

WiFiLAN Reporting

An Overview



Version 1.0

**Copyright © 2006, Wifi-Soft Solutions
All rights reserved.**

Introduction

WiFiLAN provides over 35 different reports that provide a consolidated and summarized view of accounting, billing and CRM data. Since these reports may contain sensitive information, WiFiLAN allows administrators to fine tune access control list for each report. This ensures only valid users get access to the reports. The RADIUS reports provide statistical information on user sessions, bandwidth usage, online users and usage based on days of week, hour of the day, unique sessions, session durations, etc. The Network reports provide real-time view of the network status, reliability of gateways and access points and audit reports. The CRM reports provide consolidated summary of problem tickets and other CRM related statistics. Lastly, the billing reports provide information about revenue generated, credited amounts, expense reports, failed transactions, prepaid usage and promotion effectiveness.

RADIUS Reports

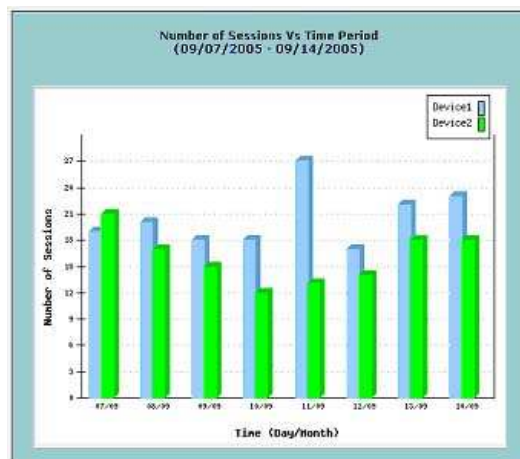
RADIUS reports primarily display the summarized accounting information collected during user's sessions. The data is displayed either in tabular or graphical format. The online user report displays the list of all users who have open sessions i.e. they are currently logged in. The users are displayed based on their login location.

The device usage reports are graphical representation of usage data for each location. There are 9 different reports in this category. Administrators can select one or more devices from the list to view comparative reports. The reports can be generated between any date range i.e. the administrator can select the date range along with the time unit for each report. The time unit decides the granularity of the report.

Listed below are some of the reports in this category:

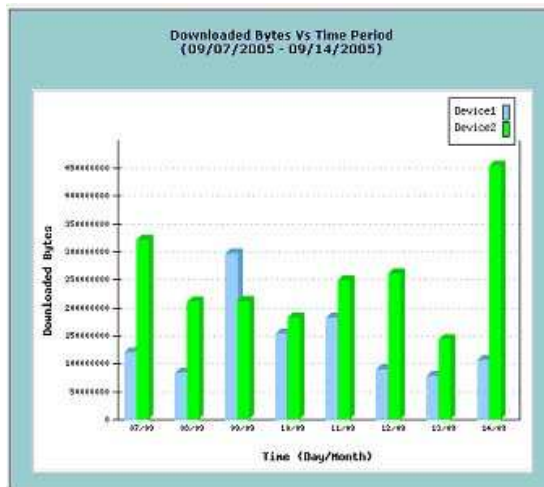
- **User Session Report**

Displays the total number of user sessions at the location within a given time period. The units on X-axis are calculated based on the time duration and time unit of the report. The Y-axis displays the total number of closed sessions.



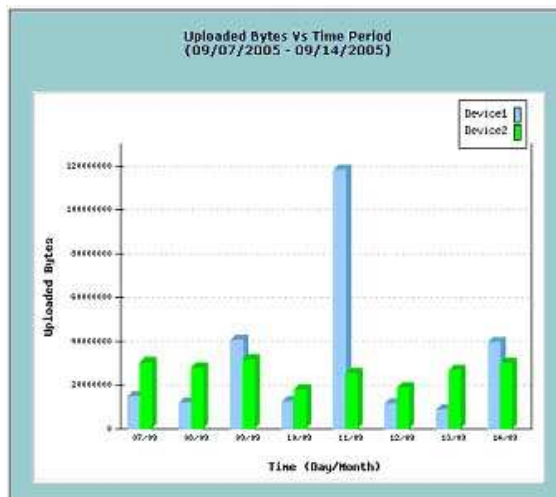
- **Downloaded Bytes Report**

Displays the total number of bytes downloaded at the particular location within a given time period. The X-axis displays the time interval and Y-axis displays the total number of bytes downloaded.



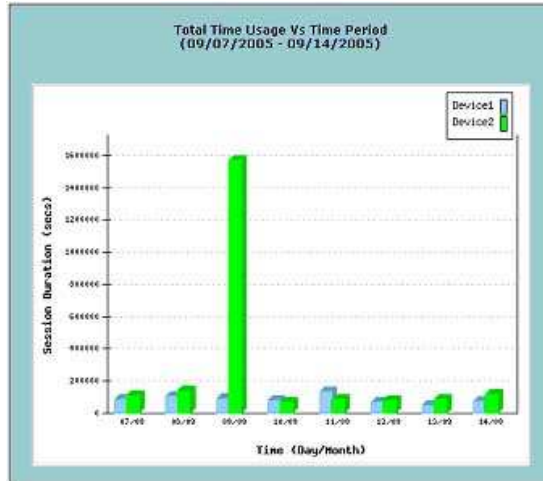
- **Uploaded Bytes Report**

Displays total number of bytes uploaded at a given location within a given time period.



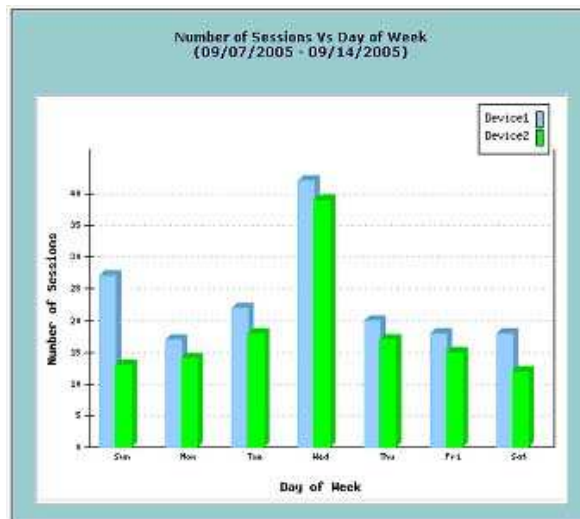
- **Internet Usage Report**

This report displays the total Internet usage (in number of seconds) for the given locations within a given time period. It is useful for hotspots that sell duration based prepaid coupons or time-bound access.



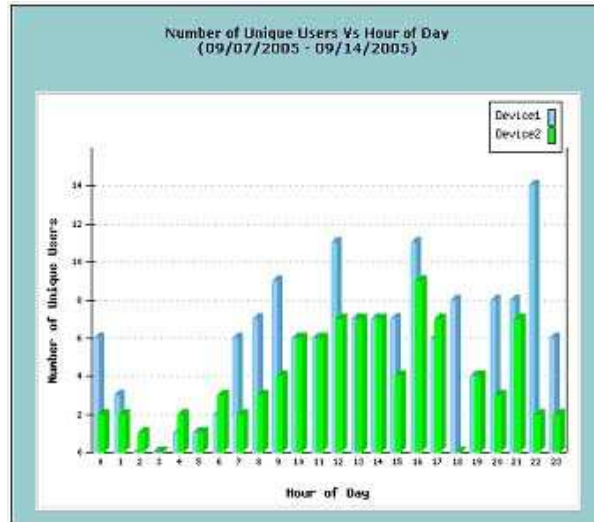
- **Day of the week Report**

This graphs helps in understanding Internet usage over the days of the week. The seven days of the week are plotted on the X-axis and the total number of sessions is plotted on the Y-axis. The graph displays records over the selected time period. Administrators can also plot comparative graphs as shown below.



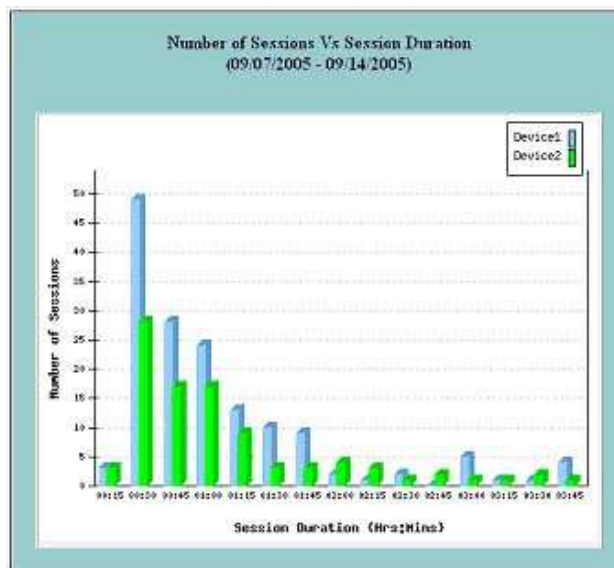
- **Time of the day Report**

Like the previous graph, this graph displays the usage trends over different hours of the day. All 24 hours are plotted on the X-axis and the number of sessions is plotted on the Y-axis. The total number of session for each hour is calculated within the time duration selected in the search query.



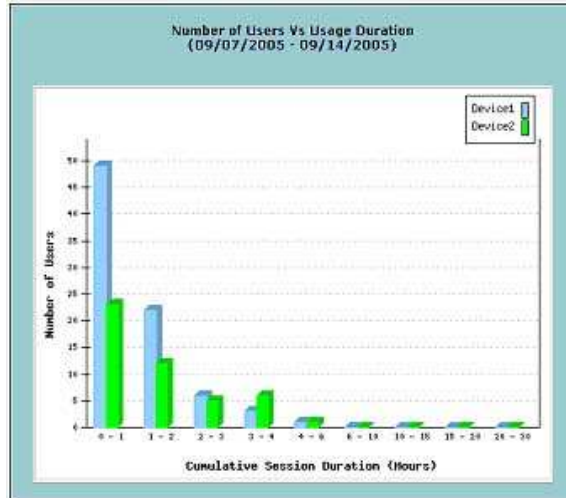
- **Session Length Graph**

This graph helps administrator understand the trends in session lengths of the hotspot users. The X-axis displays session durations in 15 minutes intervals. The Y-axis displays total number of sessions for the given time interval. For example, the first entry will display number of sessions that last between 0 and 15 minutes and so on.



- **Cumulative Usage Duration Report**

This graph displays the cumulative time users spent at the hotspot location over a given time period. Typically it indicates the stickiness of the users. The total number of users is plotted on the Y-axis and session duration (in hours) is plotted on the X-axis. For example, the first entry displays the number of users who used Internet service for 0-1 hour (cumulative). A user can have one or more sessions. The graph adds up the usage duration over a given time period.



Network Reports

Network reports displays the real-time status of the network, reliability report for each device on the network and configuration audit report.

The real-time status report is generated based on the monitoring data collected by WiFiLAN monitoring server. The monitoring server periodically scans the network and determines whether the network elements are alive or dead. It scans both the gateway/router and the internal access points (APs) and notifies the administrator when it detects a device failure.

The network status report displays the monitoring status in a tabular format. Each entry in the table is given a specific color based on its status.

Network Status Status Change History List Traps

Network Status

Device Search

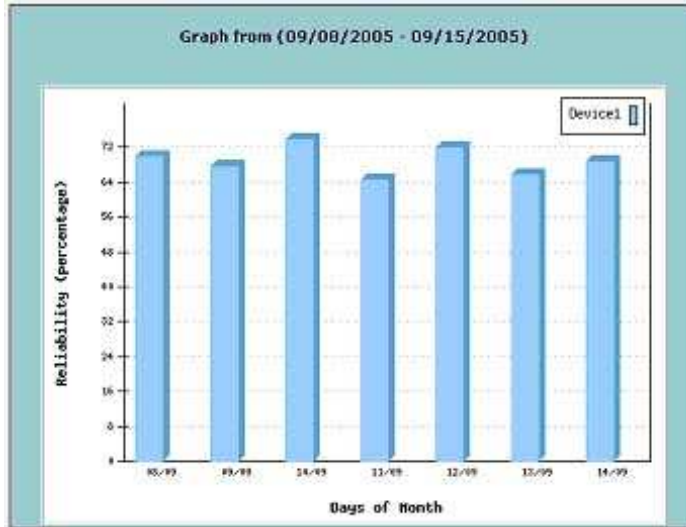
Status : Show : Search

Color Legend

- Device UP.
- Device UP,DOWN before.
- Device DOWN,Modem UP.
- Device DOWN,Modem DOWN

Current Network Status						
#	Device Name	Location	IP Address	Status	Last Monitored	Last Heartbeat
1	EastCondo Gateway	East Condo	70.245.205.106	UP	02/02/2006 12:23:34	05/29/2005 12:37:12
	Poolside AP	-	192.168.1.201	UP	02/02/2006 12:29:34	-
2	golden-CN2000	Golden Apts	68.68.224.42	UP	02/02/2006 12:11:41	05/29/2005 12:39:56
3	Hidden Forest Gateway	-	70.112.39.182	UP	02/02/2006 12:17:01	02/02/2006 12:18:12
4	Hotel Sun-CN2000	-	70.247.137.29	UP	02/02/2006 12:10:49	-
5	LakeView-CN2000	LakeView Condos	70.252.24.81	UP	02/02/2006 12:10:09	05/29/2005 12:39:43
6	Westside Device	Westside Apts	68.23.6.55	DOWN	02/02/2006 12:14:56	05/29/2005 12:38:14
	Office AP	-	192.168.1.101	DOWN	02/02/2006 12:14:56	-

Similarly, the reliability report calculates the reliability of each network device over a given period of time. The reliability is indicated in percentage.



Finally, the audit report helps administrator to periodically check the configuration of all remote device by running an audit check for each configured parameter. For example, the administrator can run an audit check to determine whether all the remote gateways are upgraded to latest firmware or whether all the gateways are running on appropriate frequency channels.

CRM Reports

The problem ticket reports provide range of statistics for the tickets submitted by the end users. Generally these reports help management in reviewing the nature of problems submitted, the quality of service, effectiveness of the customer support staff and track trends in problems. This data is extremely helpful in improving processes, solving problems within IT and network infrastructure and streamlining operations.

Summary Reports

The summary report display summarized information of all tickets based on various display options. Administrators can view summary based on:

1. Agent
2. Category
3. Severity
4. Location
5. Resolution

Each table displays number of tickets in different states – New, Assigned, Resolved and Closed – against the criteria selected from the list.

The table below displays various tickets in the database based on the category of the ticket.

Reports Ticket Summary Tickets by Date

Trouble Ticket Report

Display : By Category

#	Name	New	Assigned	Resolved	Closed	Total
1	Billing Problem	1	1	-	1	3
2	Email Problem	-	1	1	-	2
3	General Problem	-	1	-	-	1
4	Login Problem	1	2	-	1	4
5	Registration Problem	1	-	-	-	1
6	Virus Problem	2	-	-	-	2
7	Weak Signal	2	-	1	-	3

Ticket Vs Time Reports

The summary reports provide statistics on total number of tickets in the system. However, they do not give any idea on when the tickets were submitted, resolved or closed. To view the time based reports, click on the Ticket By Date tab. This report page allows administrators to select a particular time interval and view the tickets in graphical format within the selected date range. Each bar in the graph corresponds to the number of tickets in a particular state (New, Assigned, Resolved, Closed) on the given date.

