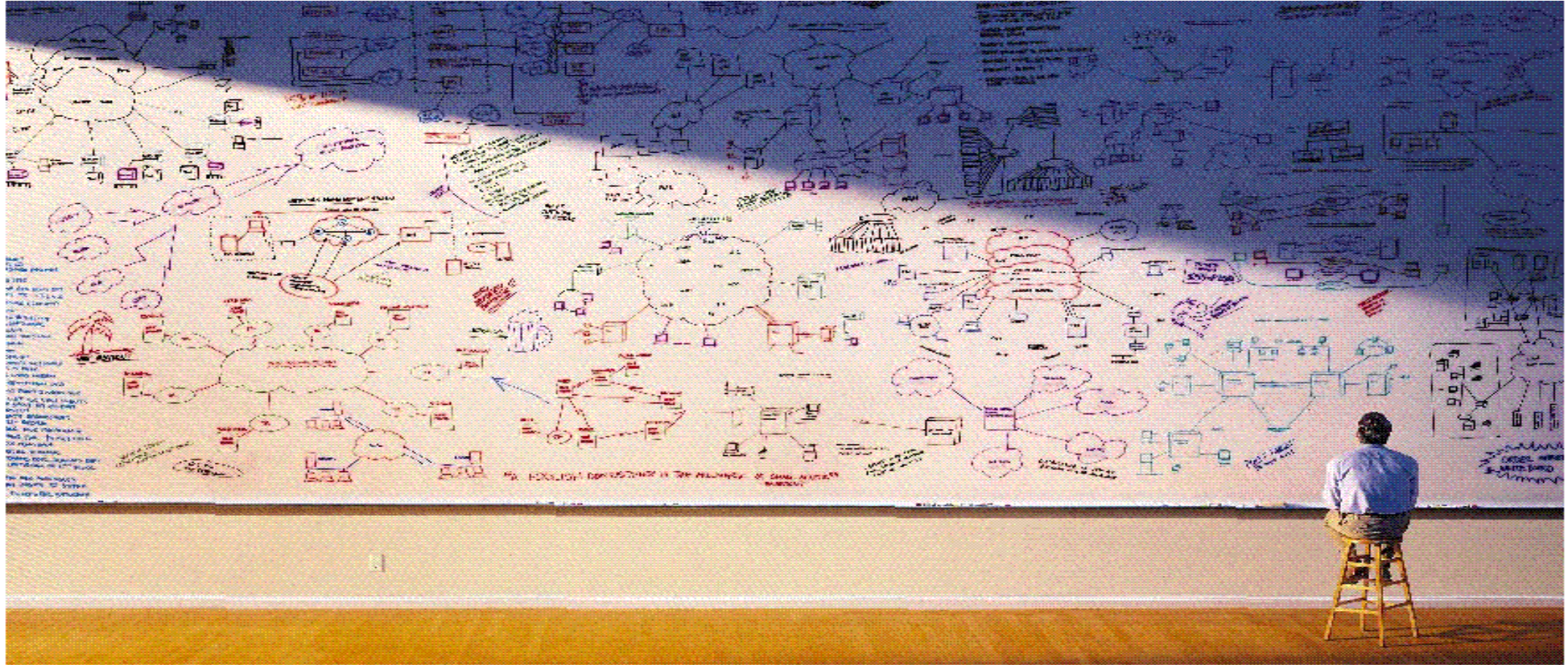
www.dlink.com

Wir sind gerne für da.

Ihr D-Link Team

Weitere Informationen finden Sie auch unter eu.dlink.com.

■ Sie haben Fragen?





Vielen Dank

D-Link®