

Creating and Using Prepaid Coupons in WiFiLAN

A Tutorial



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Introduction

Prepaid coupons are an excellent way to offer limited access to your customers. The customers are usually given a code (a long random number) that they have to enter on the login page. The system tracks the required parameters for the user's session and restricts the user from going over the specified limit. For example, a traveling businessman who is waiting for someone at a coffee shop may purchase a 1 hour coupon at the counter. The coupon will get activated as soon as he starts his first session and will allow him to access the Internet for exactly one hour. After one hour, the session will be automatically terminated. The user can use the coupon any number of times i.e. he can have multiple sessions of 30 minutes, 15 minutes and 15 minutes each or use the whole coupon in one session.

Coupons can be also used to promote your Internet service. Since customers may be little reluctant to purchase a whole month's of service, they can first try out the service using lower cost coupons. Once they are satisfied with the service, they can purchase a monthly plan.

For most cases, coupons are time-bound. However, there can be various other parameters used for restricting user's sessions. Some of them are:

#	Parameter	Description
1.	Bandwidth usage	Total number of bytes uploaded and downloaded
2.	Sessions	Number of complete sessions created by the user
3.	Clients	Number of machines from where the user is allowed to use the coupon
4.	Specific Dates	Activating on a specific date and expiring on a specific date
5.	Location	The place from where the user is allowed to use the coupon
6.	Days	Total number of days the coupon is valid starting from the day when it was activated

In some cases, a combination of the above parameters also can be used.

WiFiLAN Prepaid Solution

WiFiLAN offers a comprehensive prepaid coupon solution for hotspot operators. Most other solutions offer you a rudimentary solution for managing prepaid coupons. However, WiFiLAN provides you a complete, end-to-end solution. You can create unlimited prepaid codes with different session restrictions. WiFiLAN supports all the types of restrictions listed above. It also allows you to create a combination of these restrictions. Once the codes are generated in the database, you can export them into an Excel format or create PDF document with prepaid codes that can be directly sent to the printer. The PDF document creates professional-looking cards complete with your custom logo, background images, header and footer text.

Moreover you can also view detailed report on prepaid usage and generate graphical reports that display prepaid usage over a given time period.

Creating New Coupons

To create new coupons, click on the Prepaid submenu under Billing. Next click on the New Prepaid Cards tab. You will see a form as shown below.

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New Prepaid Cards

Password Required	<input type="checkbox"/>	<ul style="list-style-type: none"> • Password Required : Generate cards with individual passwords or default password. • Location Required : Generate location specific cards.
Location Required	<input checked="" type="checkbox"/>	
Prepaid Type	<input checked="" type="checkbox"/> Usage Time <input type="checkbox"/> Bandwidth <input type="checkbox"/> Specific Dates <input type="checkbox"/> Number of Sessions <input type="checkbox"/> Number of Days <input type="checkbox"/> Total Clients	<ul style="list-style-type: none"> • Usage Time: Generate cards that can be used for specific usage time. • Bandwidth : Generate cards with bandwidth restrictions. • Specific Dates: Generate cards that activate and expire on specific dates. • Number of Sessions: Generate cards limited for specific number of sessions. • Number of Days: Generate cards limited for specific number of days. • Total Clients: Generate cards restricted to number of client machines.
Activation Type	<input checked="" type="radio"/> Activation on First Use <input type="radio"/> Activate Immediately <input type="radio"/> Activation on Specific Date	<ul style="list-style-type: none"> • Activate On : Generate cards that activate on selected option.

This form provides you various options to customize the restrictions for your prepaid cards. If you select "Password Required", then your customers will have to enter two codes on the login page. The first code will act as username and the other code as password. Usually, you don't need to check this box. If the "Location Required" checkbox is checked, then you can restrict your prepaid cards to a specific location. The next field allows you to decide the type of restriction on the cards. You can select multiple options based on your needs. WiFiLAN will automatically prompt you if you select invalid combinations. For example you can't select "Specific Dates" and "Number of Days" since they conflict with each other. Next field decides how the cards are activated. Usually most cards are activated on first use. However you can also activate the cards immediately or on specific date. Click the Submit button once you are done.

The next page will be generated based on the parameters you selected on the earlier page. For example, if you select Usage Time and Number of Day as Prepaid Type, then this page will prompt you for entering Total Duration and Total Days. Similarly if you select Location Required, then it will display a list of locations.

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New Prepaid Cards

Card Information		<ul style="list-style-type: none"> • Number of Cards : Total number of prepaid cards to create. • Prepaid Group : Group name for cards being generated. • User Group : The group to which the card should belong. • Total Duration : The duration in minutes for each card. • Total Price : The price of each card. • Locations : Location(s) where use of card is allowed.
Number of cards *	<input type="text" value="100"/>	
Prepaid Group *	<input type="text" value="Westside_Feb06"/>	
User Group *	<input type="text" value="tx_westside"/>	
Total Price (\$)	<input type="text" value="10"/>	
Total Duration (mins) *	<input type="text" value="180"/>	
Total Days	<input type="text" value="3"/>	
Location(s) *	<div style="border: 1px solid black; padding: 2px;"> <input type="text" value="LakeView Condos"/> <input type="text" value="Office"/> <input type="text" value="Palm Creek"/> <input type="text" value="Westside Apts"/> </div>	

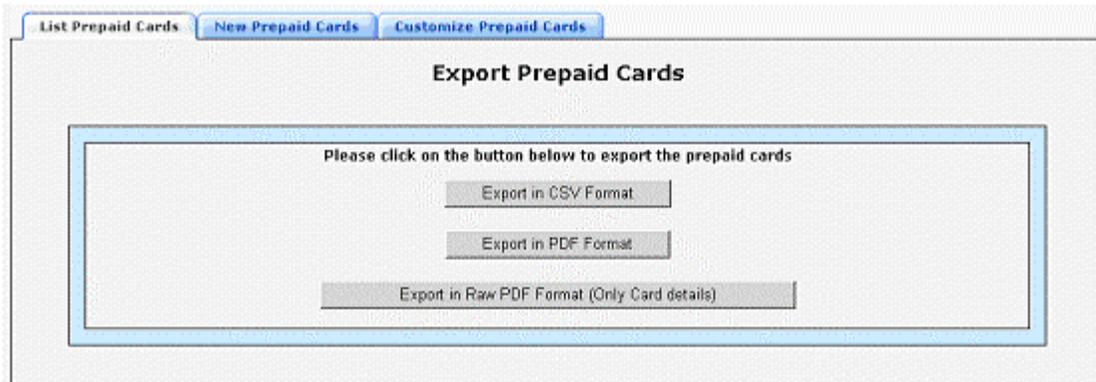
Enter appropriate parameters in the form and click Submit. WiFiLAN will generate random prepaid codes based on the number enter in the Number of Cards field. All prepaid codes are 10 digits in length. You also need to enter a unique prepaid group name. Prepaid groups are used to neatly categorize your random

codes, exporting them, generate reports and edit their properties. It is a good idea to use some naming convention to identify your groups. For example, Westside_Feb06 contains prepaid codes for Westside location for February 2006.

Export coupons

You can export all prepaid codes in a specific group by using the export feature. The codes are exported in Excel format so that they can be easily transmitted to other people or used to create prepaid cards.

To export prepaid codes, first click on the List button displayed in the rightmost column on List Prepaid Cards page. Next click on the Export button. An export page will be displayed as shown below.



Click on the Export in CSV format and save the file on your desktop. You can open the newly export file in Microsoft Excel as shown below.

	A	C	D	E	F	G	H	I	J	K	L
1	UserName	Date Created	Expires	Activate	Total Duration	Total Bandwidth	Total Sessions	Total Clients	Total Amount		
2	1611381277	19-Feb-06			7200	0	0	0	10		
3	1862261223	19-Feb-06			7200	0	0	0	10		
4	2694345557	19-Feb-06			7200	0	0	0	10		
5	2987318673	19-Feb-06			7200	0	0	0	10		
6	4446261917	19-Feb-06			7200	0	0	0	10		
7	4559664544	19-Feb-06			7200	0	0	0	10		
8	5145472938	19-Feb-06			7200	0	0	0	10		
9	5886453263	19-Feb-06			7200	0	0	0	10		
10	8855557116	19-Feb-06			7200	0	0	0	10		
11	9943147692	19-Feb-06			7200	0	0	0	10		

Printing prepaid cards

Printing customized, professional looking prepaid cards is one of the unique features of WiFiLAN. You can customize each card with your custom logo, background image, header and footer text to create soft copies of your prepaid cards in PDF format. These PDF documents can be directly printed on thick paper to create cards ready for distribution. The randomly generated codes are automatically inserted on each card. By creating your own prepaid cards, you can save time and money and offer good looking cards to your customers.

Before you print your first cards, you need to customize your prepaid cards. Click on the Customize Prepaid Cards tab and enter appropriate details in the header and footer fields. You can upload your company logo by clicking the Browse button next to Logo field. Please restrict the size of logo to 30 by 25 pixels. Similarly you can upload your custom background for your prepaid card.

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Customize Prepaid Cards

Header and Footer	
Header	<input type="text" value="Welcome to Wi-Fi Internet"/>
Footer	<input type="text" value="Enjoy Wi-Fi"/>
Logo	<input type="text" value="logo.jpg"/> <input type="button" value="Browse..."/>
Background	<input type="text" value="prepaidbg.jpg"/> <input type="button" value="Browse..."/>
<input type="button" value="Submit"/>	

- Header** : Header String to appear on prepaid card (less than 31 characters)
- Footer** : Footer String to appear on prepaid card (less than 40 characters)
- Logo** : Logo on prepaid card. Supported file formats are JPEG and PNG (if not specified, Default logo is applied.)
- Background** : Background of prepaid card. Supported file formats are JPEG and PNG (if not specified, Default background is applied.)

Next, click on the Export button on list prepaid codes page and then on the “Export in PDF format” button. When prompted to save the PDF document, click on the Save button. You can open the saved PDF document in PDF viewer. A sample of created PDF document is as shown below.



Using prepaid coupons

To use prepaid cards, you need to create a special login page that accepts only prepaid code instead of username and password. Since both username and password are required for authenticating a user, you need to hard code the password in the login form and send the password along with the login request.

You can obtain your hard coded password from the Edit Profile section under Admin menu.

Tracking Usage

You can track all the usage details for a specific prepaid code. The Prepaid Accounting Details page displays all the sessions for the prepaid code along with the duration for each session, uploaded and downloaded bytes and the MAC address of the client's machine.

List Prepaid Cards **New Prepaid Cards**

Prepaid Accounting Details

Prepaid details for 5532315939

#	Session Start	Duration	MAC Address	Location	Upload	Download
1	27 Jan 2006 02:59:22	01:30:21	00-0F-80-3B-0D-2F	-	10.0 MB	929.0 KB
2	26 Jan 2006 17:10:51	00:20:53	00-0F-80-3B-0D-2F	-	1.7 MB	1.0 MB
3	26 Jan 2006 08:13:25	00:15:56	00-0F-80-3B-0D-2F	-	163.8 KB	80.1 KB
4	26 Jan 2006 06:31:33	00:17:48	00-0F-80-3B-0D-2F	-	2.5 MB	132.9 KB
5	26 Jan 2006 03:15:00	00:28:35	00-0F-80-3B-0D-2F	-	3.6 MB	562.2 KB
6	25 Jan 2006 15:08:33	00:47:43	00-0F-80-3B-0D-2F	-	1.3 MB	345.9 KB
7	25 Jan 2006 13:31:29	00:52:44	00-0F-80-3B-0D-2F	-	9.6 MB	1.0 MB

Summary

Total	Used	Max Limit
Duration	04:34:00	12:00:00
Bandwidth	33.3 MB	-
Sessions	7	-
Clients	1	-

Additionally, you can also view various graphical reports for prepaid cards in the billing reports section. Please refer to WiFiLAN administration guide for more details on these reports.