Technical Guide

Social Media Authentication

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Edgecore Networks Corporation

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1. Introduction

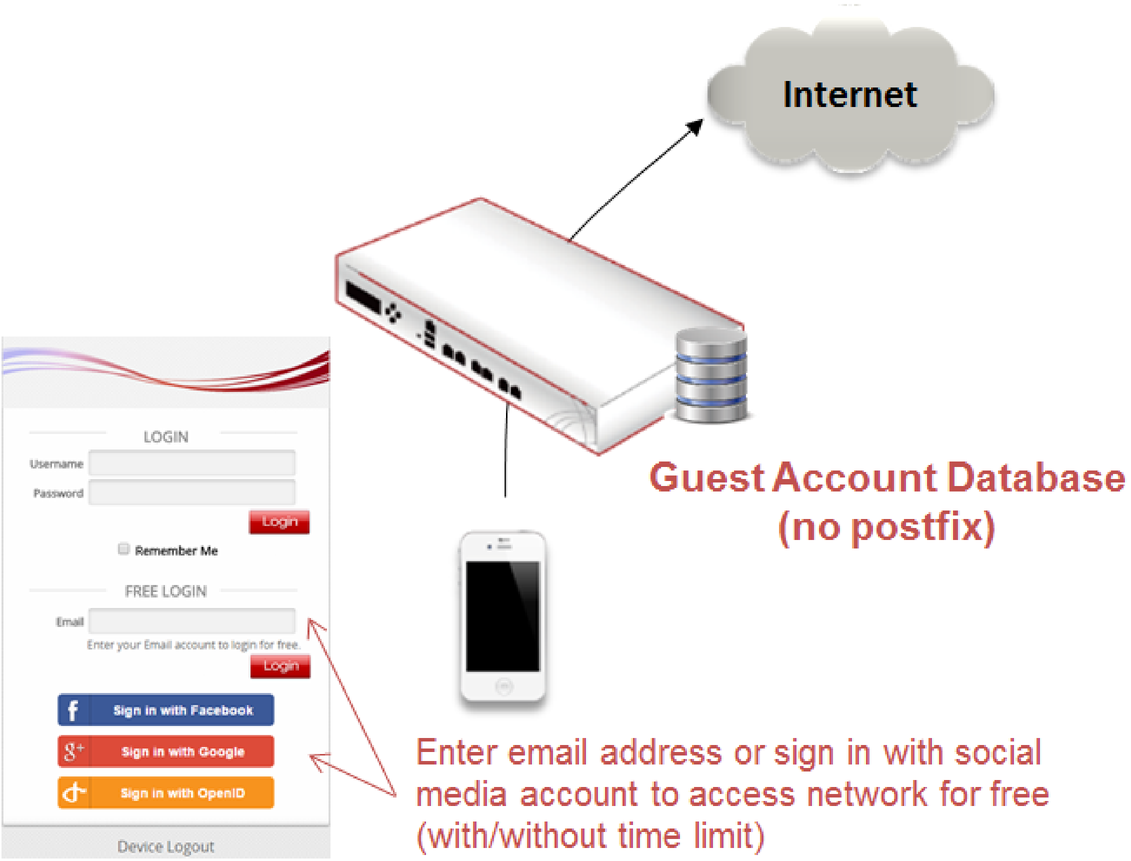
This technical guide is aimed at explaining the practical setup flow of Social Media Authentication on the Controller. Using social media accounts for authentication has become an upcoming trend in public Wi-Fi networks. The Social Media Authentication feature on the Controller allows users to login with their existing social media accounts such as Facebook for Internet access without having to provide other credentials.

With this technical guide, network administrators can easily setup and configure for Social Media Authentication on the Controller for providing free Wi-Fi service to users.

2. Overview

The Social Media Authentication feature on the Controller supports login through a variety of social media including Facebook, LINE, Weibo, OpenID and VK. Administrators can set usage constraints such as access time, access limit per day and reactivation time. In addition, users who login using social media authentication will be assigned to a group as preset by the administrator, and a group policy can be enforced on these users to further govern their Wi-Fi usage.

Social Media Authentication, along with Guest (Free) Authentication, are two authentication options provided on the Controller that the administrators can use to provide free Wi-Fi service to short-term users. See the diagram below for how these two login options will display on the default General Login Page.

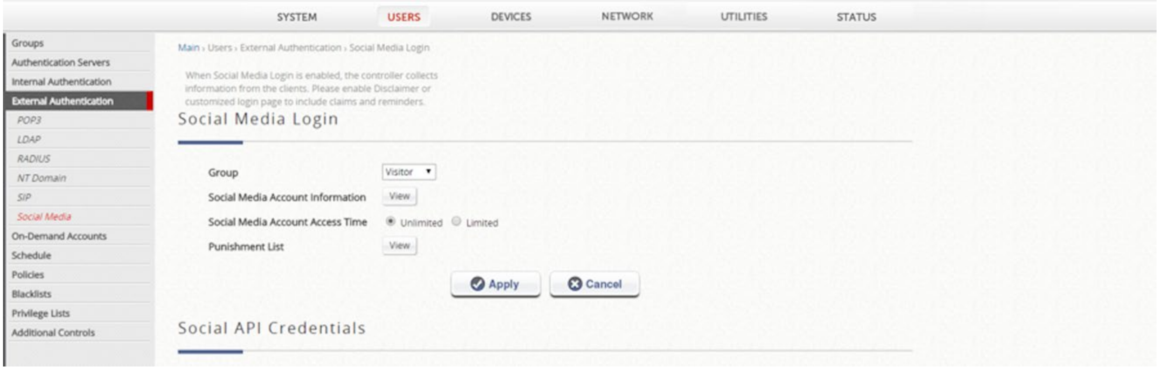


Guest Account Database (no postfix)

Enter email address or sign in with social media account to access network for free (with/without time limit)

3. Social Media Authentication

Controller's Social Media Authentication allows Wi-Fi users to access internet without going through the tedious process of account registration. When a user chooses a specific social media for login on the login page, he/she will be redirected to the login page of that social media. Once the user logs in successfully with their social media account, they will be redirected to the login successful page shown by the Controller. Communication between the Controller and the social media supported is through API. Thus, the administrator has to apply for an application from the social media's developers websites, and enter the API credentials into the Controller.



When Social Media Login is enabled, the controller collects information from the clients. Please enable Disclaimer or customized login page to include claims and reminders.

Social Media Login

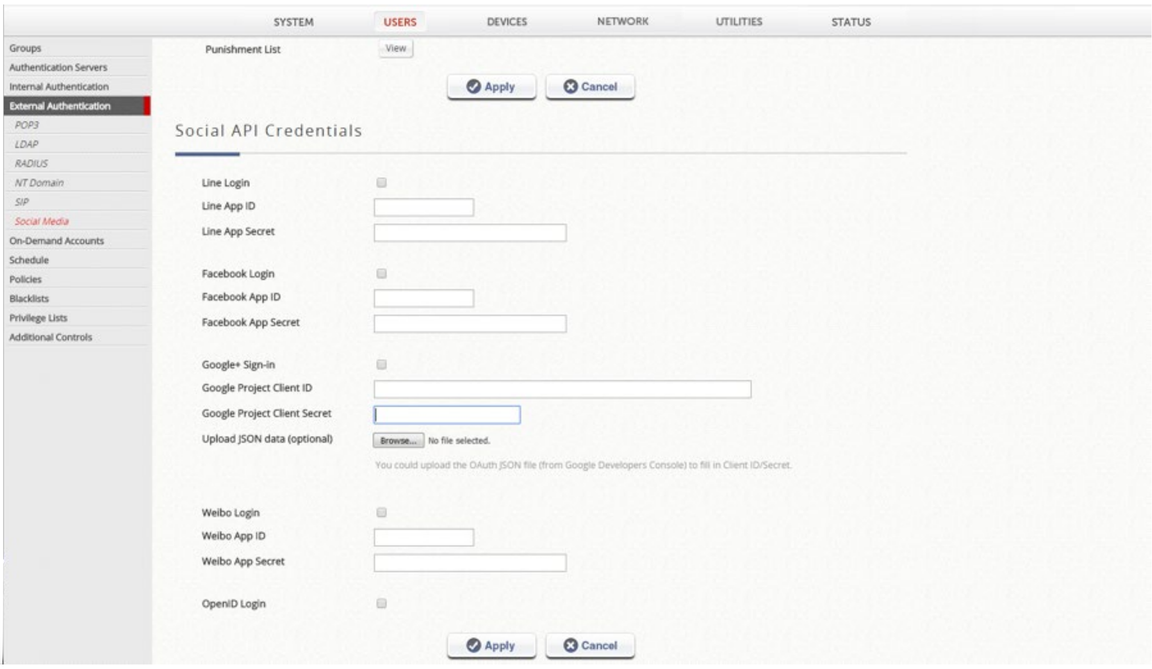
Group: Visitor ▾

Social Media Account Information: View

Social Media Account Access Time: ● Unlimited ○ Limited

Punishment List: View

Social API Credentials



Punishment List: View

Social API Credentials

Line Login ☐

Line App ID

Line App Secret

Facebook Login ☐

Facebook App ID

Facebook App Secret

Google+ Sign-in ☐

Google Project Client ID

Google Project Client Secret

Upload JSON data (optional): No file selected.

You could upload the OAuth JSON file (from Google Developers Console) to fill in Client ID/Secret.

Weibo Login ☐

Weibo App ID

Weibo App Secret

OpenID Login ☐

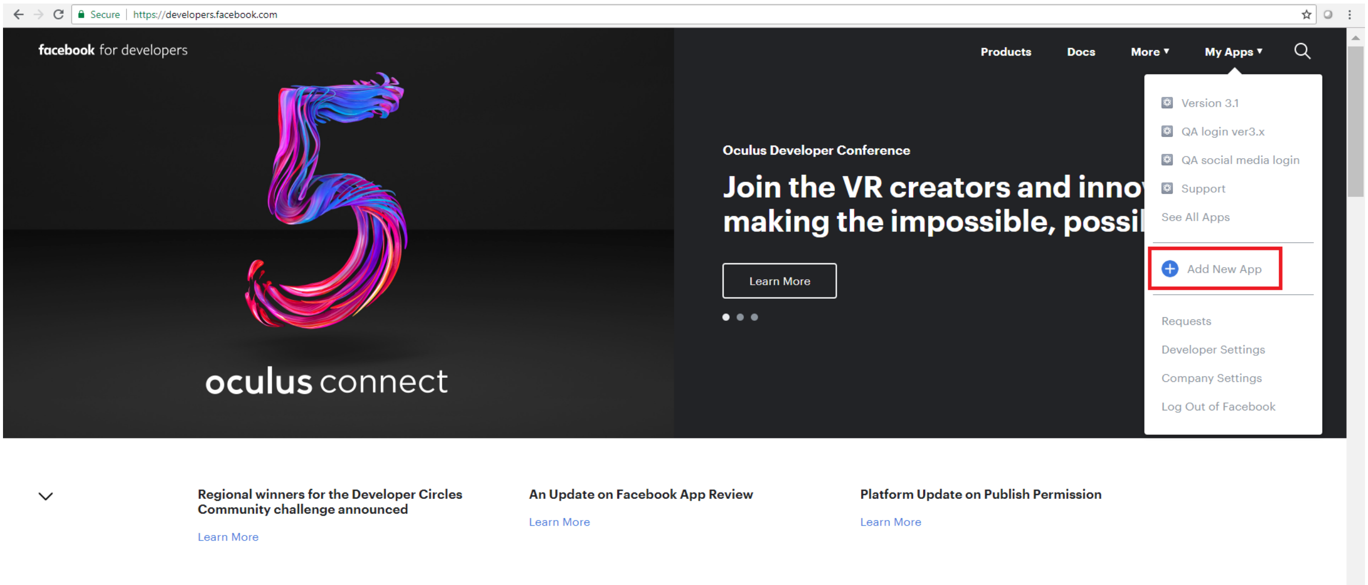
3.1 Sign in with Facebook Account

Administrators are to visit the Facebook for Developers website (https://developers.facebook.com/) to apply for a "Facebook Login" App. Administrators should first login to Facebook Developers with a registered Facebook Account if they're new to the platform. To create an App, follow the instructions below. The instructions given here are based on Facebook API Version 3.1**.** Different settings may apply for other API Versions.

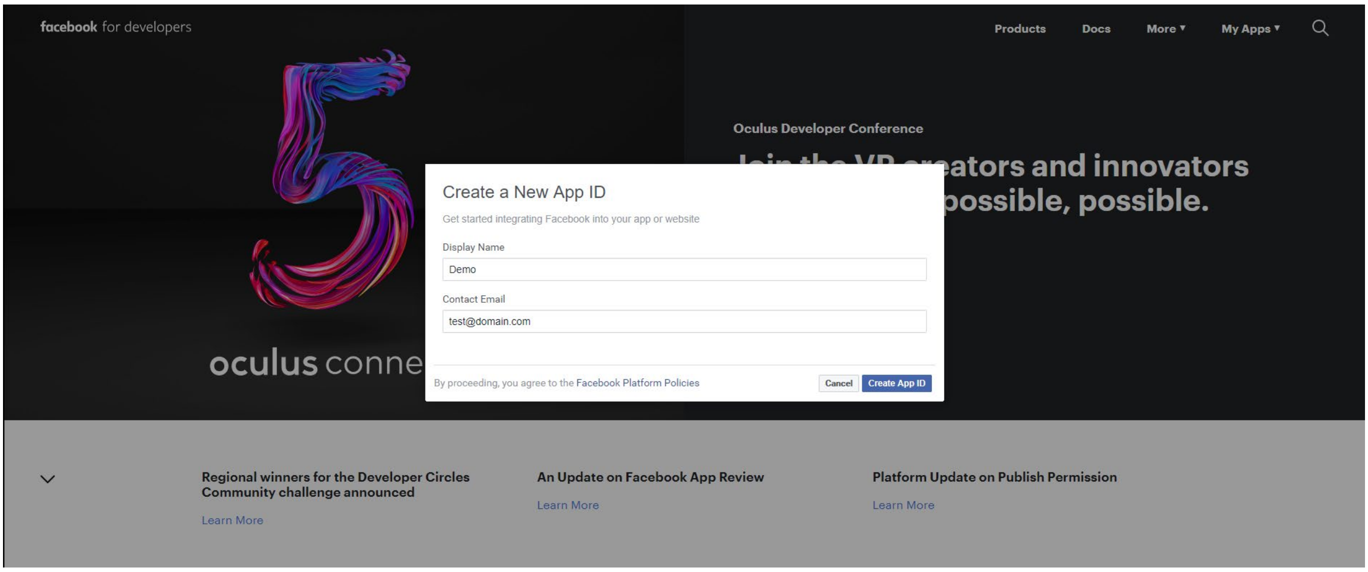
There are two things to note here. For newer API versions such as v3.1, the use of HTTPS for Redirect URIs and the JavaScript SDK is mandatory, and the use of HTTPS will become mandatory for all apps on October 6, 2018 according to Facebook (https://developers.facebook.com/docs/facebook-login/security/). In addition, a valid SSL/TLS certificate has to be obtained and uploaded to the Controller for use.

On the upper right corner, move the cursor to "My Apps" for the drop-down menu to be displayed. Since the account being used for demonstration here has already had Apps created, we will click on "Add New App".

1. Under "My Apps", click on "Add New App"


Secure | https://developers.facebook.com
facebook for developers
Products
Docs
More ▾
My Apps ▾
Version 3.1
QA login ver3.x
QA social media login
Support
See All Apps
Add New App
Requests
Developer Settings
Company Settings
Log Out of Facebook
Oculus Developer Conference
Join the VR creators and inno
making the impossible, possi
Learn More
oculus connect
Regional winners for the Developer Circles Community challenge announced
Learn More
An Update on Facebook App Review
Learn More
Platform Update on Publish Permission
Learn More

2. In the pop-up window, fill in preferred Display Name and Contact Email to create App ID.



facebook for developers
Products
Docs
More ▾
My Apps ▾
oculus conne
Oculus Developer Conference
Join the VR creators and innovators
possible, possible.
Regional winners for the Developer Circles Community challenge announced
Learn More
An Update on Facebook App Review
Learn More
Platform Update on Publish Permission
Learn More

Create a New App ID

Get started integrating Facebook into your app or website

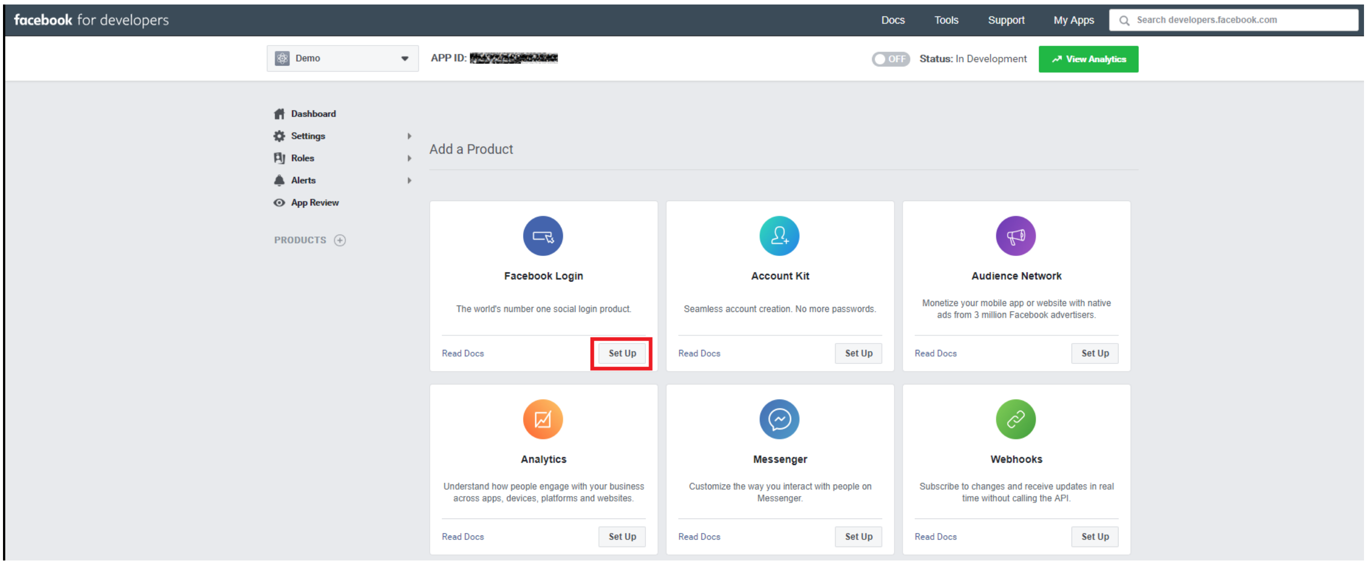
Display Name: Demo

Contact Email: test@domain.com

By proceeding, you agree to the Facebook Platform Policies

Cancel | Create App ID

3. Add a Facebook Login by clicking on Set Up in the Facebook Login box.



APP ID: [redacted]

Status: In Development

Add a Product

Facebook Login — The world's number one social login product. — Read Docs — Set Up

Account Kit — Seamless account creation. No more passwords. — Read Docs — Set Up

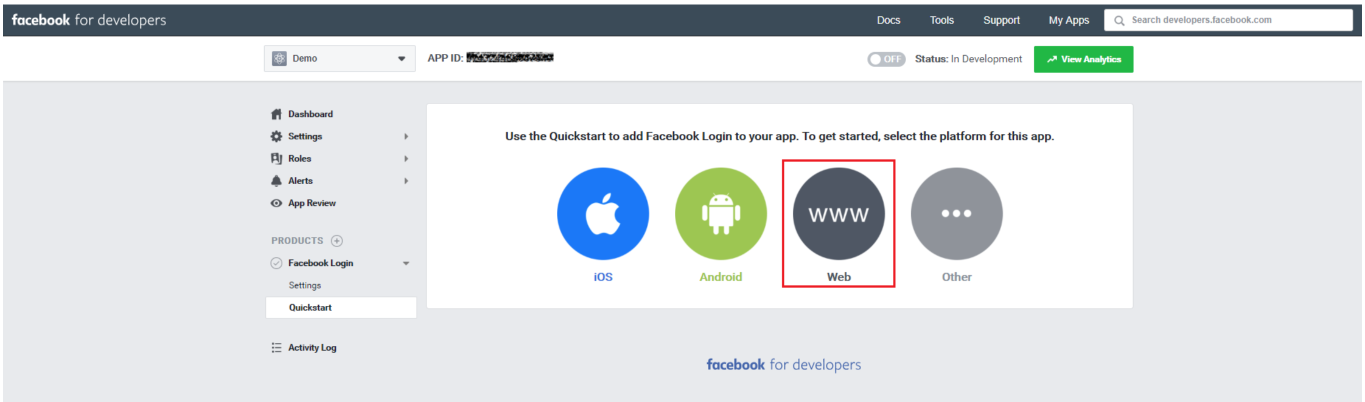
Audience Network — Monetize your mobile app or website with native ads from 3 million Facebook advertisers. — Read Docs — Set Up

Analytics — Understand how people engage with your business across apps, devices, platforms and websites. — Read Docs — Set Up

Messenger — Customize the way you interact with people on Messenger. — Read Docs — Set Up

Webhooks — Subscribe to changes and receive updates in real time without calling the API. — Read Docs — Set Up

4. Select Web

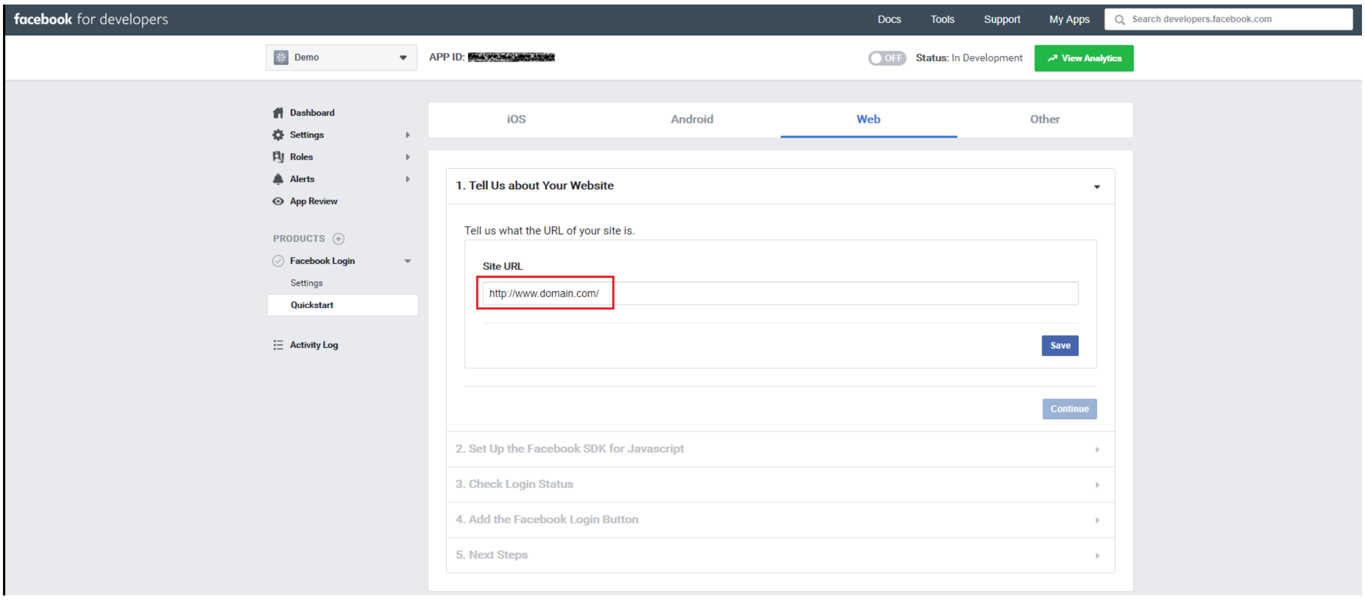


APP ID: [redacted]

Status: In Development

Use the Quickstart to add Facebook Login to your app. To get started, select the platform for this app.

5. Enter URL of one’s website. This could be the domain name on the SSL/TLS certificate to be used.



APP ID: [redacted]

Status: In Development

1. Tell Us about Your Website

Tell us what the URL of your site is.

Site URL: http://www.domain.com/

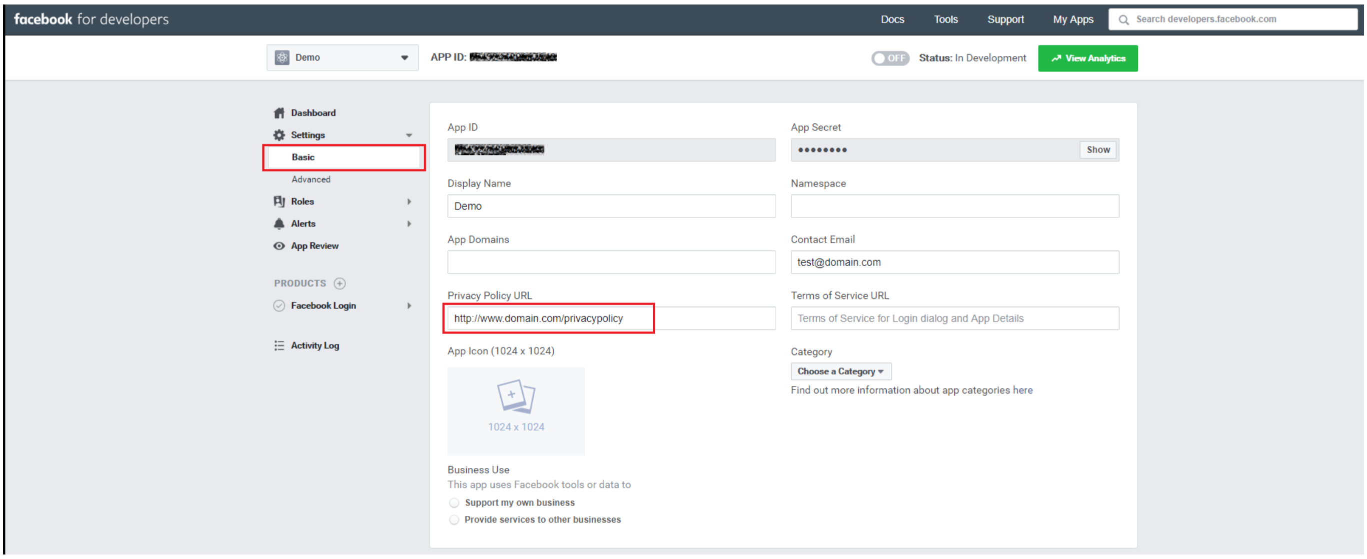
2. Set Up the Facebook SDK for Javascript

3. Check Login Status

4. Add the Facebook Login Button

5. Next Steps

6. Go to Settings > Basic and enter one's own Privacy Policy URL. Facebook would check if the URL is valid.



APP ID: [redacted]

Status: In Development

App ID: [redacted]

App Secret: ••••••••

Display Name: Demo

Namespace:

App Domains:

Contact Email: test@domain.com

Privacy Policy URL: http://www.domain.com/privacypolicy

Terms of Service URL: Terms of Service for Login dialog and App Details

App Icon (1024 x 1024)

Category

Find out more information about app categories here

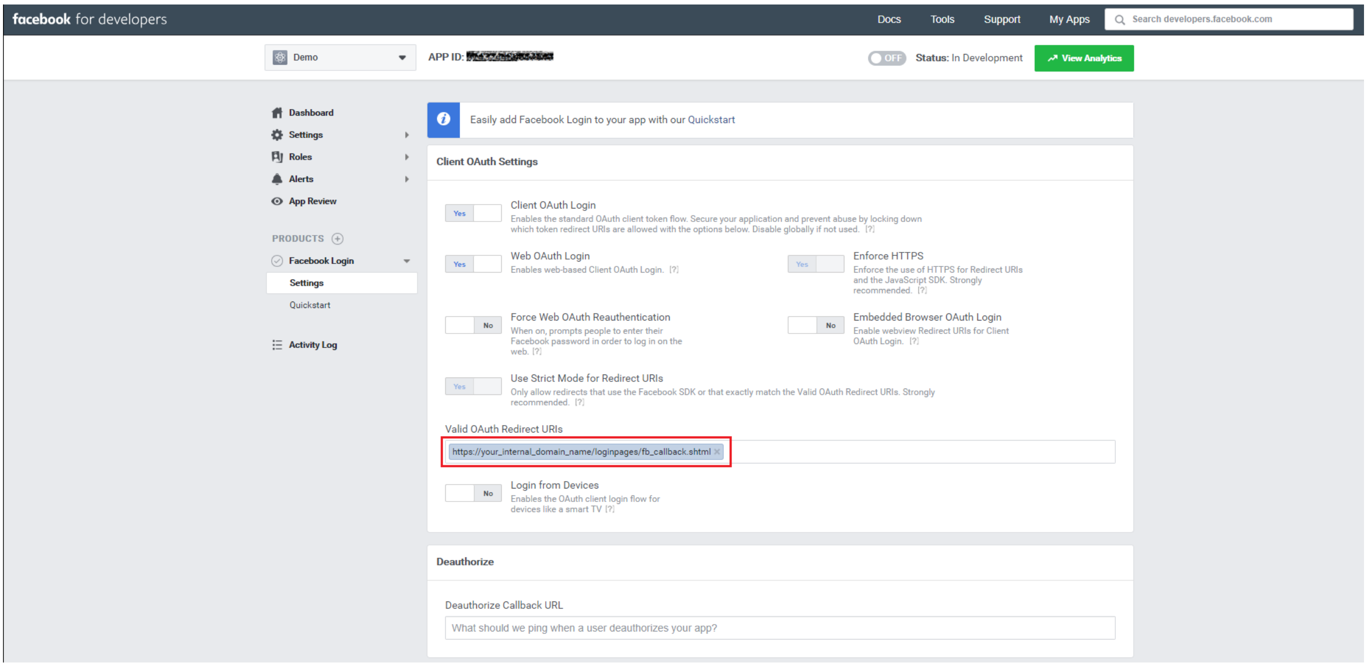
Business Use

This app uses Facebook tools or data to

○ Support my own business

○ Provide services to other businesses

7. Go to Facebook Login > Settings and add https://your internal domain name/loginpages/fb_callback.shtml to the "Valid OAuth redirect URIs". Remember to use the internal domain name on the valid SSL/TLS certificate that will be uploaded to the Controller.



APP ID: [redacted]

Status: In Development

Easily add Facebook Login to your app with our Quickstart

Client OAuth Settings

Yes — Client OAuth Login
Enables the standard OAuth client token flow. Secure your application and prevent abuse by locking down which token redirect URIs are allowed with the options below. Disable globally if not used. [?]

Yes — Web OAuth Login
Enables web-based Client OAuth Login. [?]

Yes — Enforce HTTPS
Enforce the use of HTTPS for Redirect URIs and the JavaScript SDK. Strongly recommended. [?]

No — Force Web OAuth Reauthentication
When on, prompts people to enter their Facebook password in order to log in on the web. [?]

No — Embedded Browser OAuth Login
Enable webview Redirect URIs for Client OAuth Login. [?]

Yes — Use Strict Mode for Redirect URIs
Only allow redirects that use the Facebook SDK or that exactly match the Valid OAuth Redirect URIs. Strongly recommended. [?]

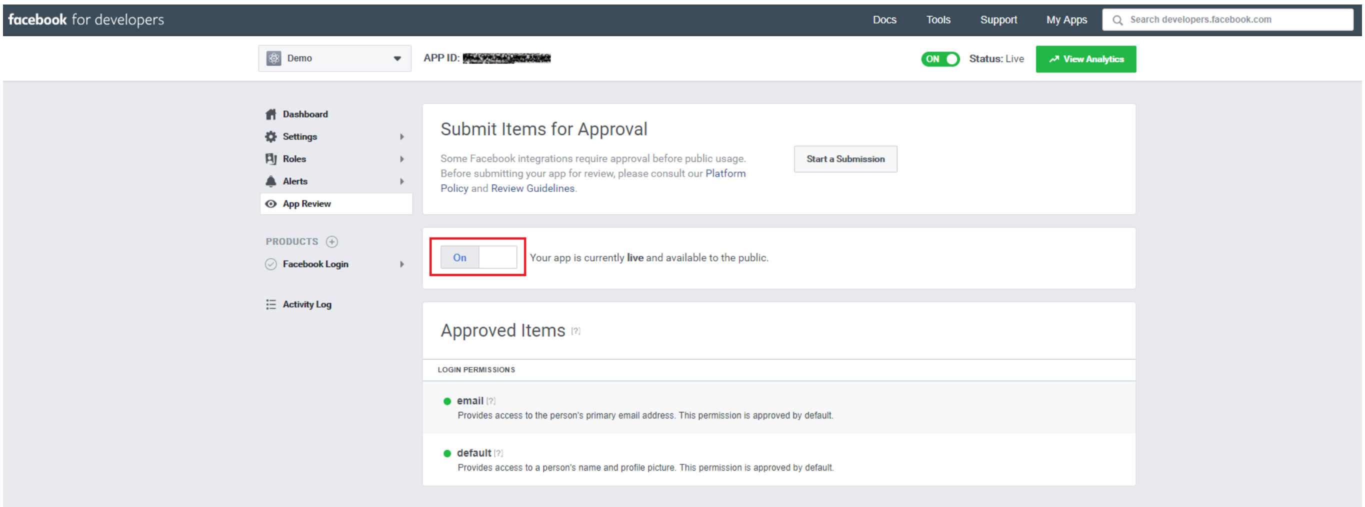
Valid OAuth Redirect URIs
https://your_internal_domain_name/loginpages/fb_callback.shtml ×

No — Login from Devices
Enables the OAuth client login flow for devices like a smart TV [?]

Deauthorize

Deauthorize Callback URL
What should we ping when a user deauthorizes your app?

8. Go to the “App Review” page and make the App public.



APP ID: [redacted]

Status: Live

Submit Items for Approval

Some Facebook integrations require approval before public usage. Before submitting your app for review, please consult our Platform Policy and Review Guidelines.

On — Your app is currently **live** and available to the public.

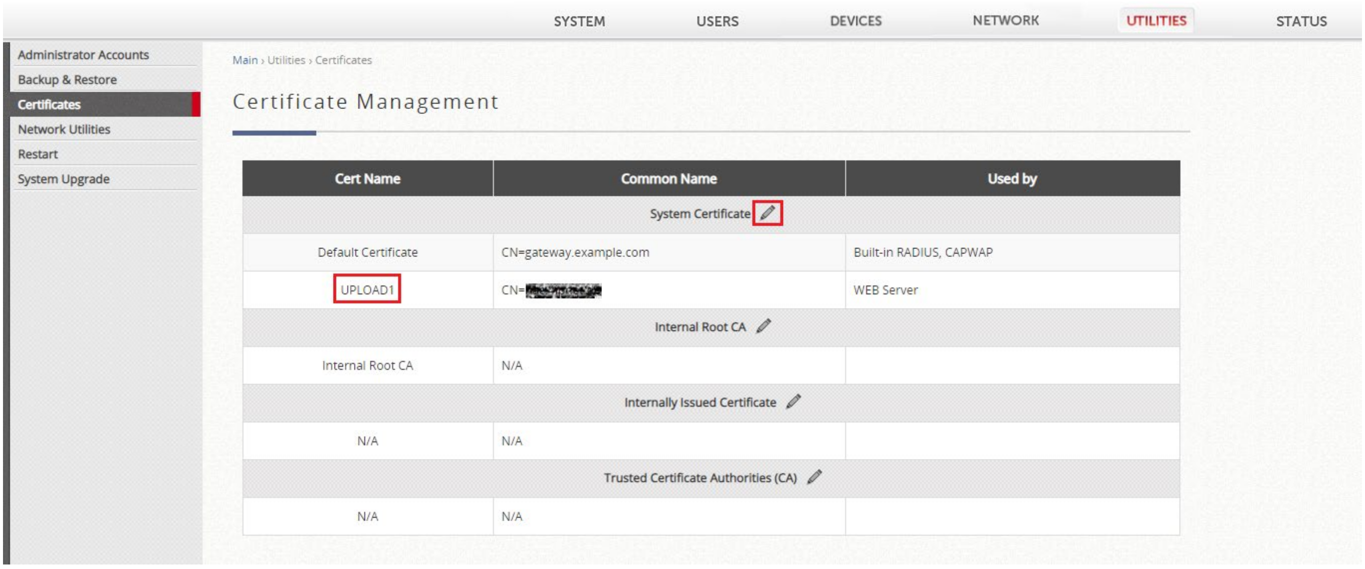
Approved Items [?]

LOGIN PERMISSIONS

● **email** [?]
Provides access to the person's primary email address. This permission is approved by default.

● **default** [?]
Provides access to a person's name and profile picture. This permission is approved by default.

9. Now, from the Controller’s WMI, go to **Utilities > Certificates** and upload a valid SSL/TLS certificate. Once uploaded, the certificate will be displayed as UPLOAD1 if it is the first uploaded certificate.

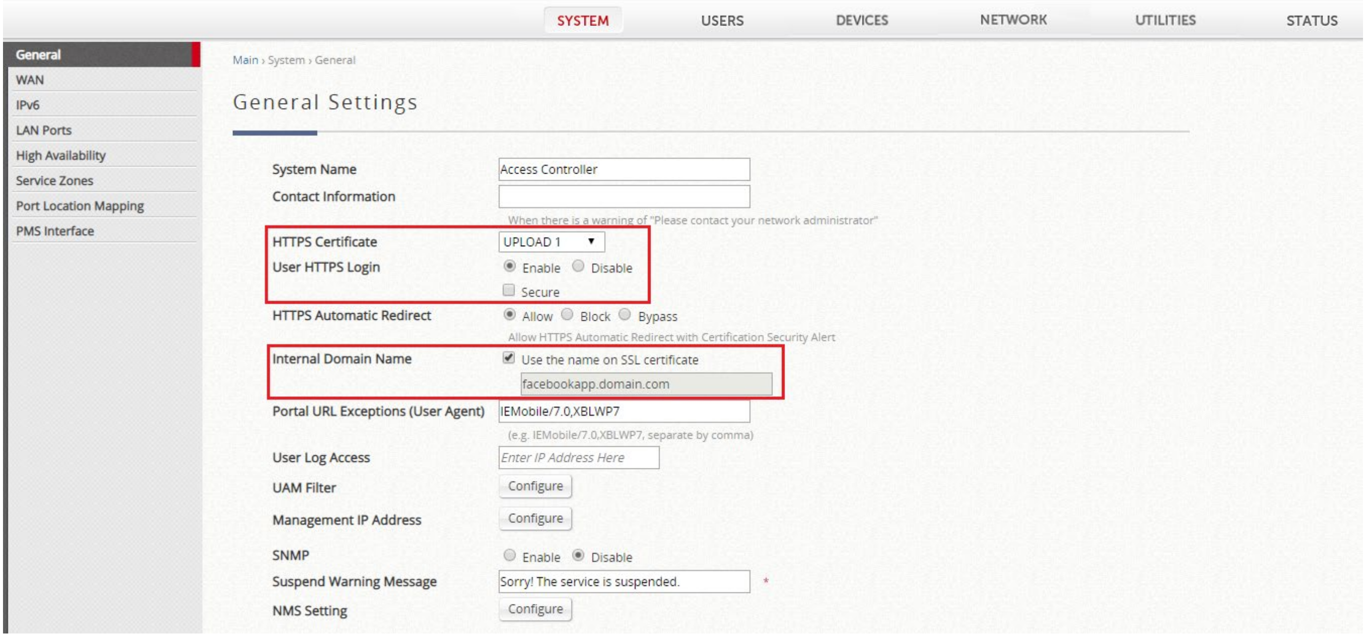


Main › Utilities › Certificates

Certificate Management

Cert Name	Common Name	Used by
System Certificate		
Default Certificate	CN=gateway.example.com	Built-in RADIUS, CAPWAP
UPLOAD1	CN=[redacted]	WEB Server
Internal Root CA		
Internal Root CA	N/A	
Internally Issued Certificate		
N/A	N/A	
Trusted Certificate Authorities (CA)		
N/A	N/A	

10. Go to **System > General Settings**. Choose UPLOAD 1 as HTTPS Certificate and enable User HTTPS Login. For Internal Domain Name, use the name on SSL certificate, or manually type in the internal domain name if a wildcard certificate is used. Reboot the Controller as asked.

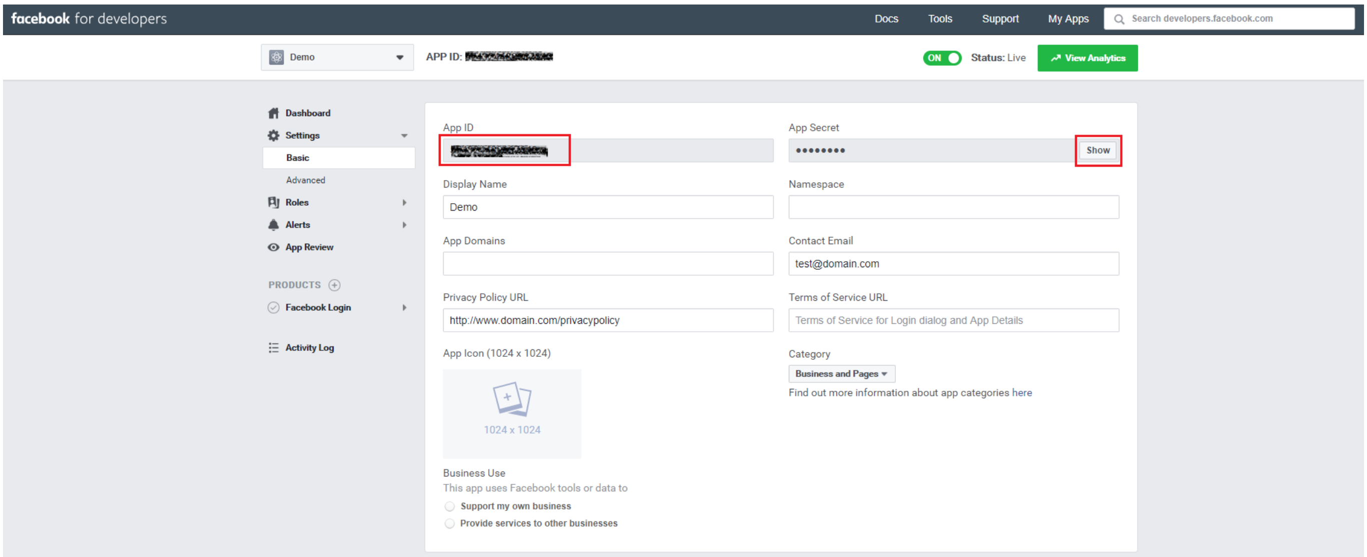


Main › System › General

General Settings

System Name	Access Controller
Contact Information	
	When there is a warning of "Please contact your network administrator"
HTTPS Certificate	UPLOAD 1 ▾
User HTTPS Login	● Enable ○ Disable □ Secure
HTTPS Automatic Redirect	● Allow ○ Block ○ Bypass Allow HTTPS Automatic Redirect with Certification Security Alert
Internal Domain Name	☑ Use the name on SSL certificate facebookapp.domain.com
Portal URL Exceptions (User Agent)	IEMobile/7.0,XBLWP7 (e.g. IEMobile/7.0,XBLWP7, separate by comma)
User Log Access	Enter IP Address Here
UAM Filter	Configure
Management IP Address	Configure
SNMP	○ Enable ● Disable
Suspend Warning Message	Sorry! The service is suspended. *
NMS Setting	Configure

11. Now return to the Facebook Login App that has been created. Go to Settings > Basic to copy the App ID and Secret.



APP ID: [redacted]

Status: Live

App ID: [redacted]

App Secret: ••••••••

Display Name: Demo

Namespace:

App Domains:

Contact Email: test@domain.com

Privacy Policy URL: http://www.domain.com/privacypolicy

Terms of Service URL: Terms of Service for Login dialog and App Details

App Icon (1024 x 1024)

Category: Business and Pages

Find out more information about app categories here

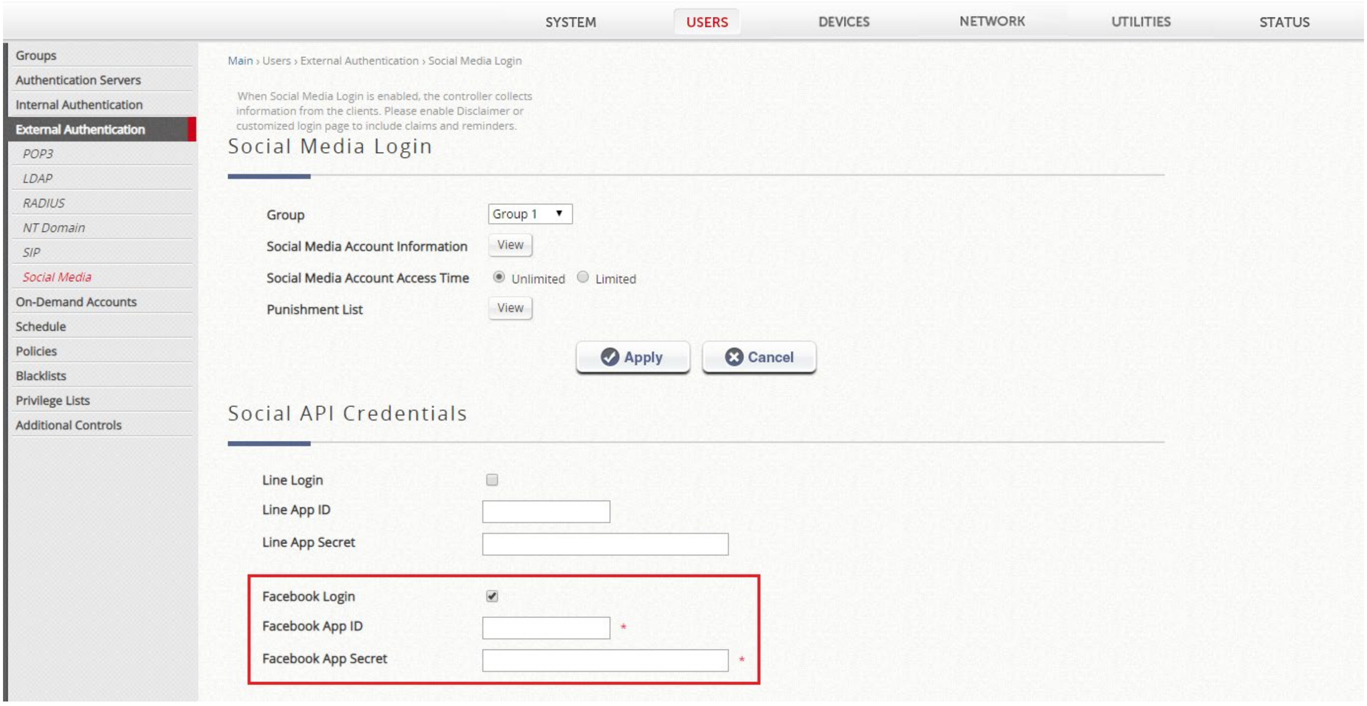
Business Use

This app uses Facebook tools or data to

○ Support my own business

○ Provide services to other businesses

12. From the WMI of the Controller, go to **Users > External Authentication > Social Media**, enable Facebook Login and paste the App ID and Secret.



Main › Users › External Authentication › Social Media Login

When Social Media Login is enabled, the controller collects information from the clients. Please enable Disclaimer or customized login page to include claims and reminders.

Social Media Login

Group: Group 1

Social Media Account Information: View

Social Media Account Access Time: ● Unlimited ○ Limited

Punishment List: View

Social API Credentials

Line Login: □

Line App ID:

Line App Secret:

Facebook Login: ☑

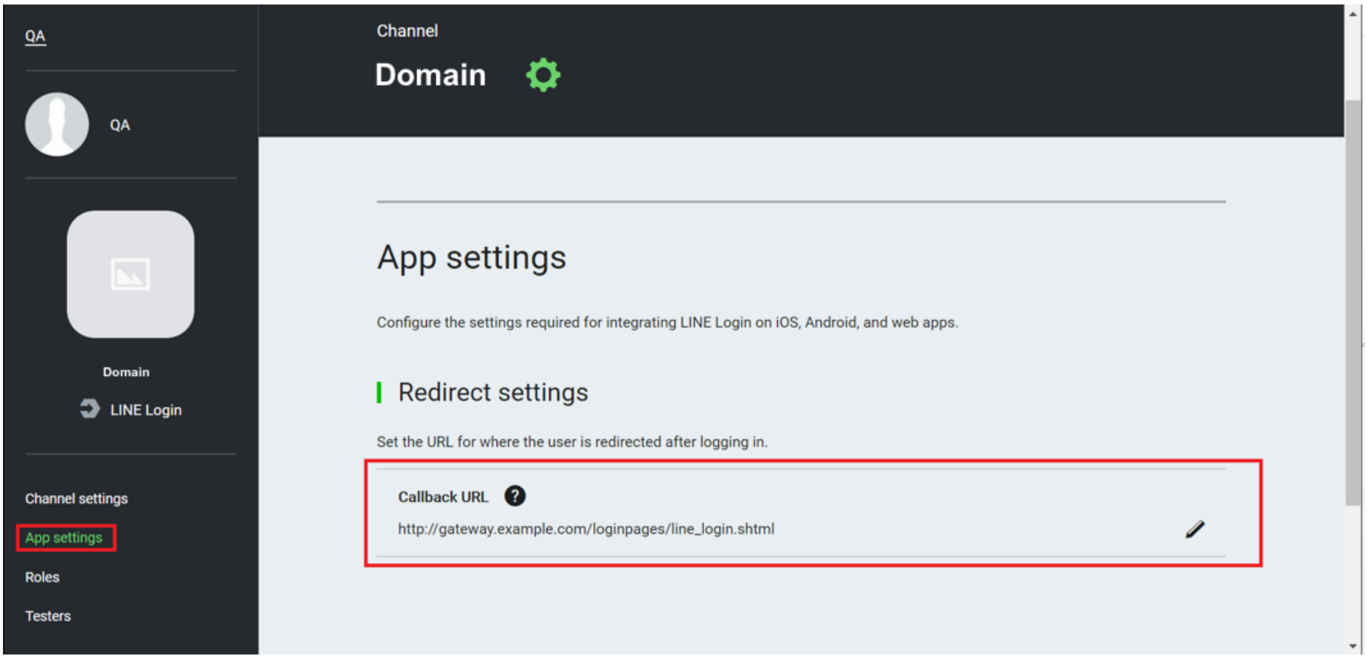
Facebook App ID: *

Facebook App Secret: *

13. Make sure to enable Facebook Login in the appropriate Service Zones.

3.2 Sign in with LINE Account

Administrators are to visit the LINE developers website (https://developers.line.me/) to create a "LINE Login" product. Administrators should first login with their registered LINE account, and they can start to create a "LINE Login" product. Please refer to the instructions provided on the website (https://developers.line.me/en/docs/line-login/getting-started/) for the setup. Note that in App settings, please set the Callback URL to http://gateway.example.com/loginpages/line_login.shtml if the Internal Domain Name on the Controller is left at default. If the Internal Domain Name has been changed, please set the Callback URL to http://your internal domain name/loginpages/line_login.shtml.



App settings

Configure the settings required for integrating LINE Login on iOS, Android, and web apps.

Redirect settings

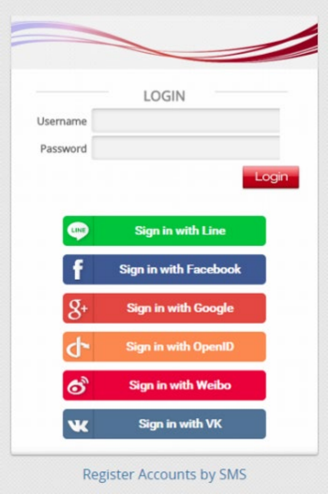
Set the URL for where the user is redirected after logging in.

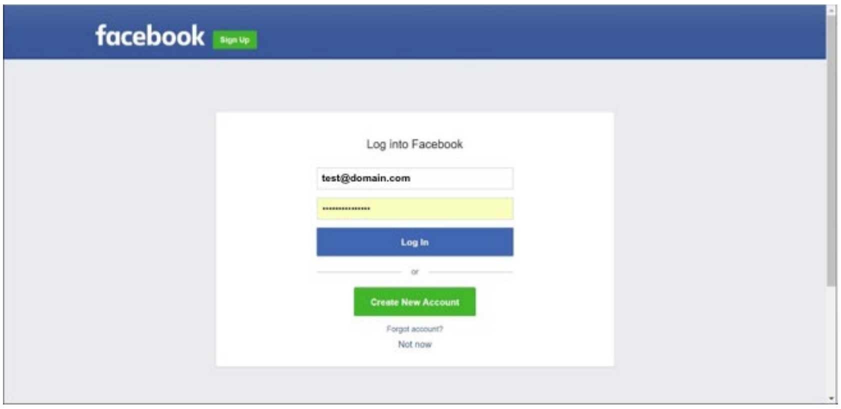
Callback URL: http://gateway.example.com/loginpages/line_login.shtml

3.3 Verification

As mentioned previously, when a user chooses a specific social media for login on the login page, he/she will be redirected to the login page of that social media. After logging in with their social media account, the user will be asked to give permission to the App to collect certain account information. The user has to agree for successful login.

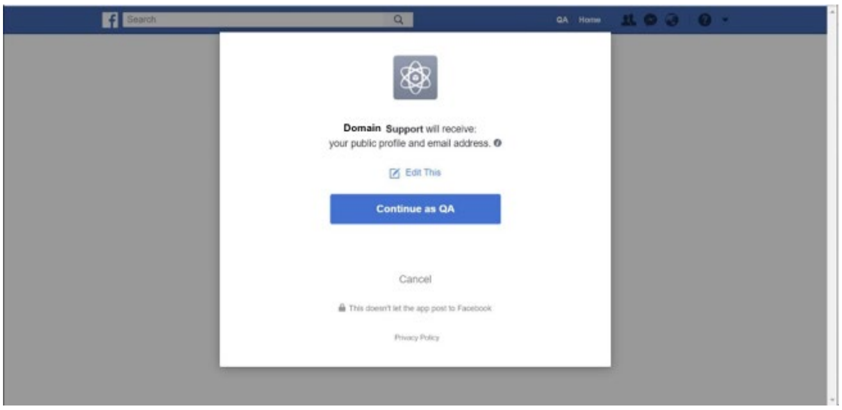
Facebook Login flow





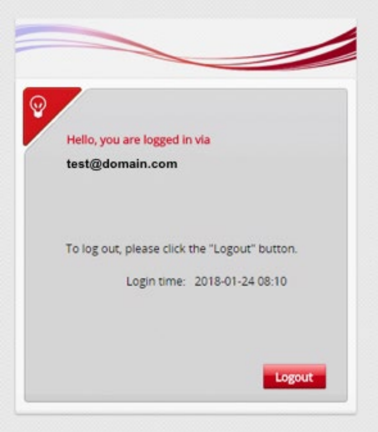
Log into Facebook

test@domain.com



Domain Support will receive: your public profile and email address.

This doesn't let the app post to Facebook



Hello, you are logged in via

test@domain.com

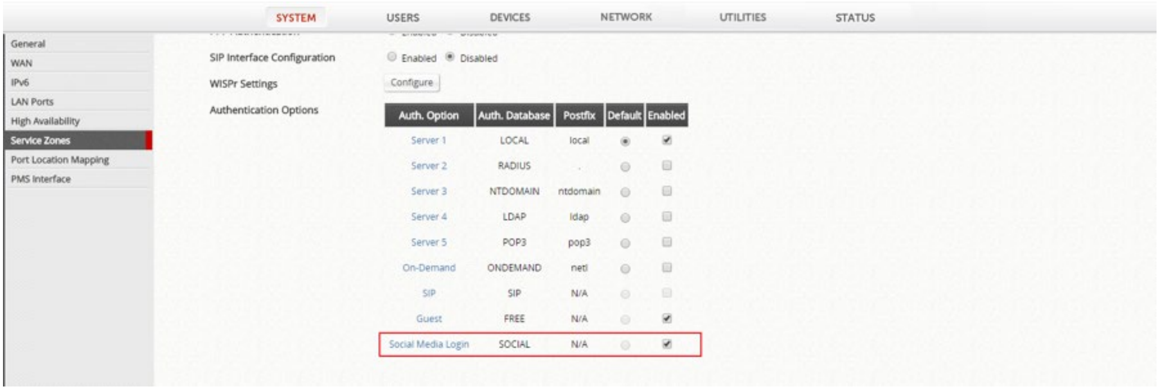
To log out, please click the "Logout" button.

Login time: 2018-01-24 08:10

4. Controller Configuration

4.1 Service Zone Configuration

To enable Social Media Authentication, go to **System > Service Zone > Configuration**, and enable Social Media Login under “Authentication Options”.



SIP Interface Configuration ○ Enabled ● Disabled

WISPr Settings Configure

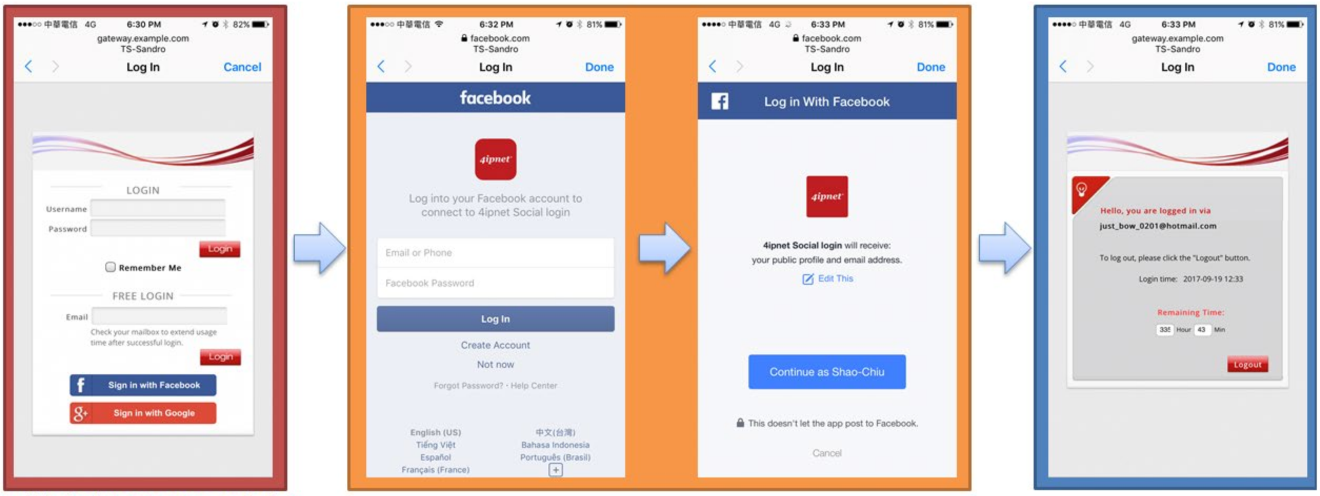
Authentication Options

Auth. Option	Auth. Database	Postfix	Default	Enabled
Server 1	LOCAL	local	●	☑
Server 2	RADIUS	.	○	□
Server 3	NTDOMAIN	ntdomain	○	□
Server 4	LDAP	ldap	○	□
Server 5	POP3	pop3	○	□
On-Demand	ONDEMAND	netl	○	□
SIP	SIP	N/A	○	□
Guest	FREE	N/A	○	☑
Social Media Login	SOCIAL	N/A	○	☑

Consequently, when users connect to the Service Zone, the corresponding Login Page will display Social Media Login options. In Controller, MAC addresses will be checked to avoid malicious use of free access.

4.2 Social Media Login Mechanism and Limitation

In firmware version v3.42.00 or later versions, when a user clicks on any of the social media sign-in buttons, he/she will be given 5 minutes of free Internet access.

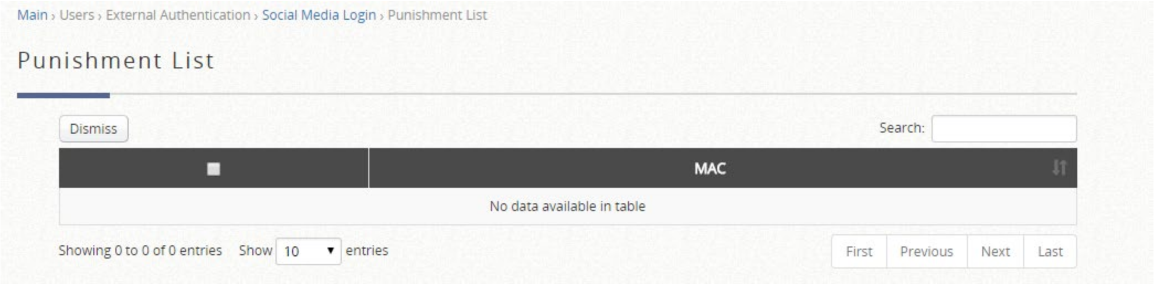

gateway.example.com
TS-Sandro
Log In
Cancel
LOGIN
Username
Password
Login
Remember Me
FREE LOGIN
Email
Check your mailbox to extend usage time after successful login.
Login
Sign in with Facebook
Sign in with Google
facebook.com
Done
facebook
Log into your Facebook account to connect to 4ipnet Social login
Email or Phone
Facebook Password
Log In
Create Account
Not now
Forgot Password? · Help Center
Log in With Facebook
4ipnet Social login will receive: your public profile and email address.
Edit This
Continue as Shao-Chiu
This doesn't let the app post to Facebook.
Cancel
Hello, you are logged in via
just_bow_0201@hotmail.com
To log out, please click the "Logout" button.
Login time: 2017-09-19 12:33
Remaining Time:
Hour
Min
Logout

Click the button to get 5min free permission to complete login flow

Complete these operation in 5 min

Get free Wi-Fi Service

If the user clicked on the sign-in button for one of the social media but did not complete the login process three times, the user will be blocked for 15 minutes as punishment, during which he/she will not be able to login using the same option. Administrators can check user status from WMI (**<u>Users > External Authentication > Social Media Login › Punishment List</u>**) and dismiss the punishment manually.



Main › Users › External Authentication › Social Media Login › Punishment List

Punishment List

Dismiss   Search:

■	MAC
No data available in table	

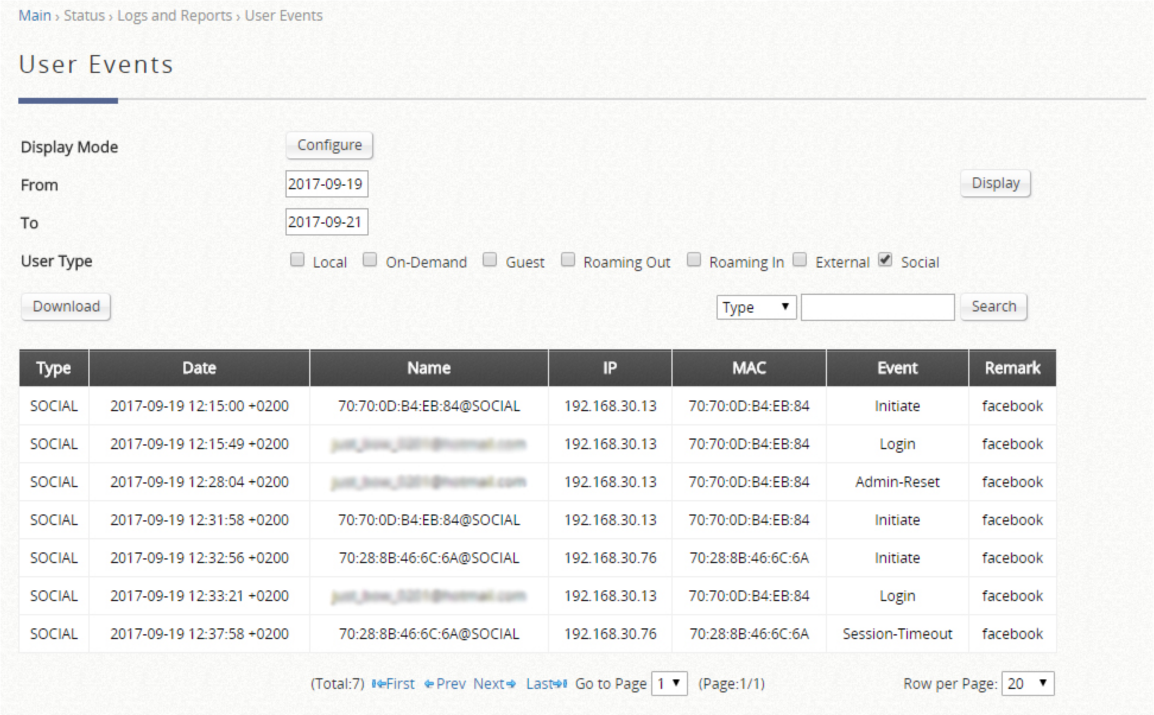
Showing 0 to 0 of 0 entries   Show 10 ▾ entries

First   Previous   Next   Last

5. Social Account Log

5.1 User Events

Logs on User Events can be saved for up to 30 days. Administrators can select the begin and end dates from the calendar to filter User Events, and they can click on the Download button to download the displayed User Events into a comma separated .txt file. Besides user events for social media accounts, user events for other accounts such as Local, On-Demand and Guest can also be displayed in User Events with user related information such as Event, Email address, IP address, MAC address and etc.



User Events

Display Mode: Configure

From: 2017-09-19

To: 2017-09-21

Display

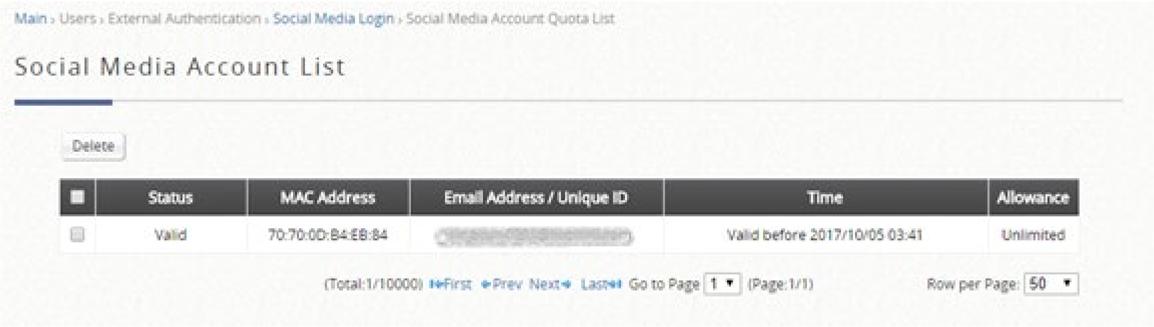
User Type: □ Local □ On-Demand □ Guest □ Roaming Out □ Roaming In □ External ☑ Social

Type	Date	Name	IP	MAC	Event	Remark
SOCIAL	2017-09-19 12:15:00 +0200	70:70:0D:B4:EB:84@SOCIAL	192.168.30.13	70:70:0D:B4:EB:84	Initiate	facebook
SOCIAL	2017-09-19 12:15:49 +0200	[redacted]	192.168.30.13	70:70:0D:B4:EB:84	Login	facebook
SOCIAL	2017-09-19 12:28:04 +0200	[redacted]	192.168.30.13	70:70:0D:B4:EB:84	Admin-Reset	facebook
SOCIAL	2017-09-19 12:31:58 +0200	70:70:0D:B4:EB:84@SOCIAL	192.168.30.13	70:70:0D:B4:EB:84	Initiate	facebook
SOCIAL	2017-09-19 12:32:56 +0200	70:28:8B:46:6C:6A@SOCIAL	192.168.30.76	70:28:8B:46:6C:6A	Initiate	facebook
SOCIAL	2017-09-19 12:33:21 +0200	[redacted]	192.168.30.13	70:70:0D:B4:EB:84	Login	facebook
SOCIAL	2017-09-19 12:37:58 +0200	70:28:8B:46:6C:6A@SOCIAL	192.168.30.76	70:28:8B:46:6C:6A	Session-Timeout	facebook

(Total:7) First Prev Next Last Go to Page 1 ▼ (Page:1/1) Row per Page: 20 ▼

5.2 Social Media Account Quota List

The Social Media Account Quota List displays the status for online social users who are logged in by their own social media accounts (Email Address or Unique ID), along with clients' MAC Addresses, Valid Time and corresponding Allowance. Administrators can delete entries from this list if necessary.



Main › Users › External Authentication › Social Media Login › Social Media Account Quota List

Social Media Account List

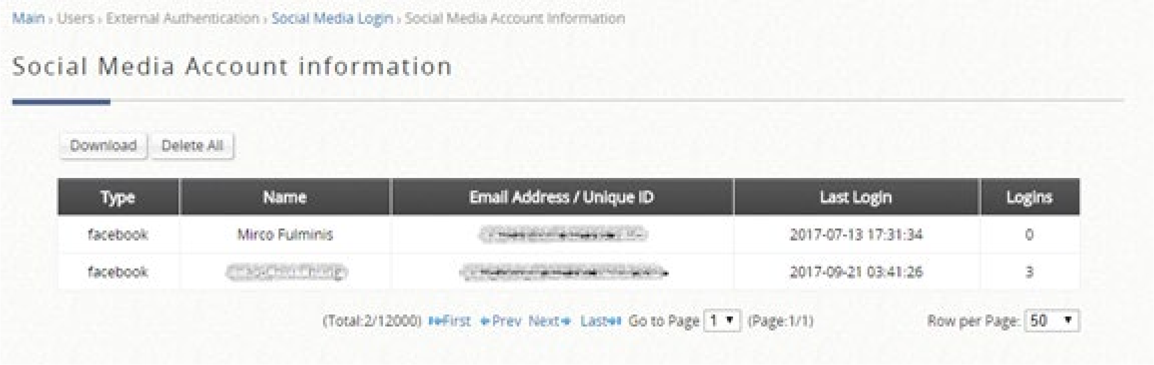
Delete

■	Status	MAC Address	Email Address / Unique ID	Time	Allowance
□	Valid	70:70:0D:B4:EB:84	[redacted]	Valid before 2017/10/05 03:41	Unlimited

(Total:1/10000) First Prev Next Last Go to Page 1 (Page:1/1) Row per Page: 50

5.3 Social Media Account Information

The Controller is capable of collecting valuable customer information from Guest Email Login clients and/or Social Media Login clients for further analysis or marketing purposes. Administrators can download Social Account Names and Account Emails/Unique ID on the Social Media Account List. Besides, the last login field indicates when the client has logged in to the system and the logins field shows how many times the socail account user appears in the system. This information can be helpful for tracking client royalty of stores, for example.



Main › Users › External Authentication › Social Media Login › Social Media Account Information

Social Media Account information

Download Delete All

Type	Name	Email Address / Unique ID	Last Login	Logins
facebook	Mirco Fulminis	[redacted]	2017-07-13 17:31:34	0
facebook	[redacted]	[redacted]	2017-09-21 03:41:26	3

(Total:2/12000) First Prev Next Last Go to Page 1 (Page:1/1) Row per Page: 50

6. Conclusion

This solution is capable of performing flexible guest authentication such as email verification or social media account login. Social media supported for login includes Facebook, Line, Weibo, and OpenID. Along with the robust authentication features, the WLAN Controller is able to consolidate valuable information collected from guests for future marketing purposes. With this solutions, administrators can easily and efficiently provide guest Wi-Fi service to users.

7. Remarks

For more information, please contact your local system integrator or our Technical Support team.