

Configuration Guide

How to Configure a Captive Portal on the DWC-1000



Overview

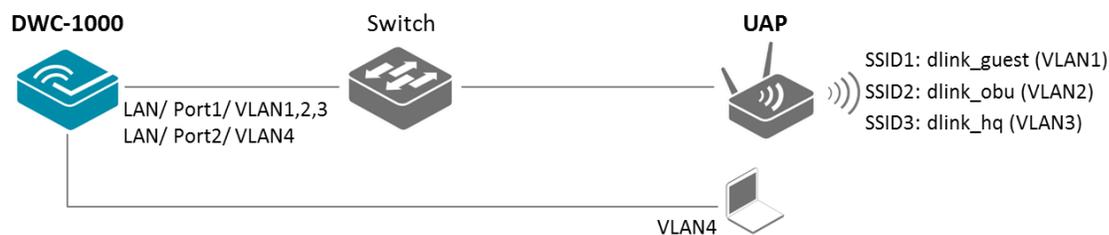
This guide describes how to configure and customize a captive portal on the D-Link DWC-1000 Unified Controller for user authentication.

Users can enable the captive portal function on one or multiple SSIDs. When a user accesses an SSID for which captive portal has been enabled, the Unified Access Point (UAP) redirects the access page to an authentication page (captive portal page) if the user has not been authenticated. If the user enters the correct username and password, he will be granted Internet access. If not, the user's access request is blocked by the UAP. The authentication methods include local database and external RADIUS server. Users can also customize the captive portal page by changing the banner and background, and adding text.

Situation Note

Many companies, businesses, and public facilities have enabled wired or wireless Internet connections in their public spaces such as meeting rooms, libraries, restaurants, and parks. Through user authentication, these places can easily control their Internet resources and manage user accounts. Most require users to input a valid username and password in order to access the Internet.

The scenario in this guide shows you how to configure a Captive Portal for the dlink_guest SSID, dlink_obu SSID, dlink_hq SSID, and VLAN4. All connections from those SSIDs and VLAN 4 require performing authentication before being granted Internet access.



The authentication methods on each SSID or VLAN 4 are different:

- dlink_guest SSID: This SSID is for guest or visitor used. The guest or visitor is allowed get access after he agrees Service-level Agreement (SLA).
- dlink_obu SSID: This SSID is for D-Link overseas employee while he visits D-Link headquarter. The overseas employee uses temporary account to get access. The temporary account generation is associated with Gust Management service. The captive portal login page is customized with international images.
- dlink_hq SSID: This SSID is for D-Link headquarter employee. The authentication method is used external RADIUS. The captive portal login page is used default profile.

NOTE: The screenshots in this guide are from the DWC-1000's firmware version 4.2.0.2_WW. If you are using an earlier version of the firmware, the screenshots may not be identical to what you see on your browser.

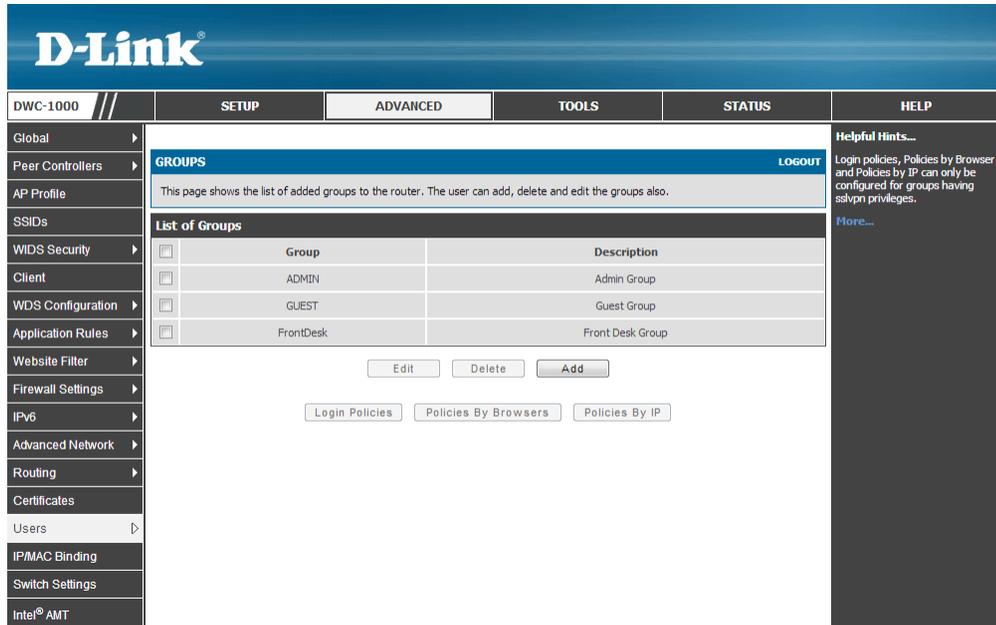
- VLAN4: This VLAN is for IT administrator used. The authentication method is used local database. The captive portal login page is used default profile.

Configuration Steps

1. Set up the AP profile and VLANs based on the network architecture. Please refer to the "How to Configure an AP Profile on DWC-1000" guide.
2. Discover and manage an AP from the network. Please refer to the "How to Configure Layer 2 Discovery on the DWC-1000" guide.
3. Set authentication database. There are two authentication methods: (a) local database, and (b) external RADIUS.

To set local database:

- 3-a-1. Build up the user list in the User Database. Go to **ADVANCED**> **Users**> **Group**. Click **Add** to add a new user group.



- 3-a-2. Fill in the necessary information under Group Configuration, enter a Group Name such as "Auth_IT" in the below screenshot, and select "Captive Portal User" under User Type. Click **Save Settings**.

How to Configure a Captive Portal on the DWC-1000

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DWC-1000 // SETUP ADVANCED TOOLS STATUS HELP

Global Peer Controllers AP Profile SSIDs WDS Security Client WDS Configuration Application Rules Website Filter Firewall Settings IPv6 Advanced Network Routing Certificates Users IP/MAC Binding Switch Settings Intel® AMT

GROUP CONFIGURATION LOGOUT

This page allows user to add a new user group. Once this group is added, a user can then add system users to it.

Save Settings Don't Save Settings

Group Configuration

Group Name: Auth_IT

Description: Captive Portal

User Type

PPTP User:

L2TP User:

Xauth User:

SSLVPN User:

Admin:

Guest User (readonly):

Captive Portal User:

Front Desk User:

Idle Timeout: 10 (Minutes)

Helpful Hints... Do you know that you can associate multiple users to a single group. More...

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DWC-1000 // SETUP ADVANCED TOOLS STATUS HELP

Global Peer Controllers AP Profile SSIDs WDS Security Client WDS Configuration Application Rules Website Filter Firewall Settings IPv6 Advanced Network Routing Certificates Users IP/MAC Binding Switch Settings Intel® AMT

Operation succeeded

GROUPS LOGOUT

This page shows the list of added groups to the router. The user can add, delete and edit the groups also.

List of Groups

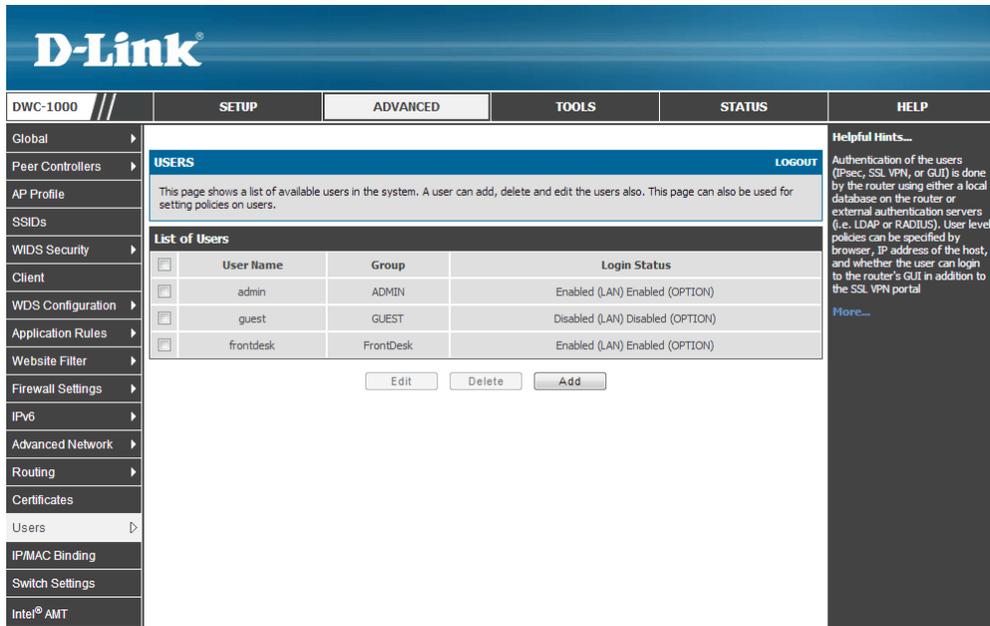
<input type="checkbox"/>	Group	Description
<input type="checkbox"/>	ADMIN	Admin Group
<input type="checkbox"/>	GUEST	Guest Group
<input type="checkbox"/>	FrontDesk	Front Desk Group
<input type="checkbox"/>	Auth_IT	Captive Portal

Edit Delete Add

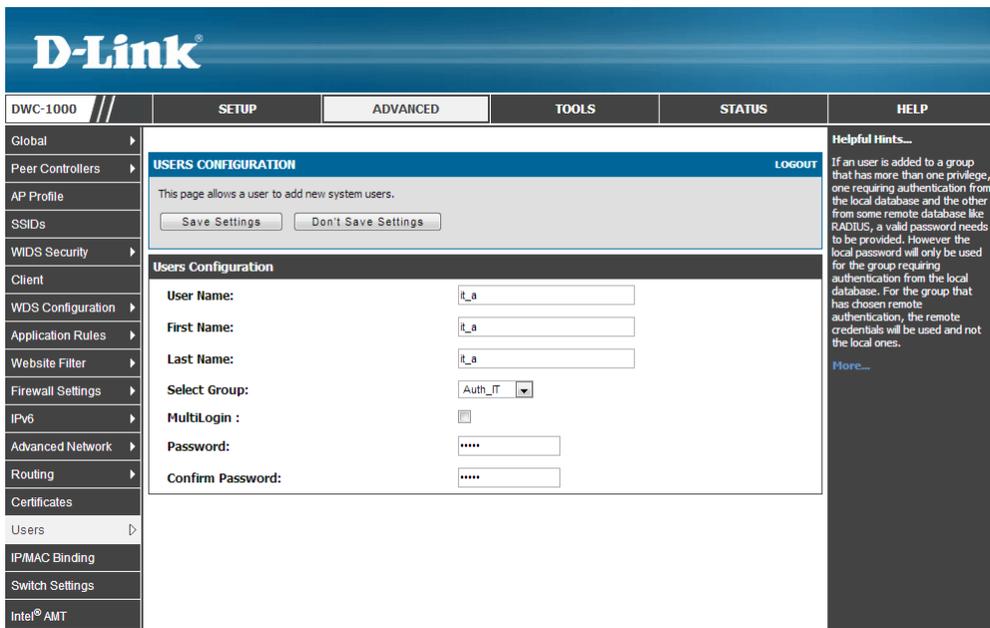
Login Policies Policies By Browsers Policies By IP

Helpful Hints... Login policies, Policies by Browser and Policies by IP can only be configured for groups having sslvpn privileges. More...

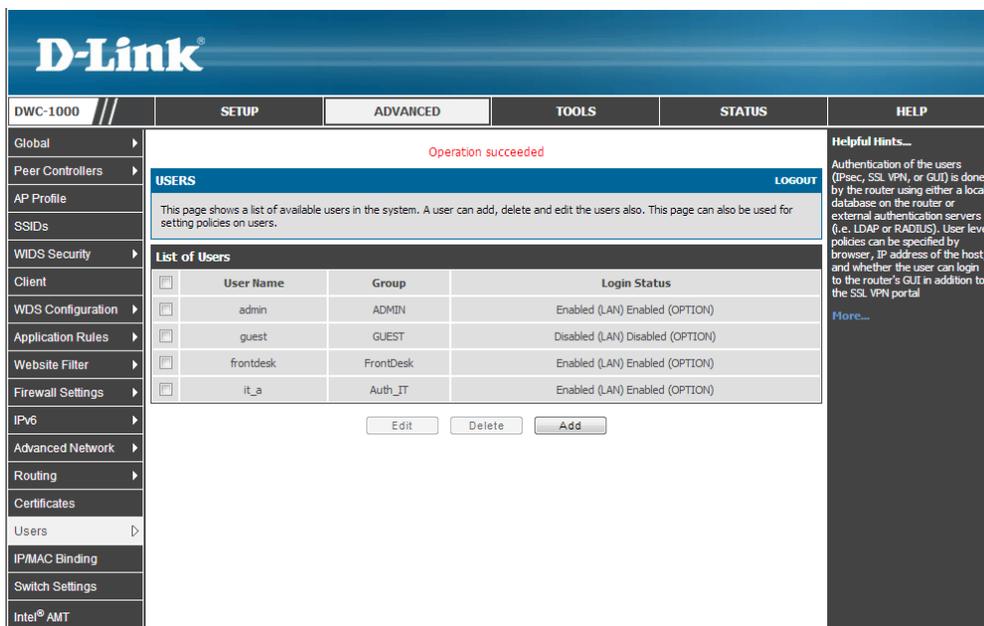
3-a-3. Go to ADVANCED> Users> Users. Click Add to add a new user account.



3-a-4. Fill in the necessary information under Users Configuration. For Select Group, choose "Auth_IT" which was created in the previous step. Enable "MultiLogin" if allow multiple device simultaneously log in with the same account. Click **Save Settings**.

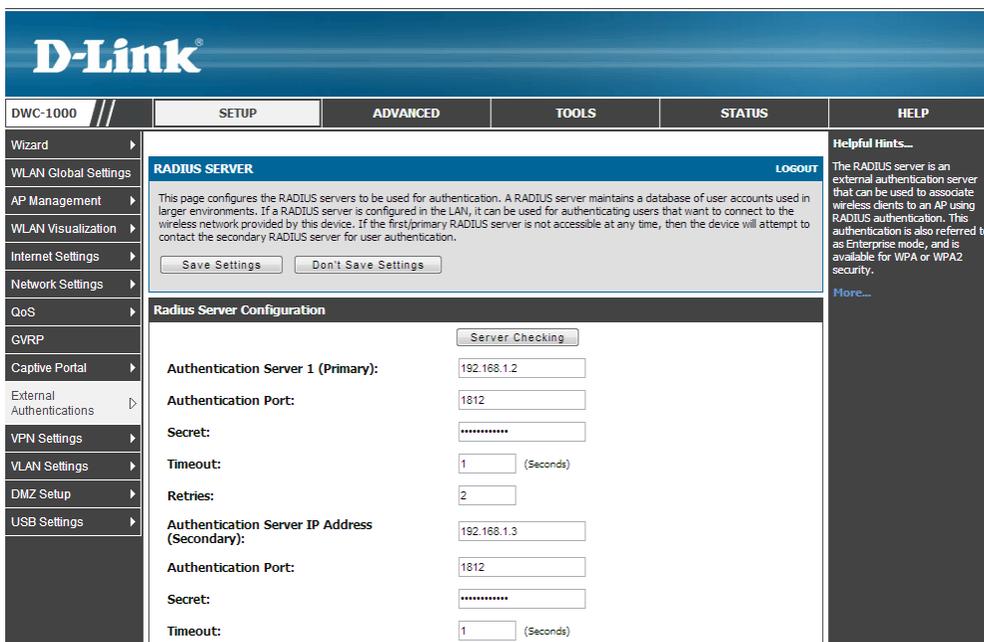


The new record will then be displayed in the database list.

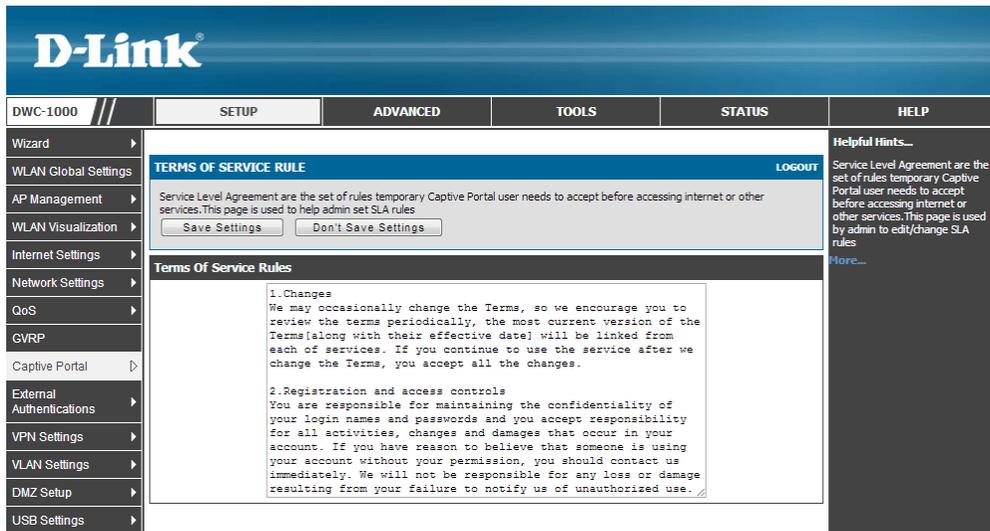
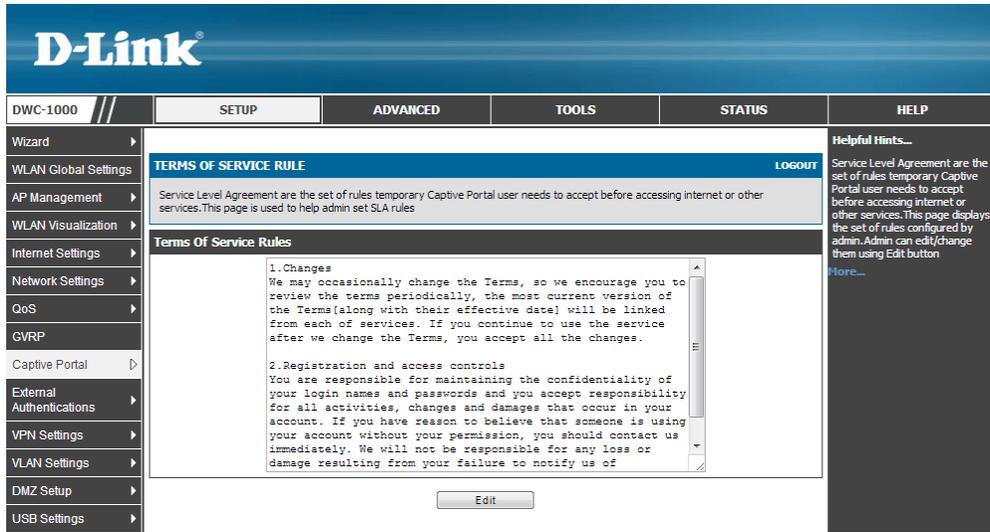


To set external RADIUS server:

3-b-1. Go to **ADVANCED**> Radius Settings. Fill in the external RADIUS info for the primary RADIUS server. Click **Save Settings**.



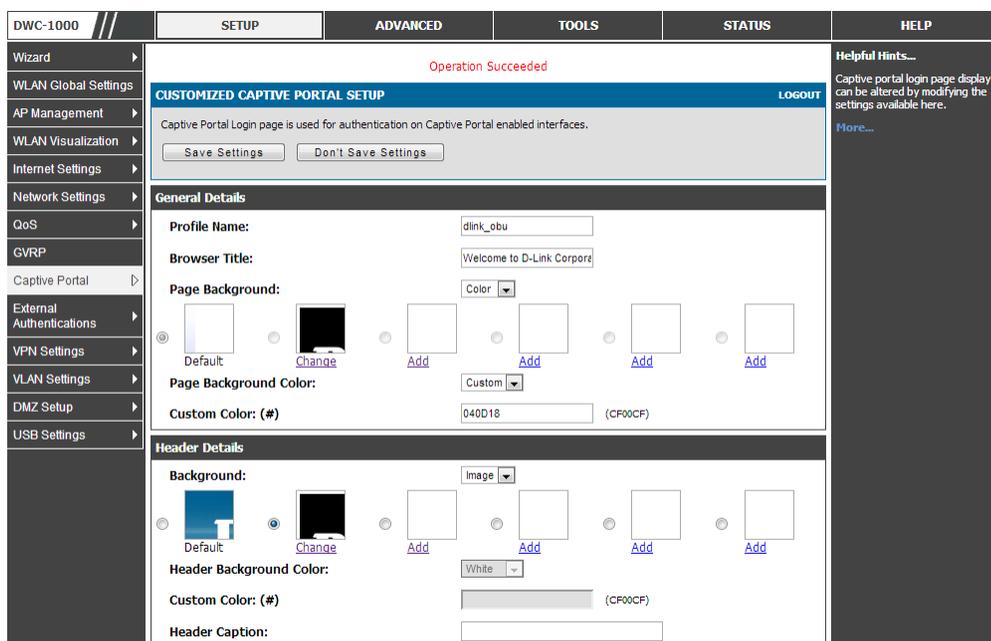
4. Customize the content of SLA. Go to **SETUP**> Captive Portal> SLA. Click **Edit** to change the SLA contents. Click **Save Settings** to save the changes.



5. Customize the captive portal page. The DWC-1000 provides one default profile for Captive Portal. You can customize the appearance of the Captive Portal page. Go to **SETUP> Captive Portal> Captive Portal Setup**. Click **Add** to add a new captive portal profile.



You can then change the settings for General Details, Header Details, Login Details, Advertisement Details and Footer details. Click **Save Settings** when finished.

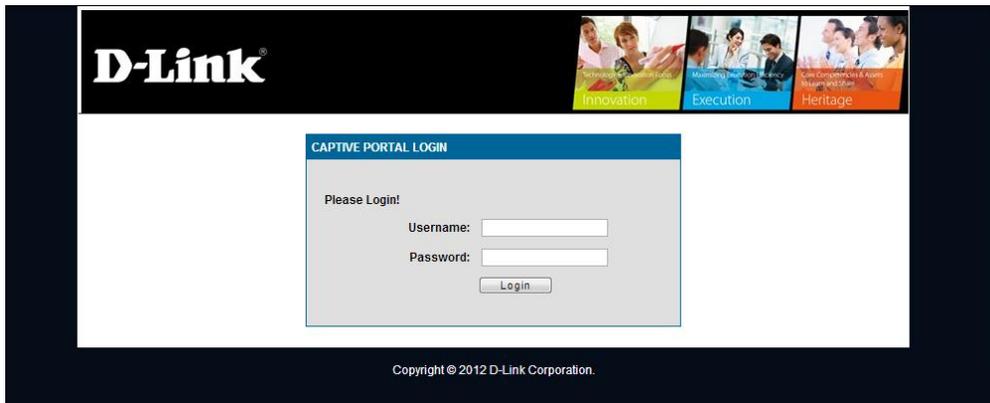
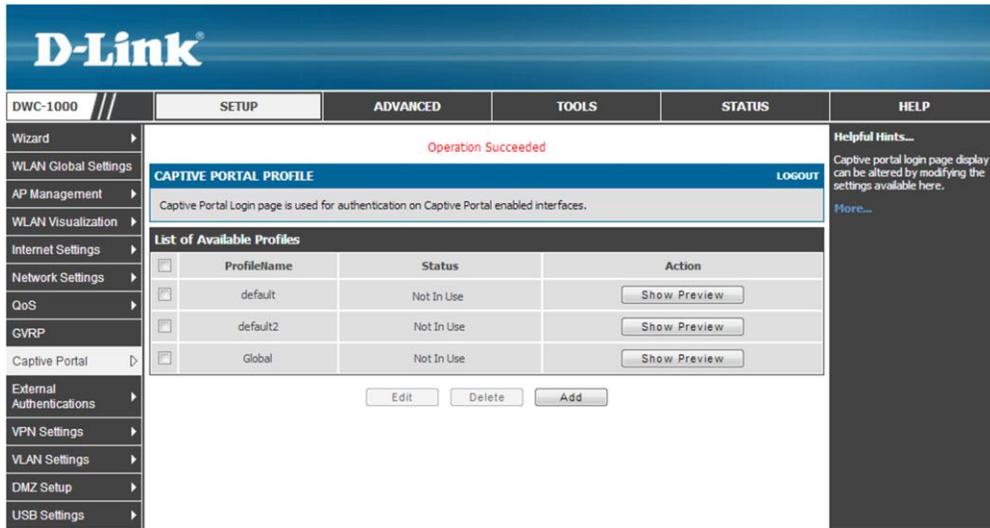


Regarding color customization, you can find more information about color hex codes from the Internet. These recommended websites may provide useful information:

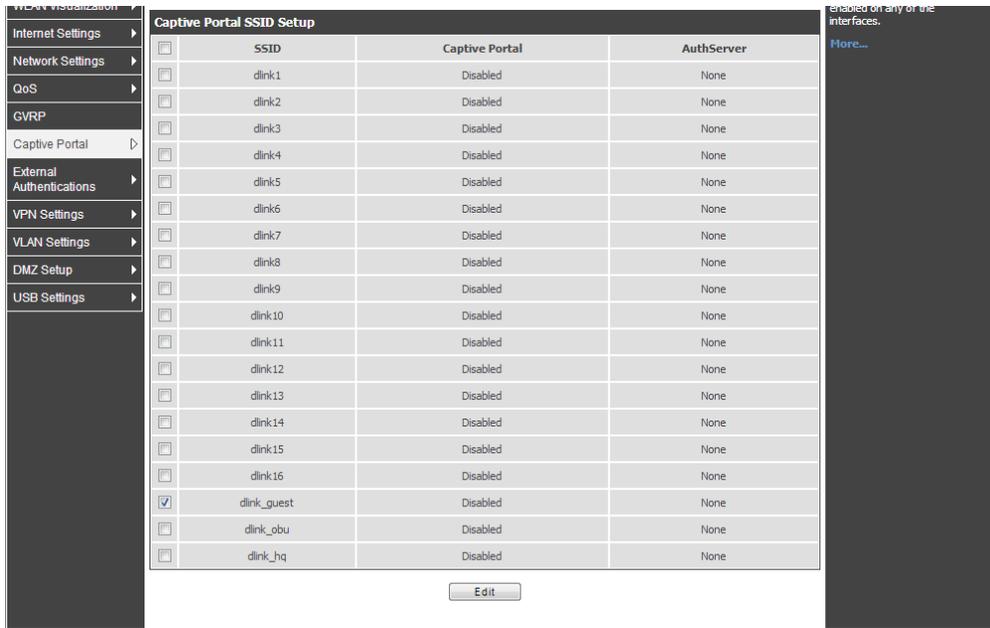
- Color-Hex.Com <http://www.color-hex.com/>
- HTML Color code info <http://html-color-codes.info/>

For the background image, please notice that the maximum size of the image you can upload is 100 KB; for the banner image, please notice that the maximum size of the image you can upload is 50 KB.

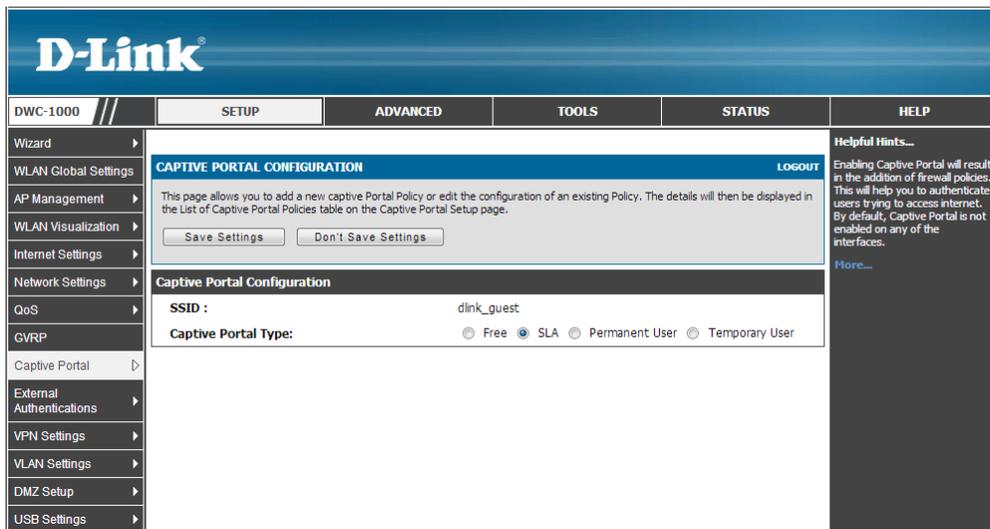
Click **Show Preview** to review your customized authentication page.



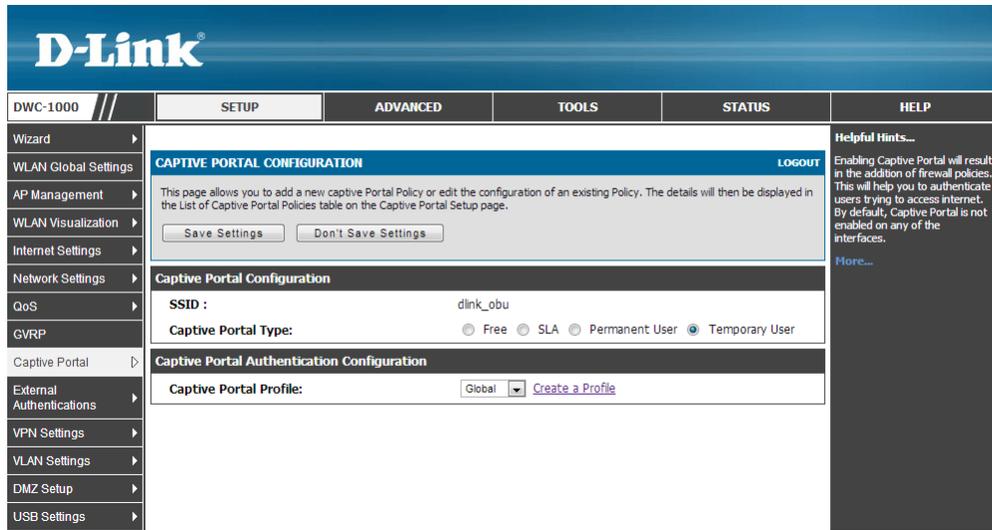
6. Enable Captive Portal. Captive Portal can be applied to both (a) wireless and (b) wired users. To apply Captive Portal on dlink_gust, dlink_obu and dlink_hq SSID for wireless user:
 - 6-a-1. Select the SSID you want to enable user authentication on. Navigate to SETUP> Captive Portal> Captive Portal SSID Setup. Select an SSID/interface from the Interface List. To enable SLA on dlink_guest SSID, select "dlink_guest," and click **Edit**.



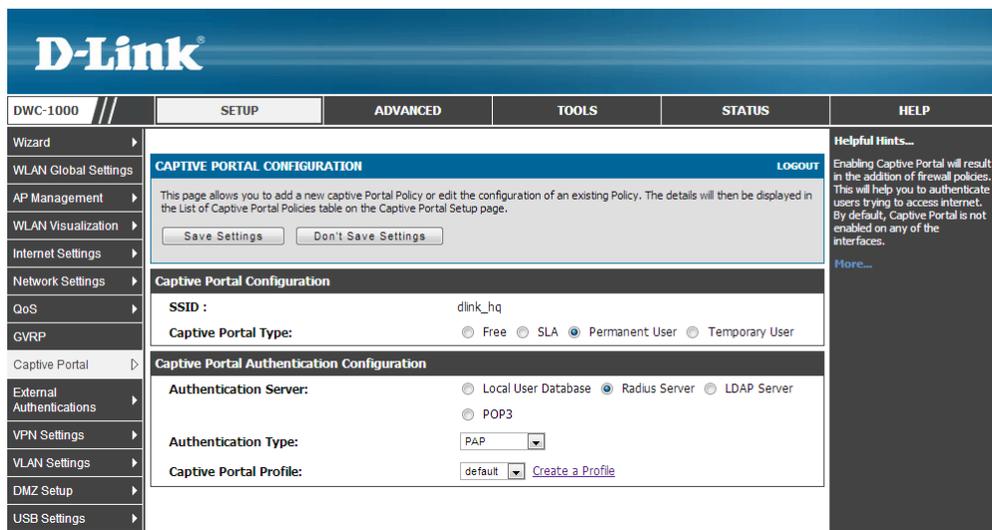
6-a-2. Select "SLA" for Captive Portal Type. Click **Save Settings**.



6-a-3. To enable Captive Portal on dlink_obu SSID, select "dlink_obu," and click **Edit**. Select "Temporary User" for Captive Portal and select "Global" for Captive Portal Profile. Click **Save Settings**.



6-a-4. To enable Captive Portal on dlink_hq SSID, select “dlink_hq,” and click **Edit**. Select “Permanent User” for Captive Portal. Select “Radius Server” for Authentication Server. Select “default” for Captive Portal Profile. Click **Save Settings**.



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SSID	Captive Portal	AuthServer
dlink1	Disabled	None
dlink2	Disabled	None
dlink3	Disabled	None
dlink4	Disabled	None
dlink5	Disabled	None
dlink6	Disabled	None
dlink7	Disabled	None
dlink8	Disabled	None
dlink9	Disabled	None
dlink10	Disabled	None
dlink11	Disabled	None
dlink12	Disabled	None
dlink13	Disabled	None
dlink14	Disabled	None
dlink15	Disabled	None
dlink16	Disabled	None
dlink_guest	Enabled	Local User Database
dlink_obu	Enabled	Local User Database
dlink_hq	Enabled	Radius-PAP

To apply Captive Portal on VLAN 4 for wired user:

4-b-1. Go to SETUP> VLAN Settings> VLAN Configuration. Click **Add** to add a new VLAN.

Vlan Name	Vlan ID	Inter VLAN Routing	Captive Portal	Auth Server
Default	1	Enabled	Disabled	None
dlink_obu	2	Disabled	Disabled	None
dlink_hq	3	Disabled	Disabled	None

4-b-2. Fill in the necessary information under VLAN Configuration. Enter a VLAN name such as "IT" and VLAN ID "4". Select "Permanent User" for Captive Portal. Select "Local User Database" for Authentication Server. Select "default" for Captive Portal Profile. Click **Save Settings**.

How to Configure a Captive Portal on the DWC-1000

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DWC-1000 // SETUP ADVANCED TOOLS STATUS HELP

Wizard
WLAN Global Settings
AP Management
WLAN Visualization
Internet Settings
Network Settings
QoS
GVRP
Captive Portal
External Authentications
VPN Settings
VLAN Settings
DMZ Setup
USB Settings

AVAILABLE VLANS LOGOUT

This page allows user to enable/disable VLAN support on the LAN.

Save Settings Don't Save Settings

VLAN Configuration

Name: IT
Id: 4
Inter VLAN Routing Enable:
Captive Portal Type: Free SLA Permanent User Temporary User

Captive Portal Config

Authentication Server: Local User Database Radius Server LDAP Server
 POP3
Authentication Type: PAP
Captive Portal Profile: default [Create a Profile](#)

Helpful Hints...
Enter Name and ID and save the settings. Make sure that the ID provided is unique. Once the settings are saved, you will be shown the List of Available VLANs where you can further add new VLAN(s) or edit/delete existing VLAN(s).
[More...](#)

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DWC-1000 // SETUP ADVANCED TOOLS STATUS HELP

Wizard
WLAN Global Settings
AP Management
WLAN Visualization
Internet Settings
Network Settings
QoS
GVRP
Captive Portal
External Authentications
VPN Settings
VLAN Settings
DMZ Setup
USB Settings

Operation succeeded

VLAN CONFIGURATION LOGOUT

This page allows user to enable/disable VLAN functionality on the router.

Save Settings Don't Save Settings

VLAN CONFIGURATION

Enable VLAN

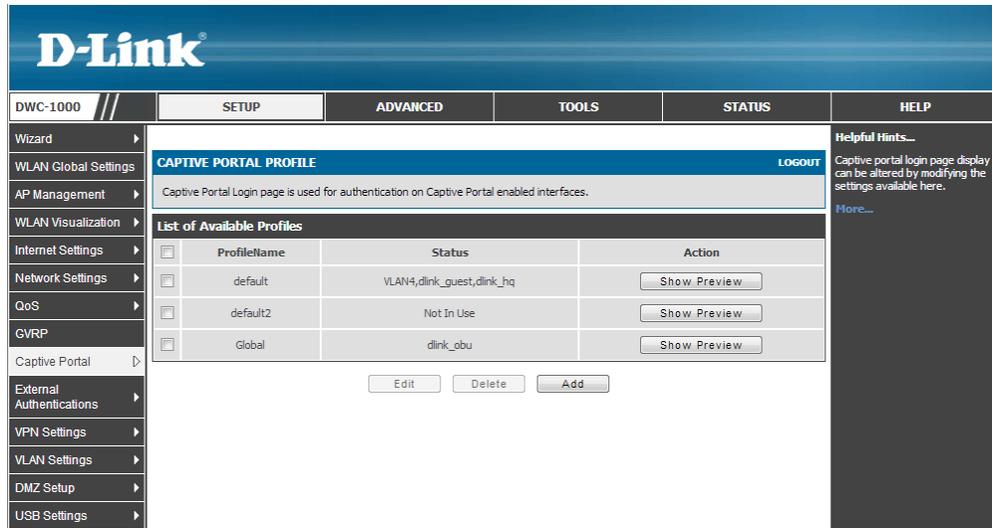
List of available VLANs

<input type="checkbox"/>	Vlan Name	Vlan ID	Inter VLAN Routing	Captive Portal	Auth Server
<input type="checkbox"/>	Default	1	Enabled	Disabled	None
<input type="checkbox"/>	dlink_obu	2	Disabled	Disabled	None
<input type="checkbox"/>	dlink_hq	3	Disabled	Disabled	None
<input type="checkbox"/>	IT	4	Disabled	Enabled	Local User Database

Edit Delete Add

Helpful Hints...
The router supports virtual network isolation on the LAN with the use of VLANs. LAN devices can be configured to communicate in a subnetwork defined by VLAN identifiers.
[More...](#)

DWC-1000 supports multiple captive portal profiles since this firmware version. You can find the relationship between the captive portal profile and its associated interface from SETUP> Captive Portal> Captive Portal Configuration.



- Set a billing profile for temporary account. Please refer to the "How to Configure Guest Management on the DWC-1000" guide for the settings of Guest Management service.

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