Version X.3.7.9.0

User Guide

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Technical Support

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AIM of the Document

This user guide is created for End-Users for knowing necessary information about the 24online SMS device and portal.

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	• SMS User Guide

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Introduction

Overview

24online is an industry leading internet billing and bandwidth management solution having global presence with 3000+ installations across 45+countries, serving more than 2.5 million subscribers worldwide.

24online's Service Management System (SMS) series is a comprehensive solution for small, medium and large Internet service providers. It offers complete billing and bandwidth management solution for the ISP's with advance features at subscriber, service provider and franchisee level. It is an all in one solution which allows the service provider to maintain subscribers through centralized GUI interface.

Various modes of 24online are:

- Authentication, Authorization and Accounting (AAA)
- Billing –Data
- Access Gateway
- Subscriber Management
- Franchisee Management
- Voucher Management
- Reporting Tool
- Bandwidth Management
- Dynamic Host Configuration Protocol (DHCP)
- Domain Name System (DNS)

24online can be used as whole complete solution or each of the above mentioned modes can be used alone in the network as per the network requirements.

Advanced Features of 24online:

- Multi-Lingual Support
- User-Friendly GUI
- Attractive Dashboard (Graphical User Interface)
- Packages, Policy Creations and Enforcement
- Multiple Gateway Load Balancing
- Secure Network Address Translation (SNAT)
- Third Party Integrations (SMS, Payment Gateways)
- Captive Portals
- Reporting Tools
- EZPrinter

....And many more are available. 24online is highly scalable and flexible that is easy to install and easy to use!!

Before We Commence

This User Guide is created for both - beginners and experienced users of 24online SMS series.

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If you are a beginner read this guide from beginning to end, this guide has been divided into different sections as per 24online GUI interface, it also includes diagrams and tables for easy understanding and application. And if you are an experienced 24online user, this guide will prove beneficial in configuration of 24online in your network.

Refer to below shown Conventions as they will be used in entire User Guide.

Conventions
Notes: Contains necessary information regarding the topic
Alerts: Alerts are information that cannot be ignored
Create: Select after all specifications are completed.
Add: Select to add after all specifications are completed.
Submit: Select submit button to save the operations performed by you, after all specifications are completed.
Save: Indicate that by clicking on save button system will save the operation performed by you.
Update: Indicate that by clicking on update button system will overwrite the previous operations with new operations performed by you.
Cancel: Click on "Cancel" button to cancel the current operation.
Delete: Use "Delete" option to remove the operation done from the system
Search: Enter the required search criteria and then click on "Search" button for search operation.

Basic Terminology

Authentication, Authorization and Accounting (AAA)

24online AAA provides authentication and authorization based on IP and MAC addresses and accounting based on time, duration, and usage. It offers features to access different resources, enforce policies, and provide all necessary details for billing purpose.

NAS

NAS is also known as RADIUS Client, it acts as middle man between 24online end user and internet. It is a door for the end user, it receives their request, communicates with RADIUS and as per the radius responses allows user to surf with their pre-configured packages and policies.

Remote Access Dial-In User Service (RADIUS)

RADIUS is a networking protocol used by 24online that provides centralized AAA for the computers (nodes) connected in the network.

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24online Deployment

24online can be deployed in two major modes like centralized and distributed mode.

- In centralized mode, 24online performs both - responsibilities of NAS, and RADIUS.
- In distributed mode, separate NAS server and RADIUS server are deployed at different locations or at the centralized location as per the requirement of the client network.

Deployment of 24online:

- 24online will be deployed at the central NOC
- All the base stations will be connected with 24online in transparent mode
- 24online server will perform the responsibility of Authentication, Authorization and Accounting (AAA)
- User requests will be authenticated by 24online server and upon successful authentication the users will be allowed to surf the internet
- User database, Policies, Packages will be in the 24online server
- Complete usage logs of the user, reports and information related to user package will be stored in server
- Below shown Network Diagrams will make the picture clear:

RADIUS Mode

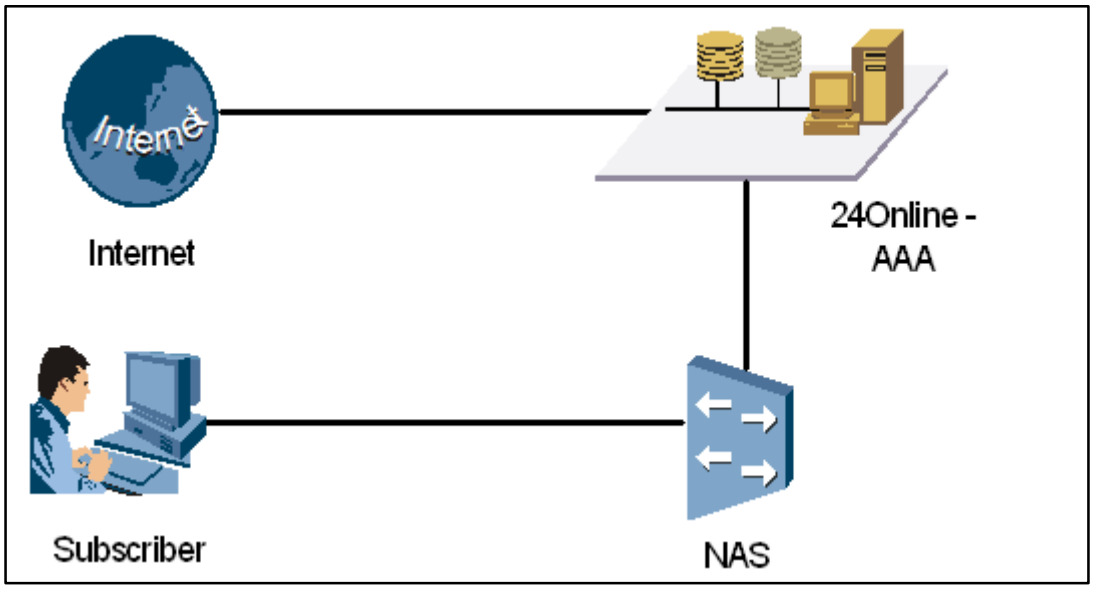

Figure: 24online in RADIUS Mode

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NAS Mode

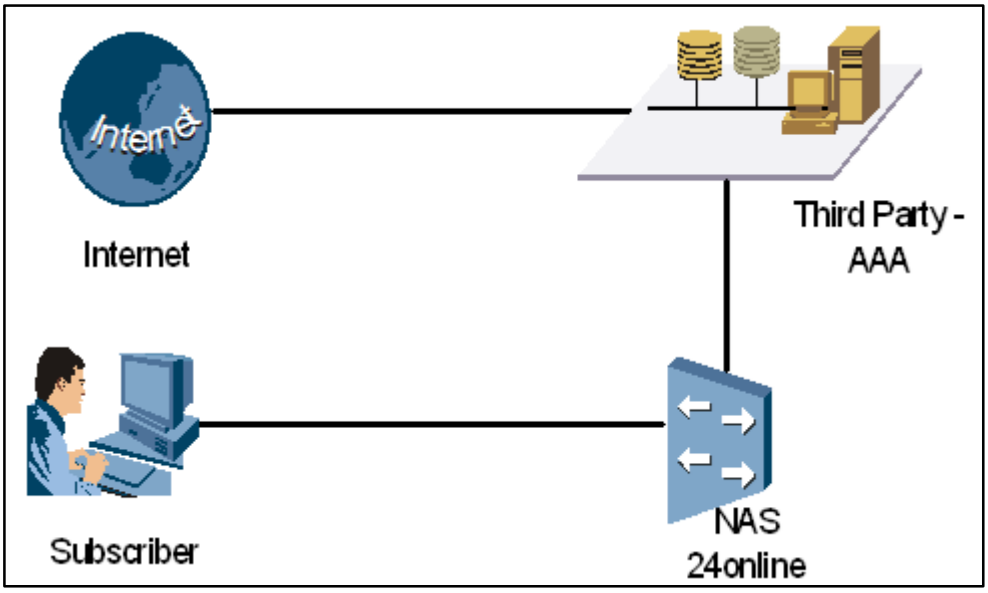

Figure: 24online in NAS Mode

Single Box Mode

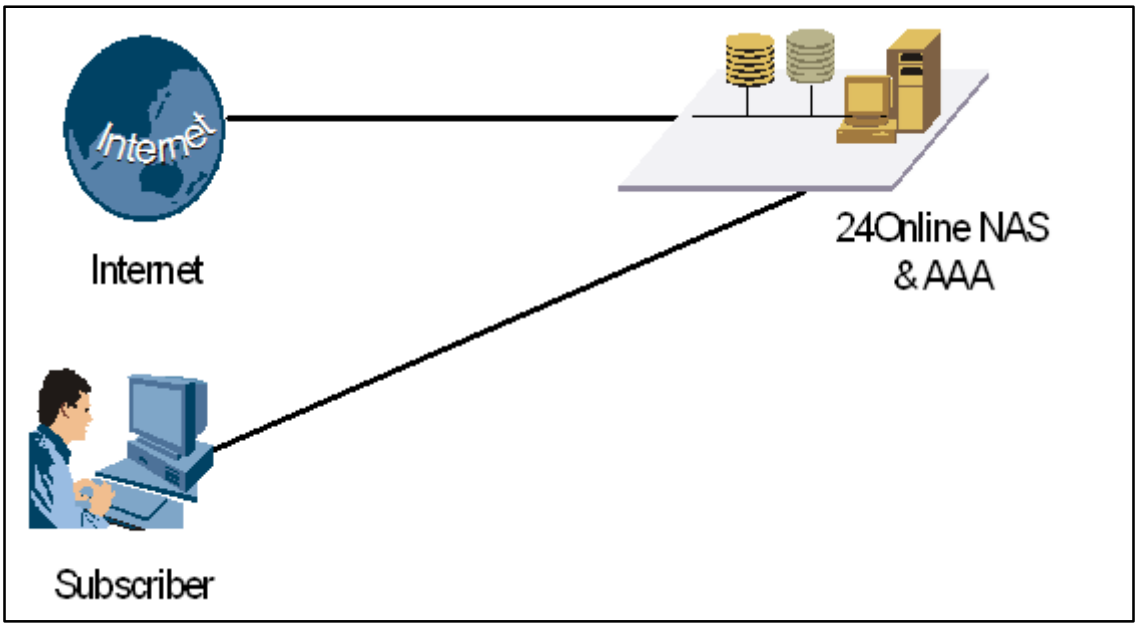

Figure: 24online in Single Box Mode

Login and Register 24online

Refer Quick Start Guide (QSG) for configuration process. Once 24online is successfully deployed in your network, 24online GUI can be accessed through any browser. Register your 24online before using it; take help of 24online representative at any stage of deployment.

Once registered, use Username and password mentioned in the QSG.

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Login 24online

Open a web browser and type the IP address of the 24online system in the URL box.

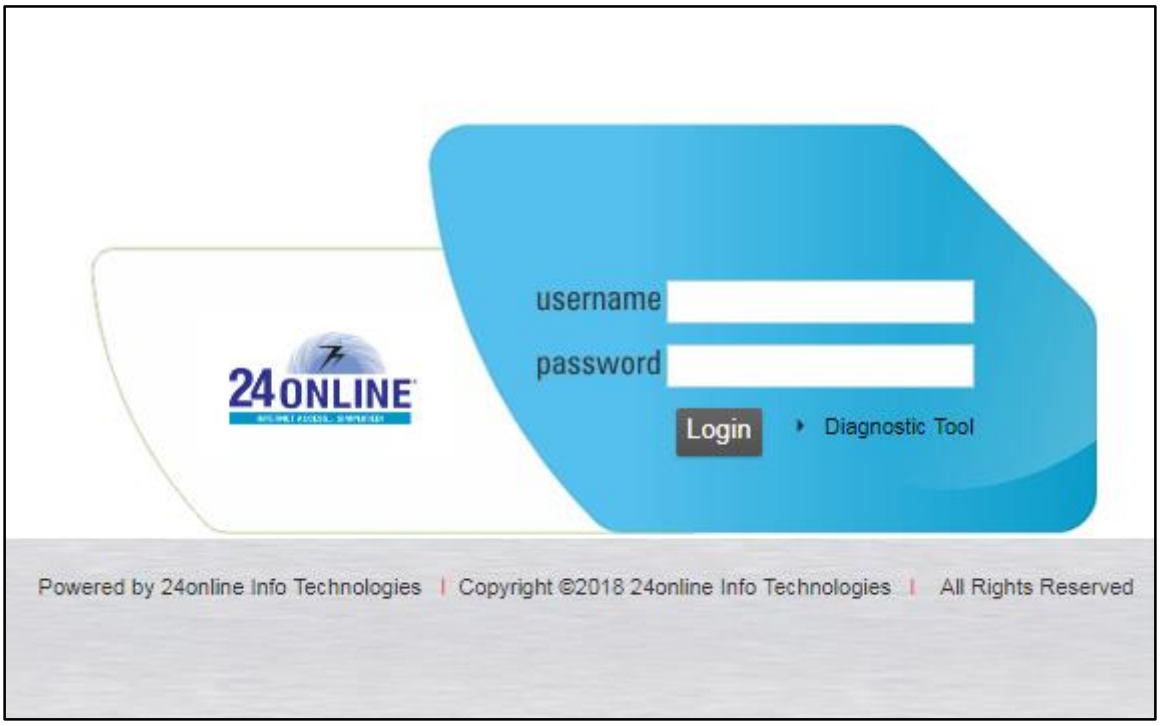

Figure: 24online administrative login

24online Administrator Login	
Username	Enter Username
Password	Enter Password
Login	Click on **"Login"** button to enter into 24online GUI interface

Registration of 24online Server

After 24online login, the software needs to be registered and customers need to avail the license key to enable 24online functions and features, kindly follow the steps to register the product:

Online Registration

24online machine should be connected with internet.

Online registration makes it an easy task to fill in the necessary details of the appliance and company contacts. It automatically retrieves License Key from website and stores it in the database. Administrator need not manually acquire the details of license key and feed in the form.

Note: Product ID and Unique ID are provided in the appliance invoice or through email

External Proxy Server

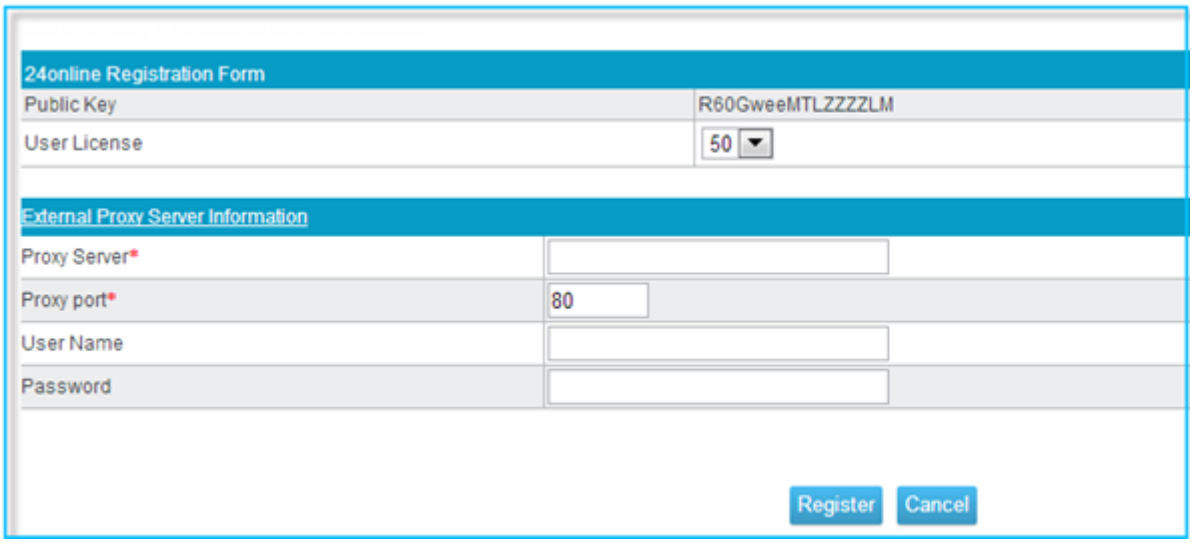

Figure: 24online Server External Proxy Server

To connect system to any external server for Internet connection, specify the server IP, port details and username/password. 24online will automatically connect the server and follow the registration process.

We'll now proceed with the default menu-options available in 24online system. In-case you wish to refer to any modules, kindly refer to their specific user-guides.

Home

Home page includes four menus Home, Dashboard, Console, support and Logout.

Let's understand each in detail.

Figure: 24online Home

Home Menu

GUI home page is configurable from SystemàClient ServicesàParametersà Admin GUI home page.

Admin can configure live user page, Search user page, manage package page, Dashboard page, or Advanced Search User page as default Home page. Admin can directly navigate to pre-configured home page through a single click on menu.

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Dashboard

Manage your network and get the instantaneous status/summary of the system under one roof through 24online Dashboard.

24online's real time dashboard gives the freedom of including widgets as per the requirement. System now allows having maximum of five dashboards each with the facility of including System, Subscriber and Logger Widgets. These interactive representations display the immediate position of the system using which management decisions can be taken at a glance. There are several options to manage the system functions efficiently. Let's understand each function in detail.

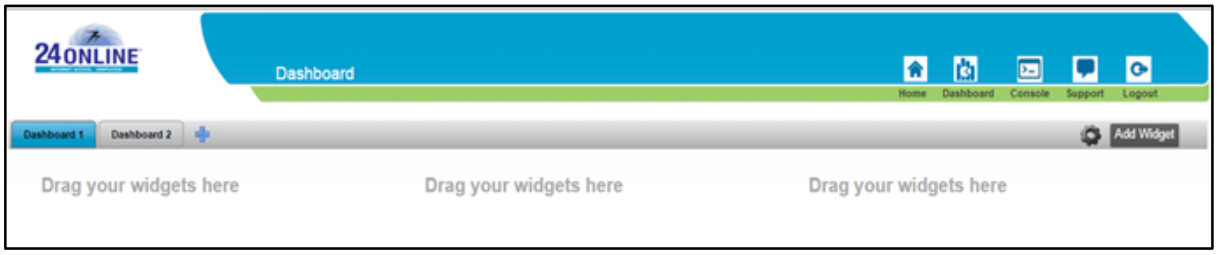

Figure: Dashboard

Widgets

Widgets are the part of Dashboard, helping user to manage and control the graphical representations of the system. Using these drag and drop widgets each admin entity can design their own dashboard. There are four sections of widgets each with the facility to display the real-time status of the system.

Four sections of widgets are:

- Subscriber widget
- System Widget
- Logger Widget
- Other Widget

Configuration of widgets can be done as per the requirements, which allows changing the view of the details, filtration of data by Pop or Zone, or displaying data based on time.

Auto Refresh feature facilitates to refresh data at every fixed time stated in seconds to get real-time data required for some widgets. This fixed time should be more than 10 seconds. To stop "Auto-refresh" feature once enabled, simply leave "Auto Refresh Time" field blank.

Widgets having lengthy data are systematically organized and displayed in to different pages.

Let's understand each widget in detail.

Subscriber Widget

Subscriber widget includes details regarding subscriber's usage pattern. As shown below subscriber widget consists of 13 different widgets i.e. User Status (numbers), Package wise users (numbers), Status wise Pins(chart), Top Live users by Duration (numbers), Top Live users by Data (numbers), Top Live users by Bandwidth (numbers), Module Registration (numbers), Live Users by NAS (numbers),

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Package wise Revenue (numbers), Expiry Data wise User Count (numbers), Zone wise Collection (numbers), Revenue by Time (numbers), and Live users by Login Type (numbers).

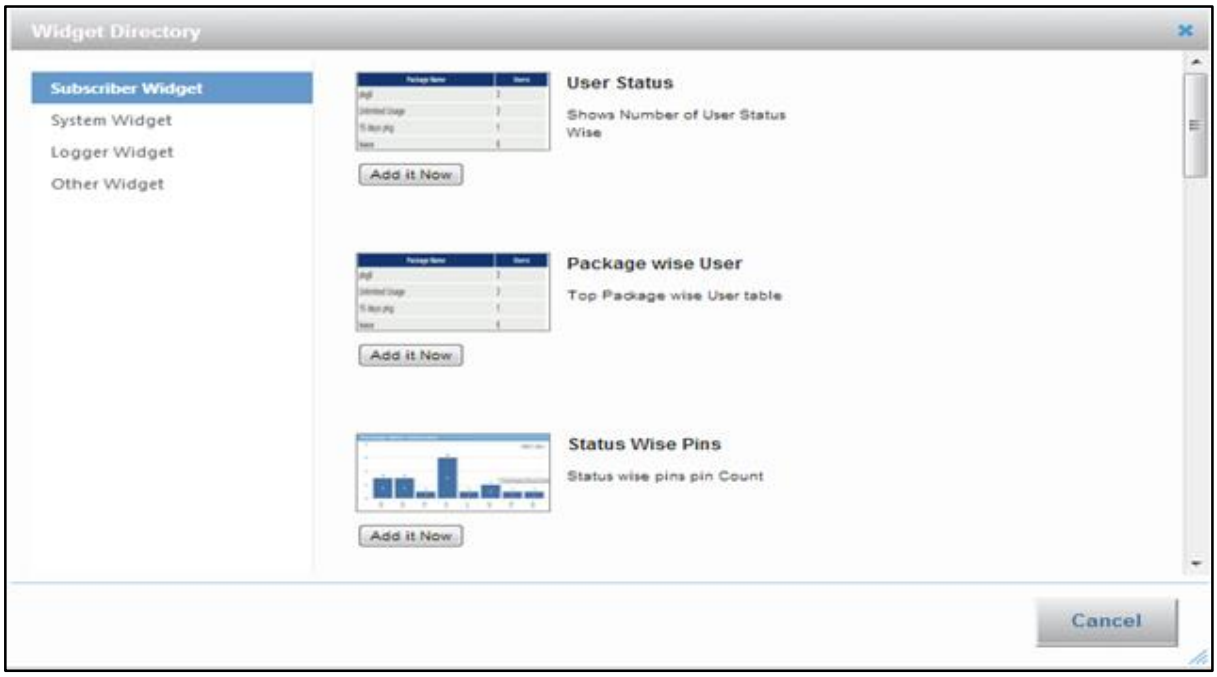

Figure: Subscriber Widget

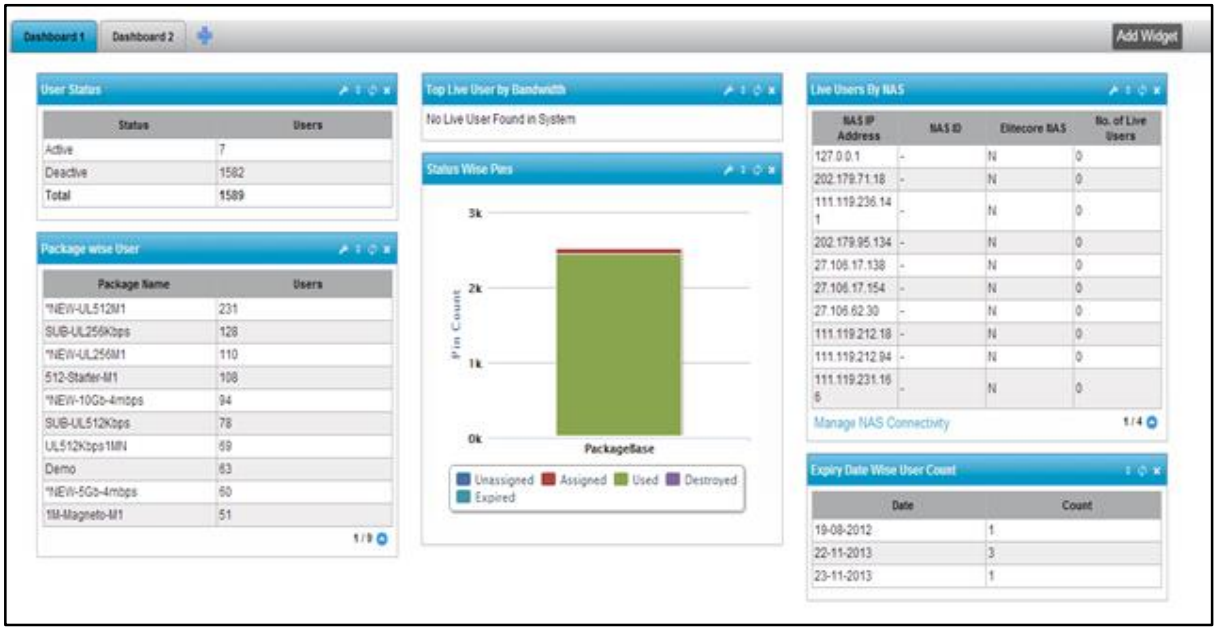

Figure: Subscriber Widget Dashboard

Let's understand each of these widgets in detail:

User Status

User status (numbers) displays the total number of users in the system as per their status i.e. Archived, Active, Deactive, Acquisited. User status (statistics) widget displays the percentage -wise users available in the system, roll the mouse to see the exact percentage. These details can be also displayed in a Pie chart or Bar chart form for better understanding.

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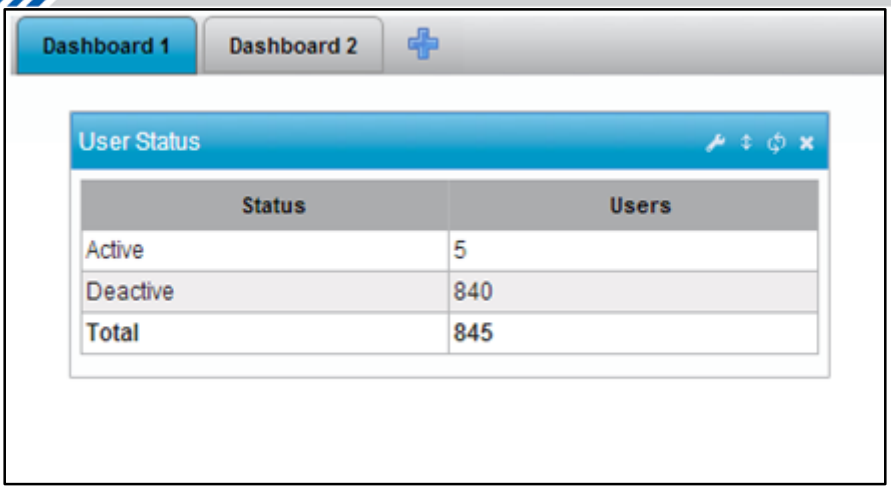

Figure: User Status (numbers)

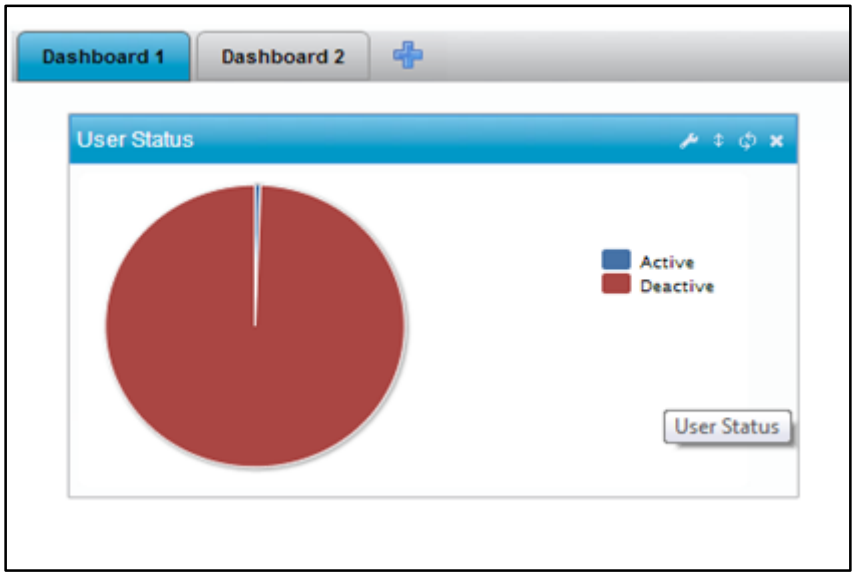

Figure: User Status (statistics)

Package –Wise User

Package-wise user widget displays the list of packages that are majority used by the subscribers. Similarly Package-wise user (statistics) displays the data in the form of graph.

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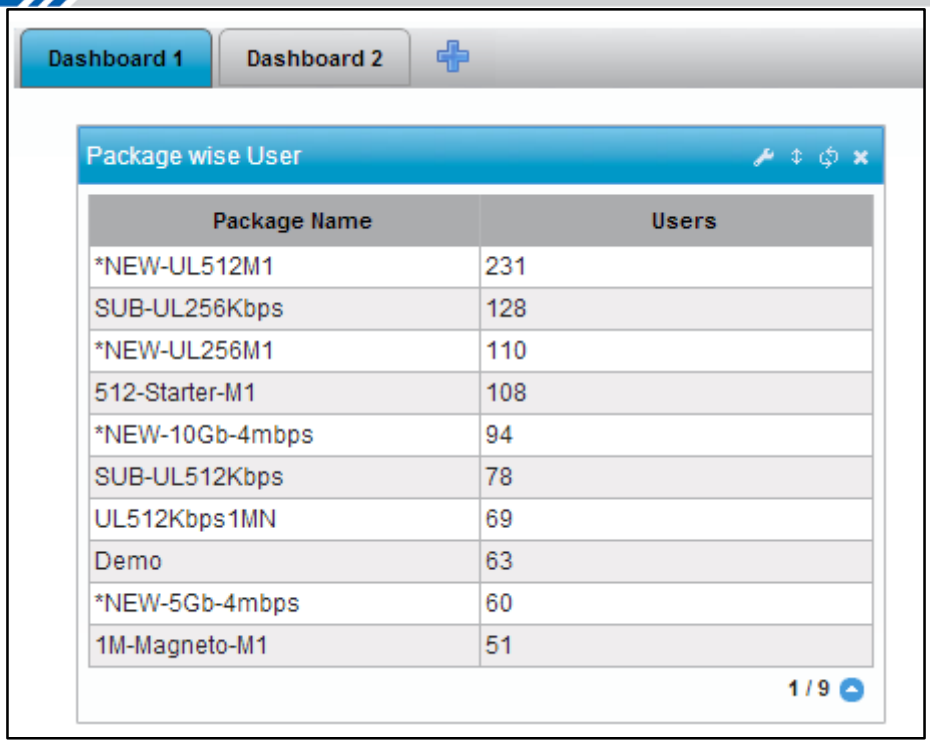

Figure: Package-wise User

Status Wise Pins

Status Wise Pins (chart) displays the pins count that are assigned, unassigned, already used, destroyed, and expired. These details can be obtained according to the different packages.

Figure: Status wise Pins

Top Up Users

Top users widgets display the list of top live users as per three different criteria, i.e. Top Users-Duration shows the live users that are connected with the network for the longest duration, Top-

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users-Bandwidth shows those live users who have consumed highest bandwidth and Top User-Data displays the list of users having largest amount of data transfer.

Top Live User by Duration

Account ID	User Name	Start Time	IP Address
A000000035	swati	Mon, Oct 7, 12:22 PM	10.104.1.199
A000000053	ll1	Thu, Oct 3, 03:46 PM	10.1.1.2
A000000052	TestLeasedline	Thu, Oct 3, 03:46 PM	10.104.1.84

Figure: Top user-Duration

Top Live User by Bandwidth

Account ID	User Name	Total Bandwidth (bits/sec)	IP Address
A000000035	swati	0.0	10.104.1.199
A000000052	TestLeasedline	0.0	10.104.1.84
A000000053	ll1	0.0	10.1.1.2

Figure: Top user-bandwidth

Top Live User by Data

Account ID	User Name	Data Usage	IP Address
A000000035	swati	0 KB	10.104.1.199
A000000052	TestLeasedline	0 KB	10.104.1.84
A000000053	ll1	0 KB	10.1.1.2

Figure: Top user-data

Module Registration

Module Registration widget displays the status and expiry date of registered and demo modules.

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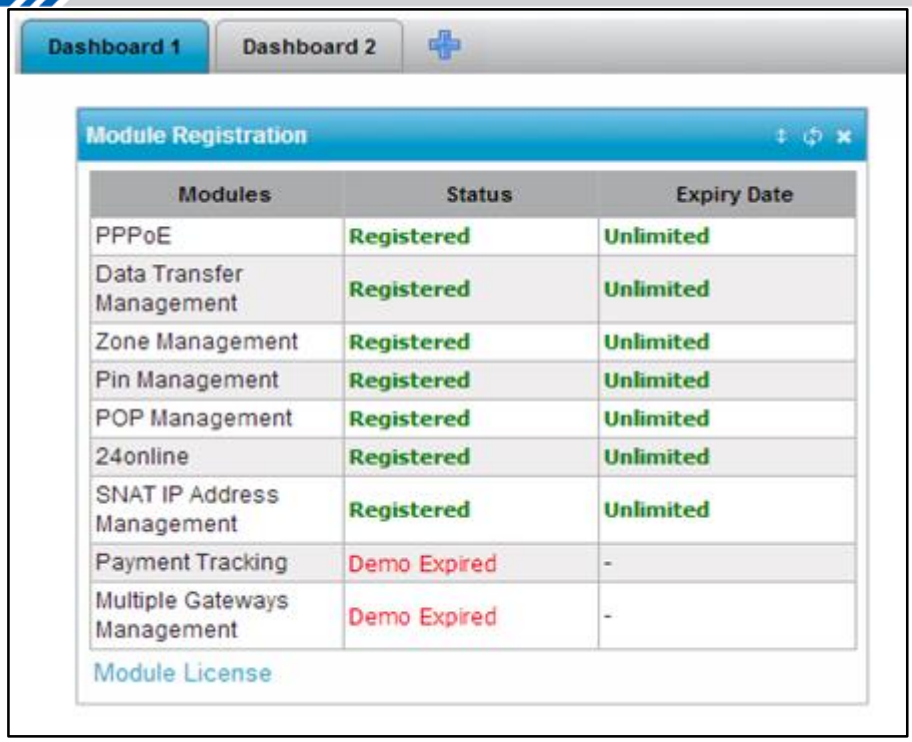

Figure: Module Registration-data

Live Users by NAS

Number of Live Users filtered by NAS along with their NAS IP address and NAS id details can be known by this widget.

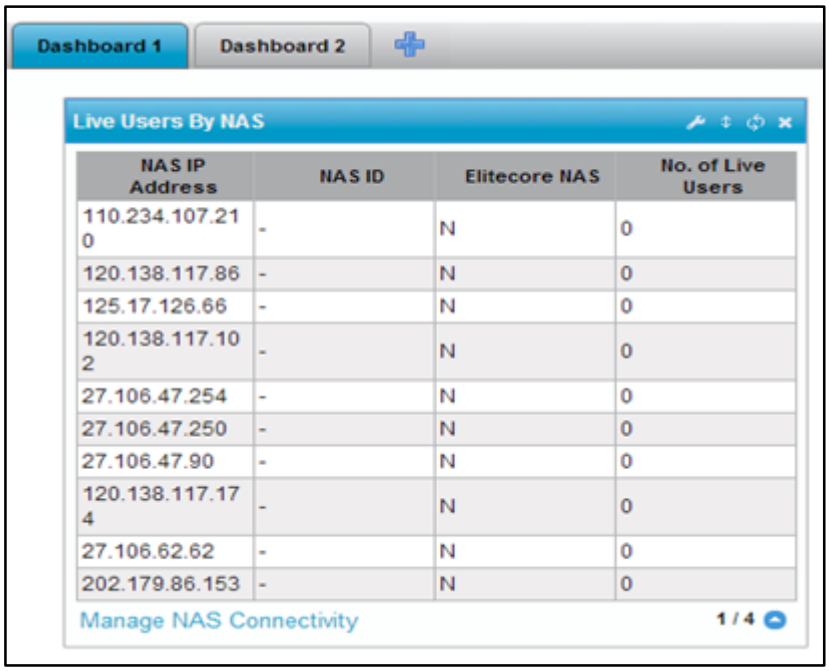

Figure: Live Users by NAS

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Package Wise Revenue

In this widget, No. of invoices along with respective amount details can be known according to the Packages. For every package offered, no. of invoices generated and relevant amount is listed under this.

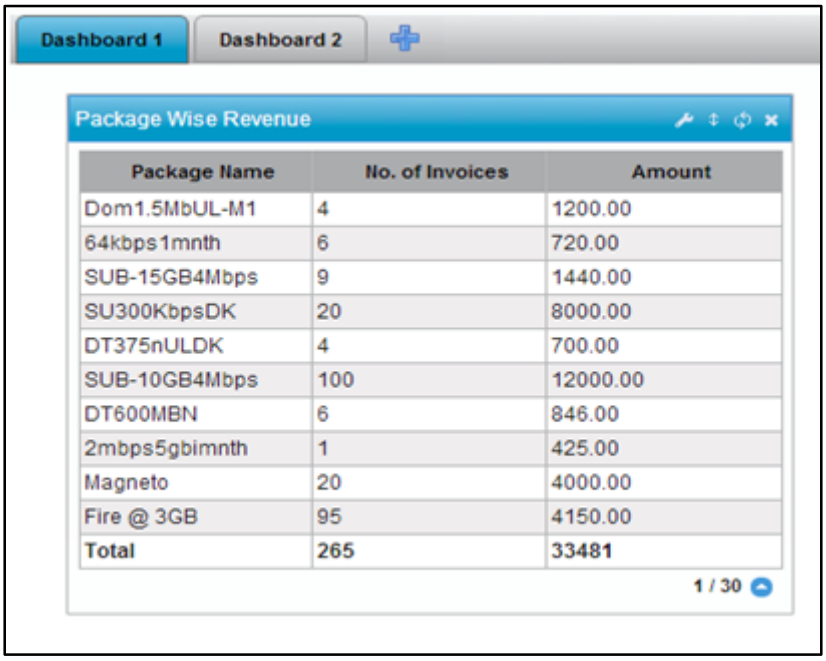

Figure: Package wise Revenue

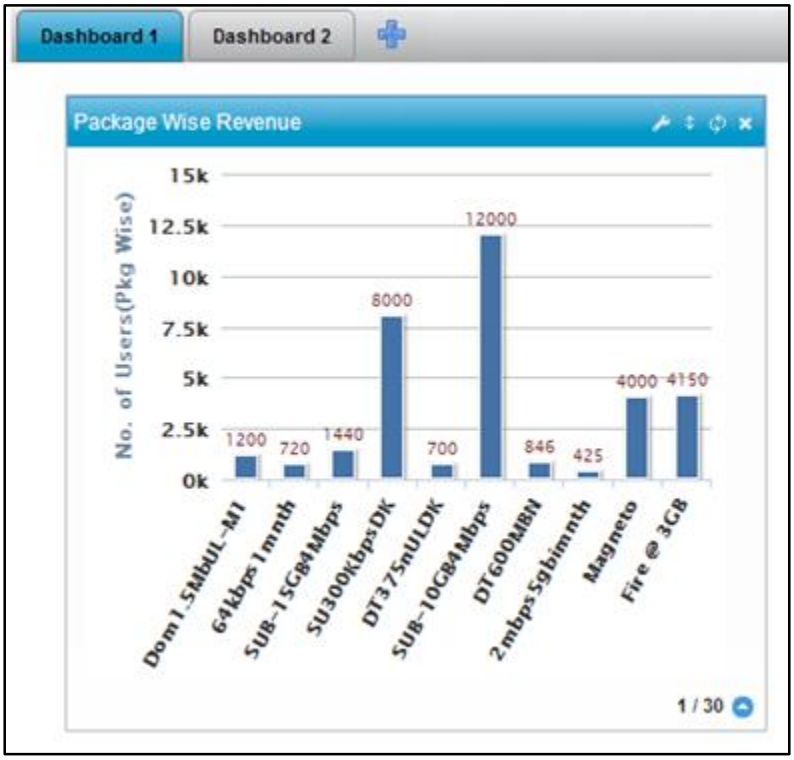

Figure: Package wise Revenue (Bar Chart)

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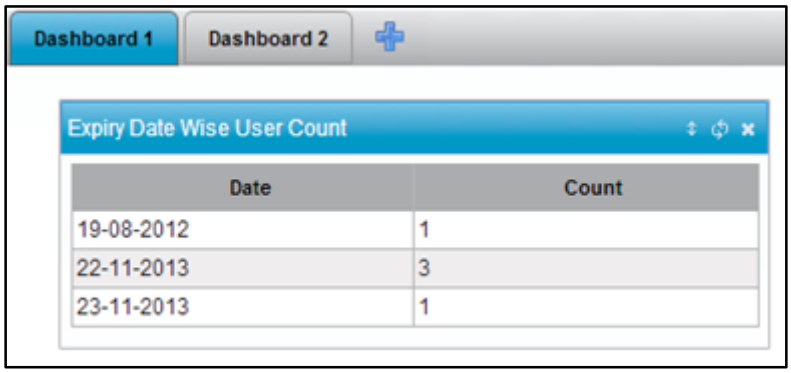
Expiry Date wise User Count

According to the Expiry dates, the user counts can be obtained by this widget.

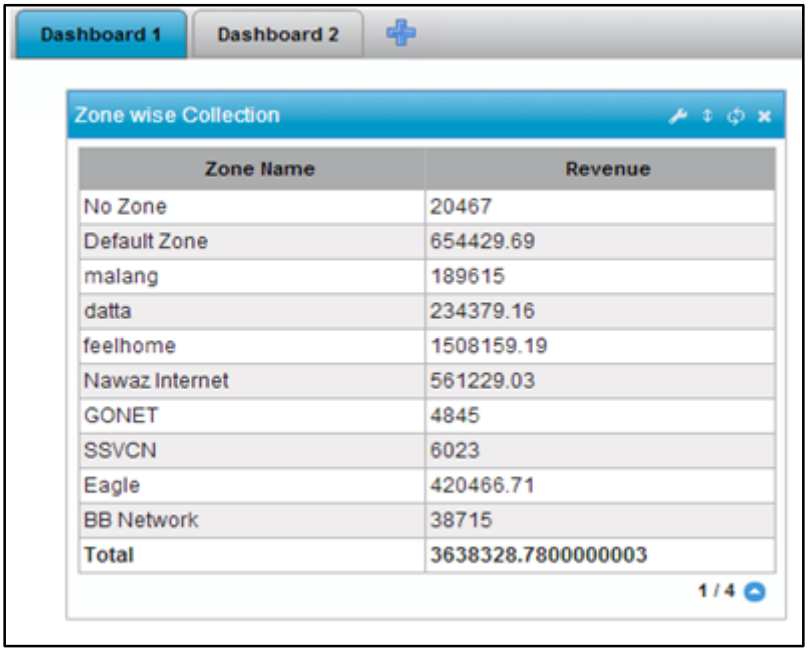


Date	Count
19-08-2012	1
22-11-2013	3
23-11-2013	1

Figure: Expiry Date wise User Count

Zone wise Collection

Total revenue collection done according to different zones can be known by this widget.



Zone Name	Revenue
No Zone	20467
Default Zone	654429.69
malang	189615
datta	234379.16
feelhome	1508159.19
Nawaz Internet	561229.03
GONET	4845
SSVCN	6023
Eagle	420466.71
BB Network	38715
Total	**3638328.7800000003**

1 / 4

Figure: Zone wise collection

Revenue by Time

Total revenue generated daily, month wise, or yearly can be known with ease by this widget to keep a continuous track.

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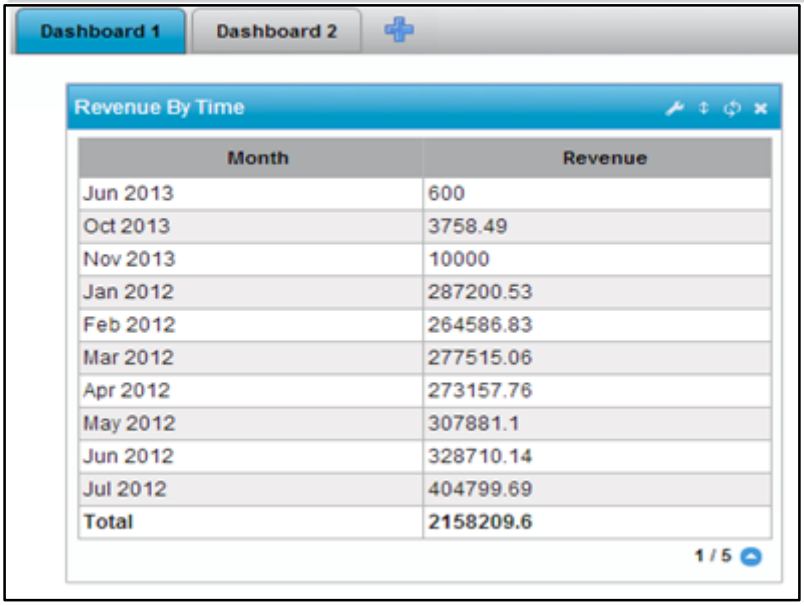


Month	Revenue
Jun 2013	600
Oct 2013	3758.49
Nov 2013	10000
Jan 2012	287200.53
Feb 2012	264586.83
Mar 2012	277515.06
Apr 2012	273157.76
May 2012	307881.1
Jun 2012	328710.14
Jul 2012	404799.69
Total	2158209.6

1 / 5

Figure: Revenue by Time

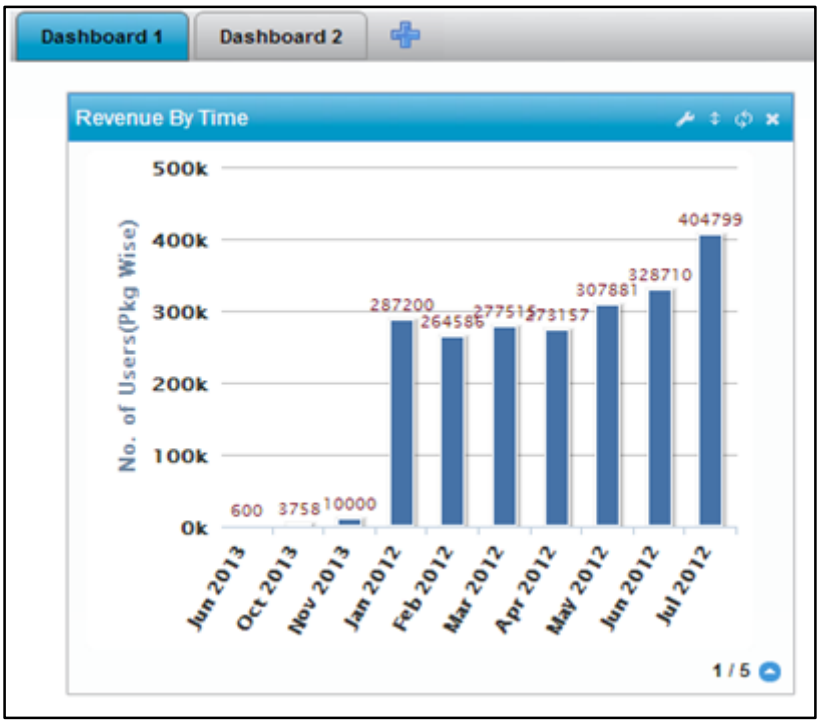
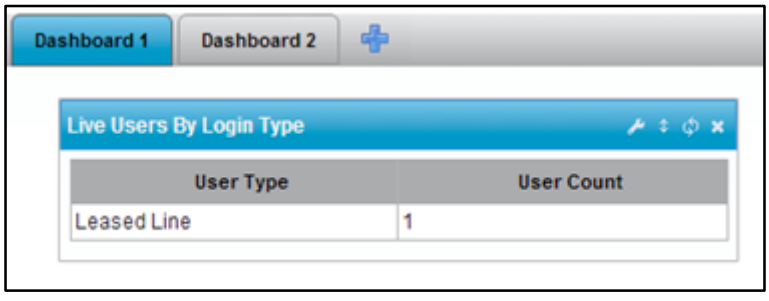


Figure: Revenue by Time (Bar Chart)

Live Users by Login Type



User Type	User Count
Leased Line	1

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Figure: Top live users by login type

System Widget

System widget includes details regarding system related functionality. As shown below system widget consists of eight different widgets i.e. Remote device status, Server time, Gateway information, Service status, Hard disk status, System Information, Interface Information and Disk usage.

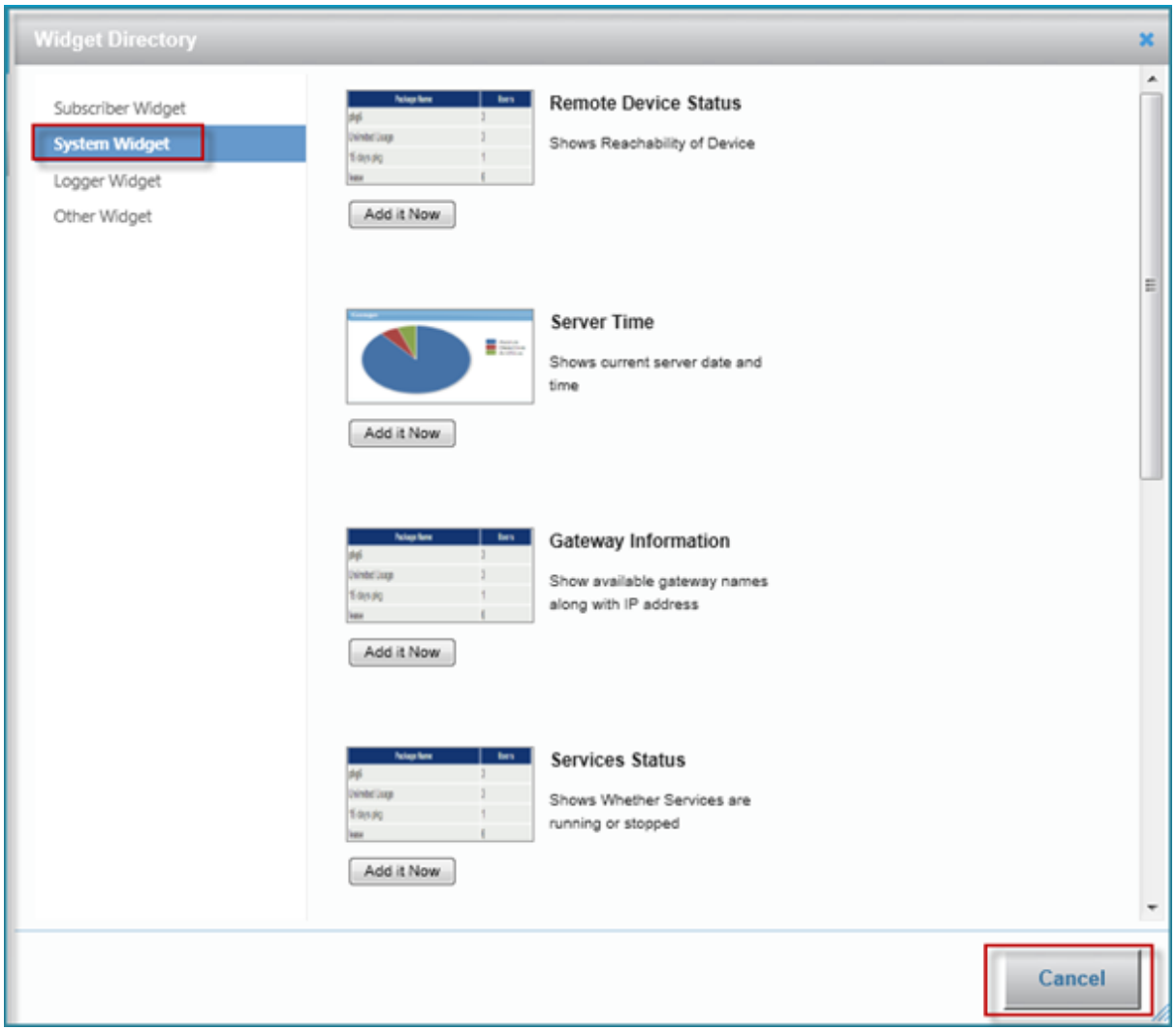

Figure: (a) System Widget

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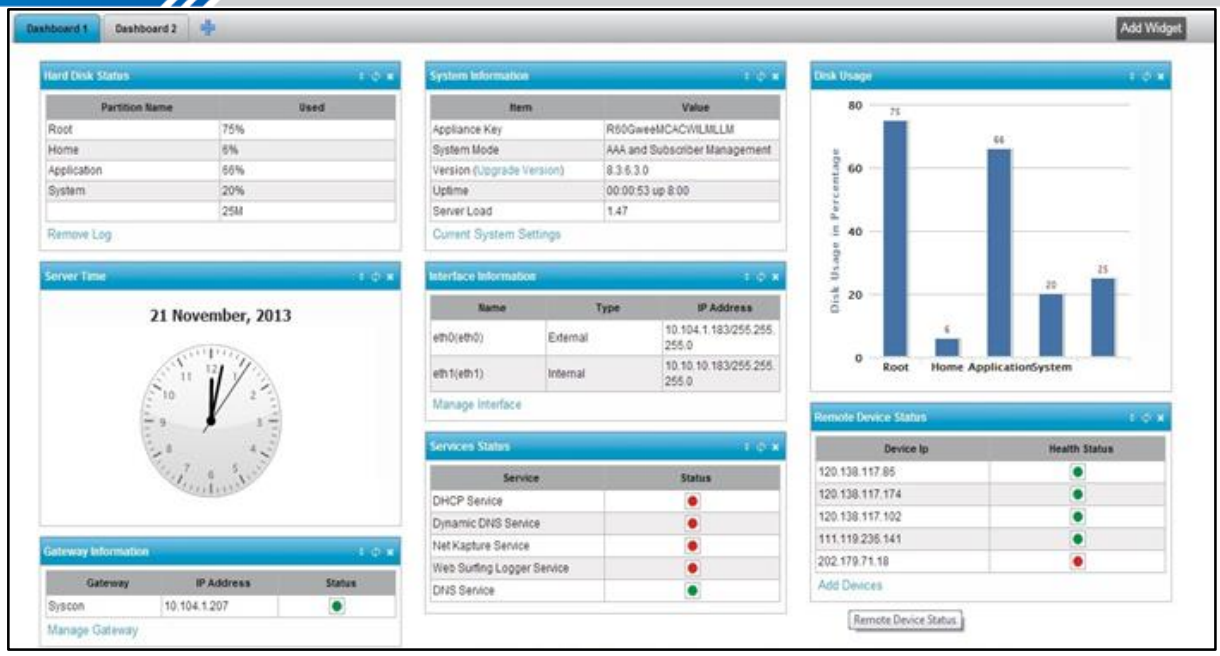

Figure: (b) System Widget

Service Status

Service status displays the status of all the services i.e. DHCP, Dynamic DNS, Netkapture, Websurfing Logger and DNS service running in the system. This Widget displays the status against each service, if the status is it suggests that the service is non operational and if the status is it suggests that the service is operational in the system.

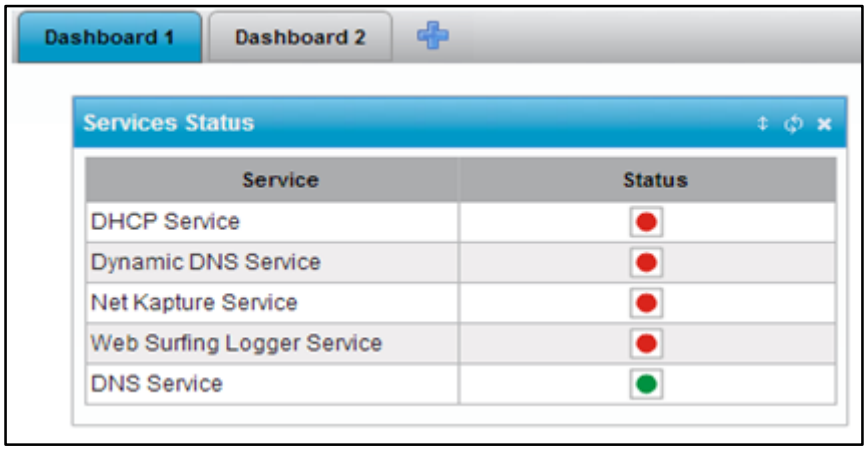

Figure: Service Status

Interface

Admin can directly see the list of interfaces configured in the system through this widget. To add a new alias click on “Manage Interface”, this would directly redirect you to **System > Network > Interface**.

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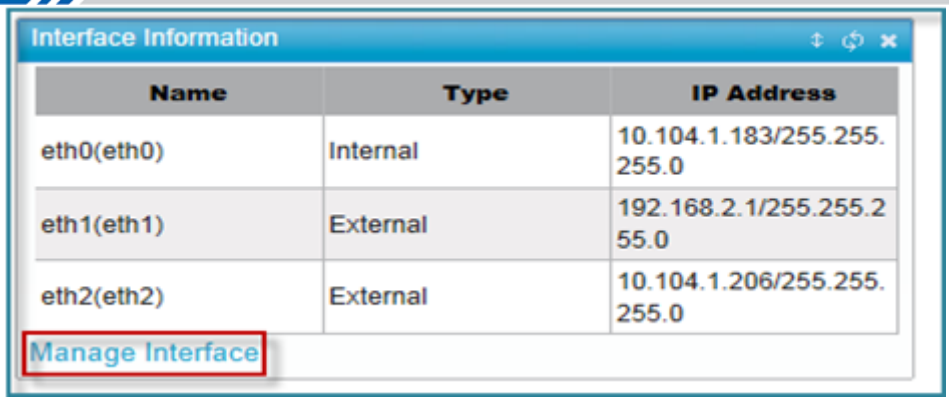

Figure: Interface Information

System Information

This widget consists of brief information regarding system like key, mode, uptime, load, and version.

If 24online comes up with a new version, system will display "Upgrade Version" link which will redirect to http://download.24onlinebilling.com/index1.html from where clients can download the latest available version.

To view the detailed system settings click on "**Current System settings**", this will redirect you to **System > Current System Settings**.

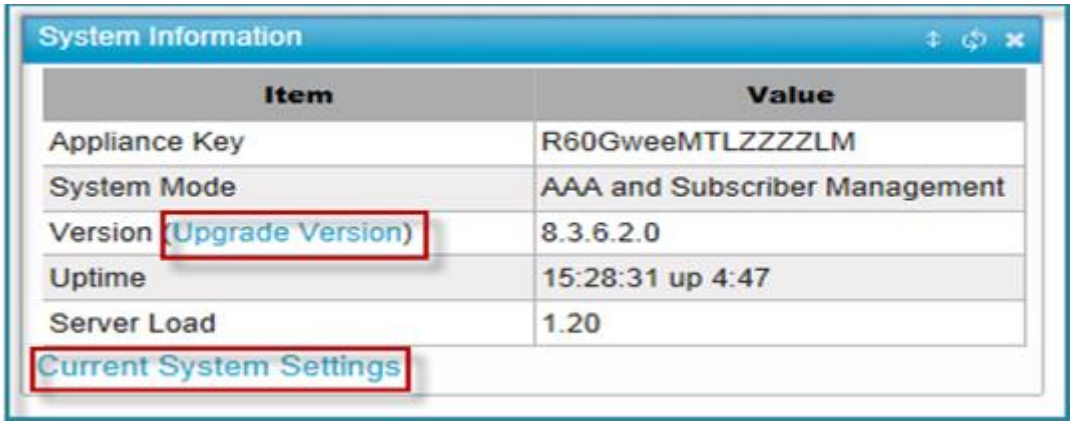

Figure: System Information

Remote Device Status

This widget displays the health/ reachability status of the device connected with the system. If the health status is green, it suggests device is connected and reachable. If the health status is red, it suggests device is not connected and not reachable.

To add device click on "**Add Devices**", this will redirect to **System > Status Tracker > Add Devices**.

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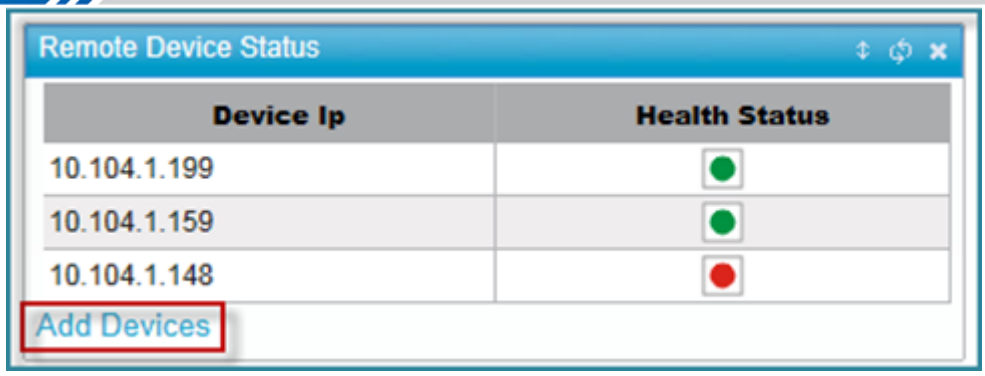

Figure: Remote Device Status

Gateway

This widget displays the information regarding gateway configured in the system, if the status is green, it suggests gateway is connected and reachable. If the status is red it suggests gateway is not connected and not reachable.

To edit gateway configuration click on "**Manage Gateway**", this would redirect you to **System > Network > Gateway page**.

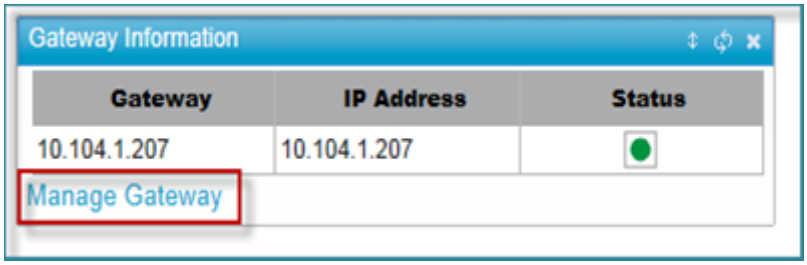

Figure: Gateway Information

Server Time

This widget displays the exact server timings.

Figure: Server Time

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Hard Disk Status

Admin can see the status of hard disk through this widget; this will help admin to take proper actions before system hangs. Admin can even directly remove logs through the widget, click on "**Remove Log**", this would remove all the logs from the system.

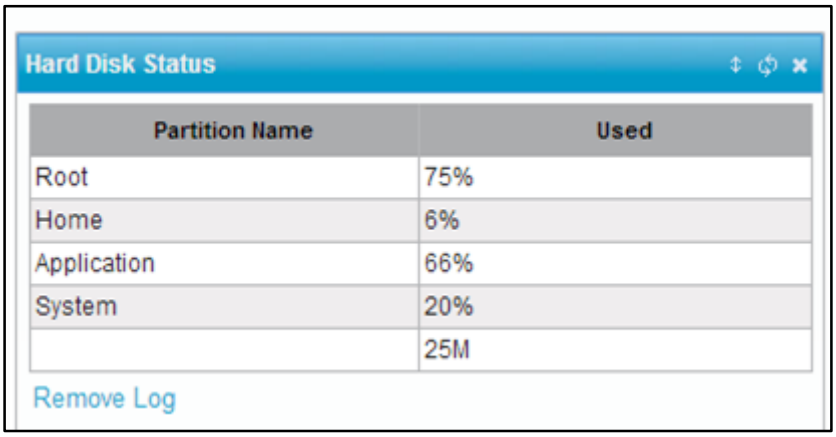

Figure: Hard Disk Status

Admin can see the same i.e. "**Hard Disk Status**" if form of bar graph thorough "**Disk Usage**" widget.

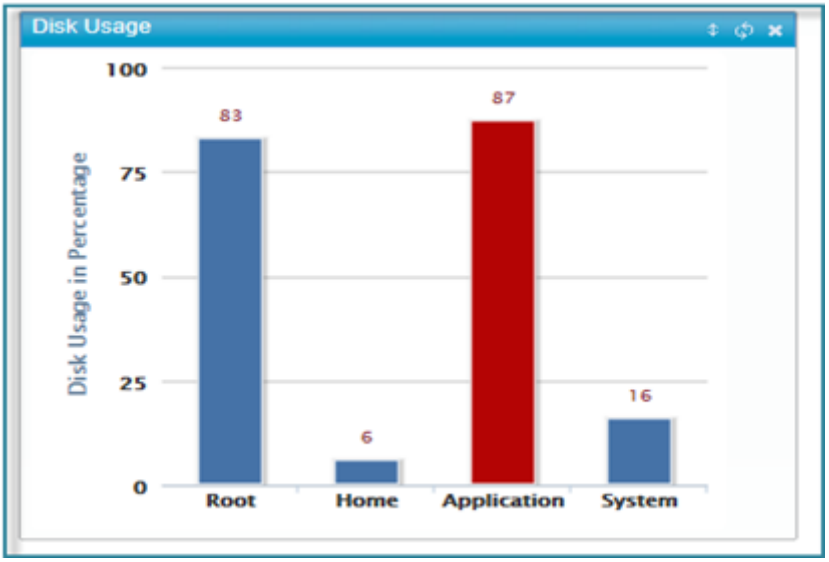

Figure: Hard Disk Status (Bar Graph)

Logger Widget

Logger widget includes activity log as shown below.

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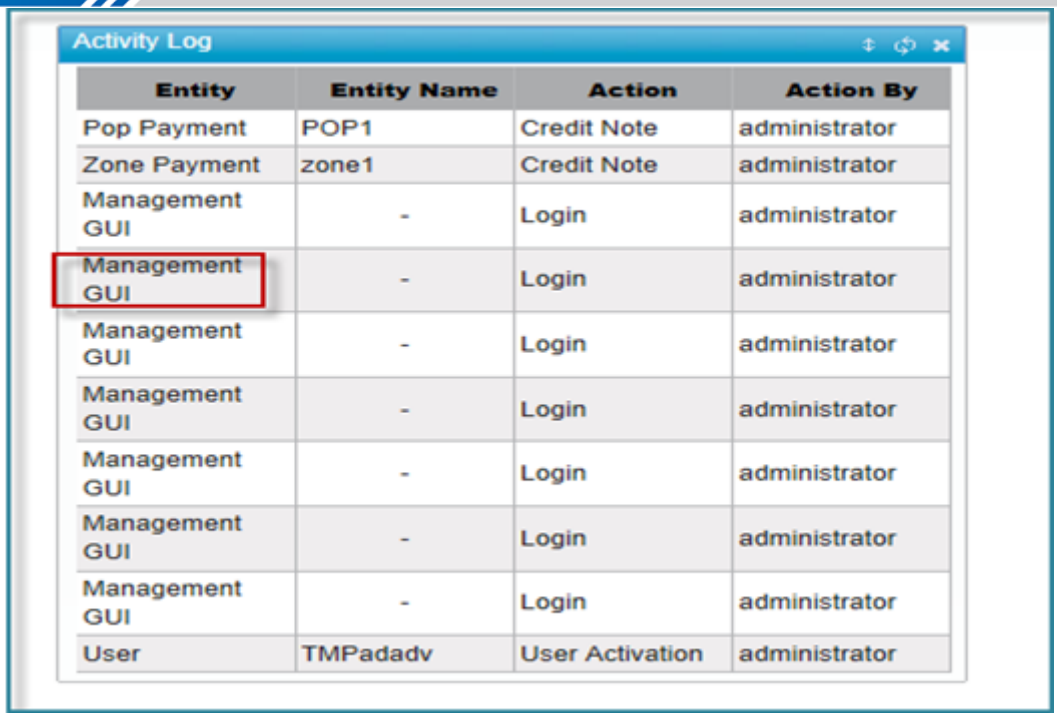

Figure: Activity Log of all users

Click on any entity to see the detailed operation, as shown below:

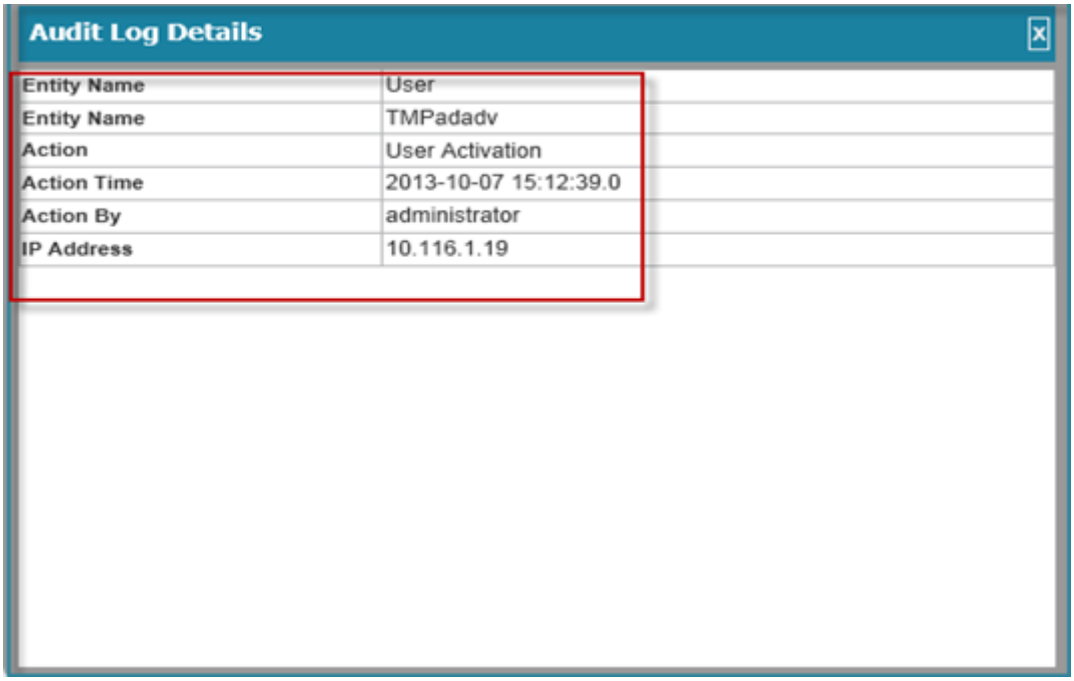

Figure: Detailed activity log of one user

Other Widget

Other Widget includes "**Document Center**". This consists of all the documents related with the release that would prove helpful in understanding the system.

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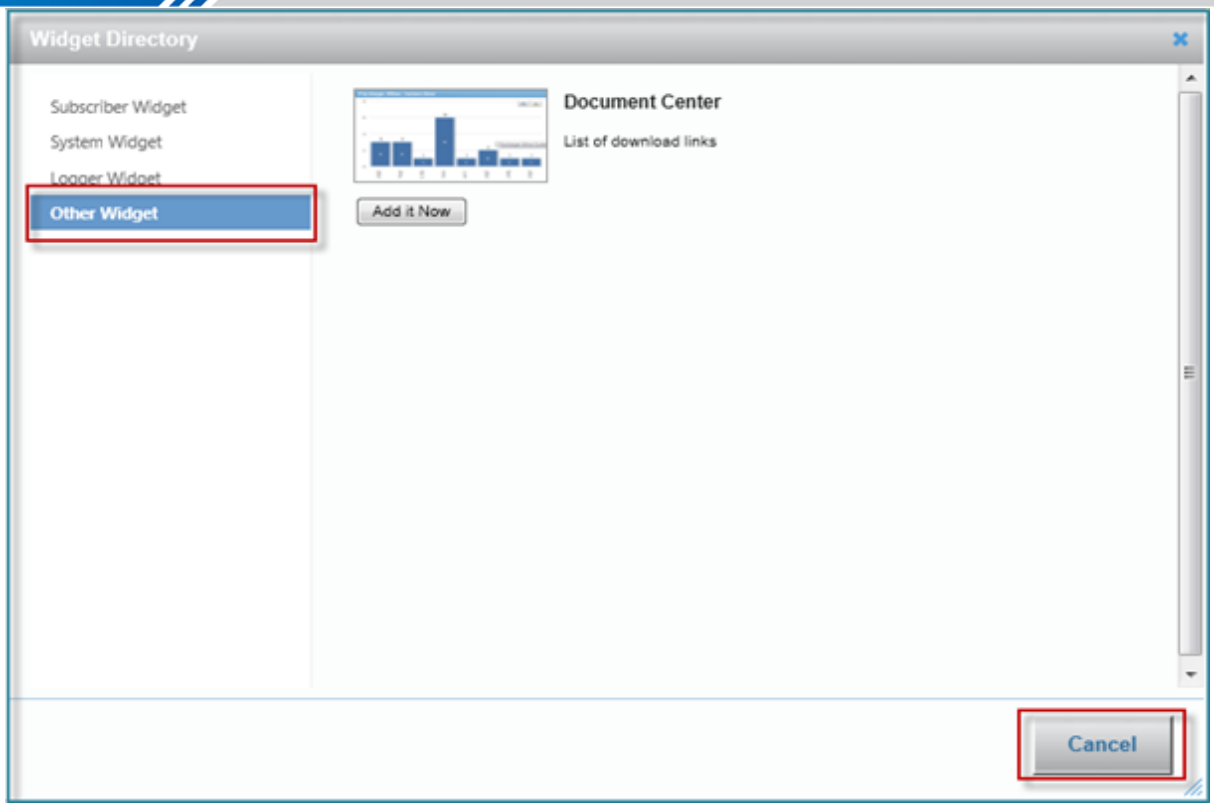

Figure: Other Widget

Click on any of the listed document i.e. "**Release note**", "**User Guide**" and **SOP** (Standard Operating Procedure) which would help admin regarding the system details.

Console

Console button is provided here that will enable administrator to directly access console menu by clicking it as shown in below window:

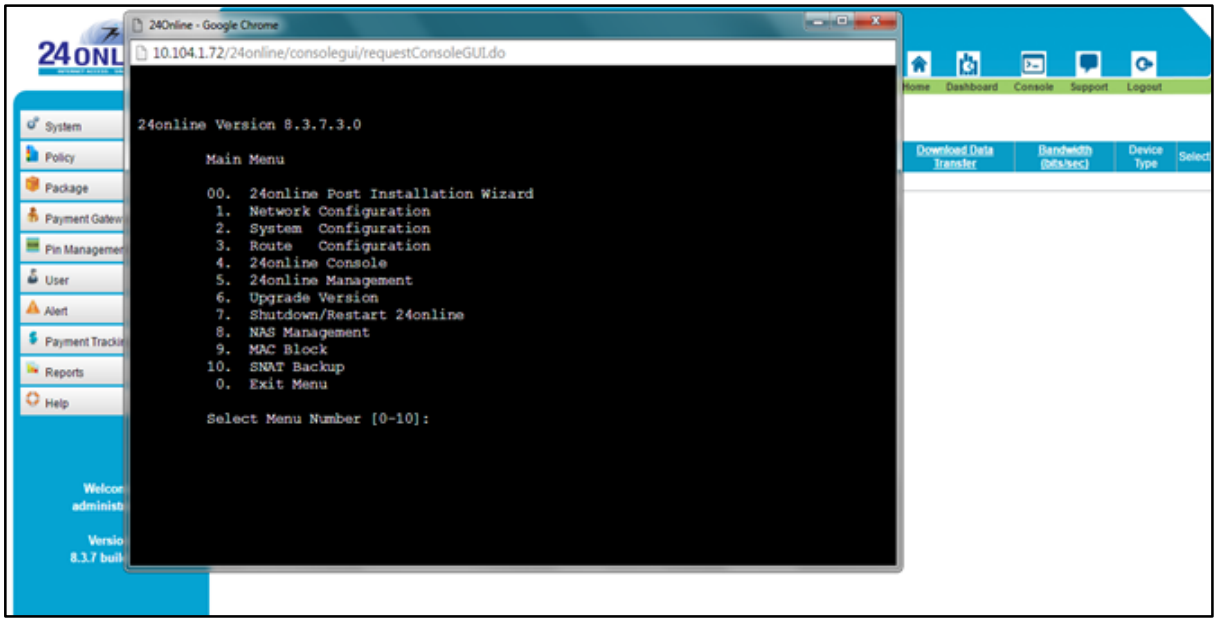

Figure: Console

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Support

24online provides 24 * 7* 365 days support; admin can click on **Support** from 24online GUI home page which will be redirected to http://messenger.providesupport.com/messenger/24online.html where admin can get online/offline support from 24online support engineers.

Admin has to fill the details provided on the support page as shown below:

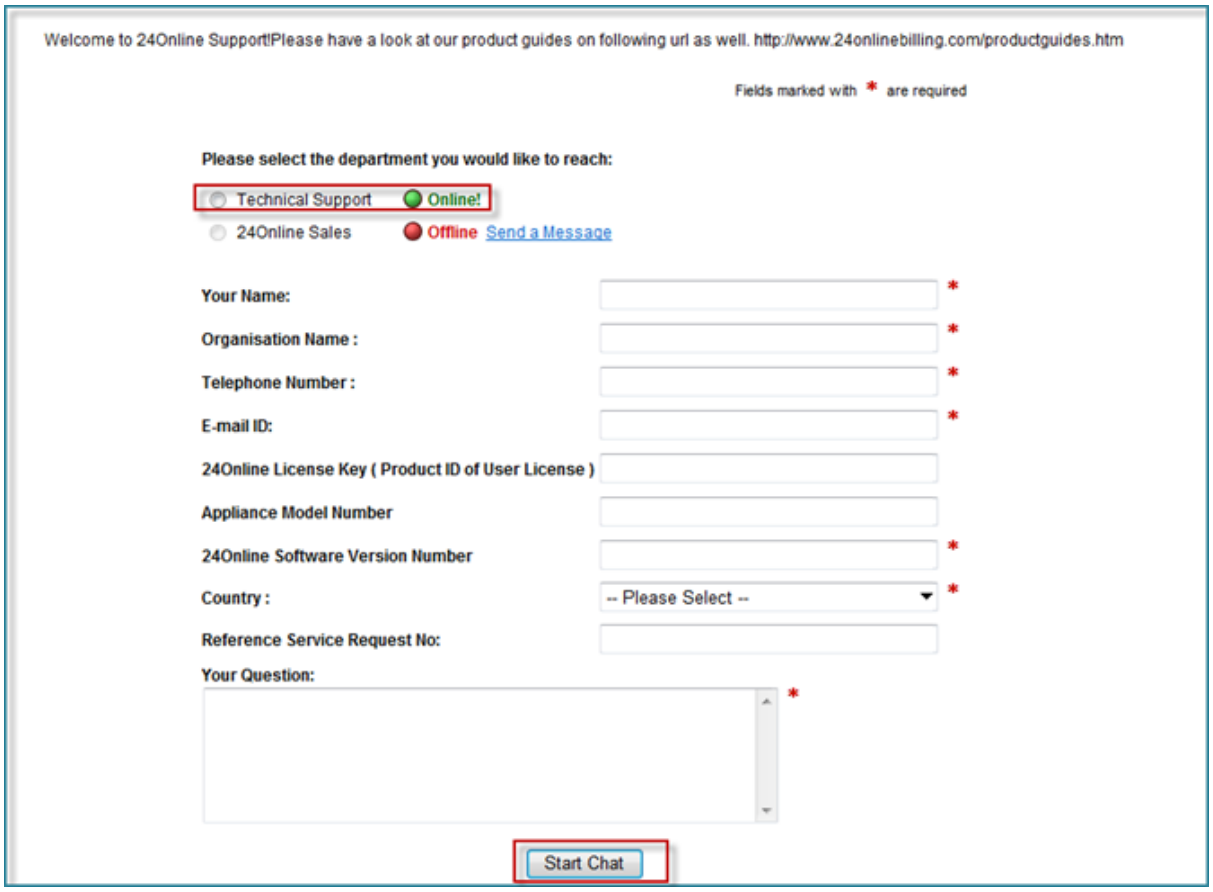

Figure: Technical Support

Technical Support	
Your Name	Enter your name
Organization Name	Enter name of the organization
Telephone number	Enter your Telephone number
E-Mail ID	Enter your Email-ID
24online Licence Key	Enter 24online Licence Key
Appliance Model number	Enter Appliance Model Number

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24online Software Version Number	Enter 24online version Number
Country	Select your country from the drop down
Reference Service Request No	Enter the Reference service request no
Your Question	Enter your question

Once you have entered all the credentials click on "**Start Chat**" button. This will redirect your request to 24online support engineers.

If you require help from 24online sales team click on "**Send a Message**", as shown below:

Figure: Sales Support

This will redirect to http://messenger.providesupport.com/messenger/24online.html where admin can fill the required credentials and a request mail will be sent to 24online sales team, as shown below:

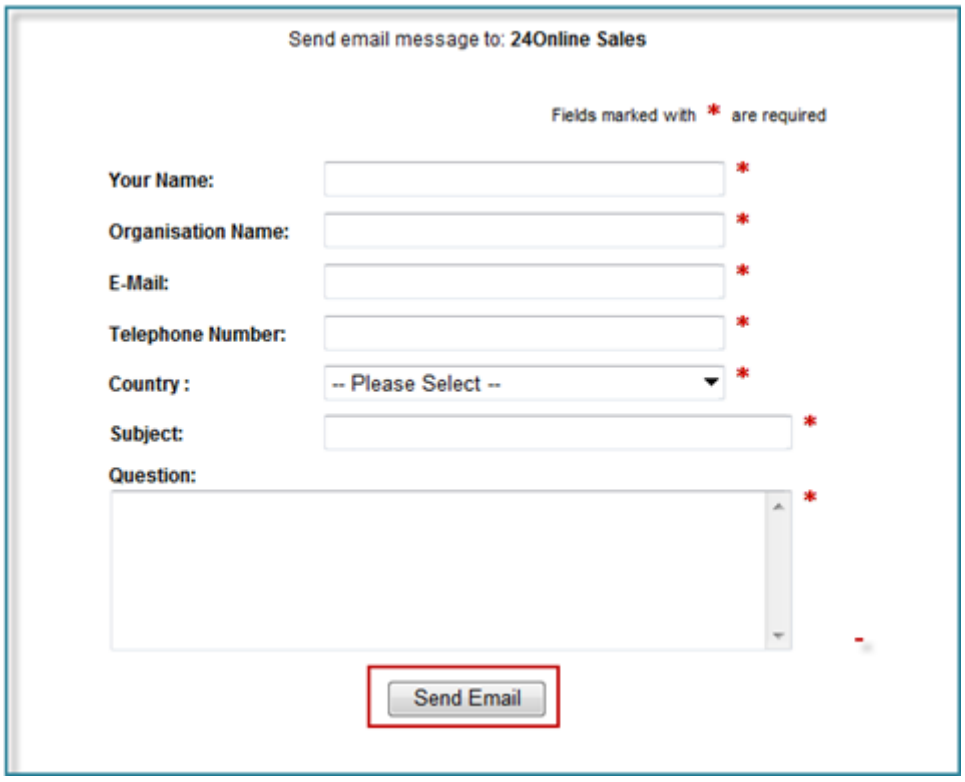

Figure: Sales Support

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Sales Support	
Your Name	Enter your name
Organization Name	Enter name of the organization
Telephone number	Enter your Telephone number
E-Mail ID	Enter your Email-ID
Country	Select your country from the drop down
Subject	Enter subject of your request
Your Question	Enter your question

Once you have entered all the credentials click on "**Send Mail**" button. This will redirect your request to 24online Sales engineers.

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System Menu

Introduction

Manage all major system related configurations under one menu 'System Management'. With the help of 24online System Management options you can configure various services like DHCP, DNS, Network Access Server (NAS), RADIUS, etc. Necessary configurations are provided for creating different interfaces in the system. With the help of manage data option in the system configuration you can take backup, restore backup and schedule backup data in the system. There are several options to manage the system functions efficiently. Let's understand each function in detail.

Network

Any physical network in the system needs to be defined, by which the system can easily operate and functionalize its services. An interface is a configured path of data transfer which connects server with the client. One can assign more than one IP address to the same Ethernet or the Network Card using options given in the telnet. These are aliases and you can define aliases for both internal as well as external network. Maximum eight IP address (aliases) can be found to a single network card.

'Network' menu offers you all the options using which you can view the defined interfaces of the network, configure the gateway and DNS of the network. 24online offers default configurations using which you can plug-n-play the solution, but for further configurations, you may go through each menu option in-detail:

Interface

Interface configuration functionality is combined with the 24online's text based console options. While configuring the 24online system (through console), you need to define different interface of the system. With the help of the interface configuration menu, you can view the details of the various interfaces configured in the system. From this page you can get the complete interface details of the network:

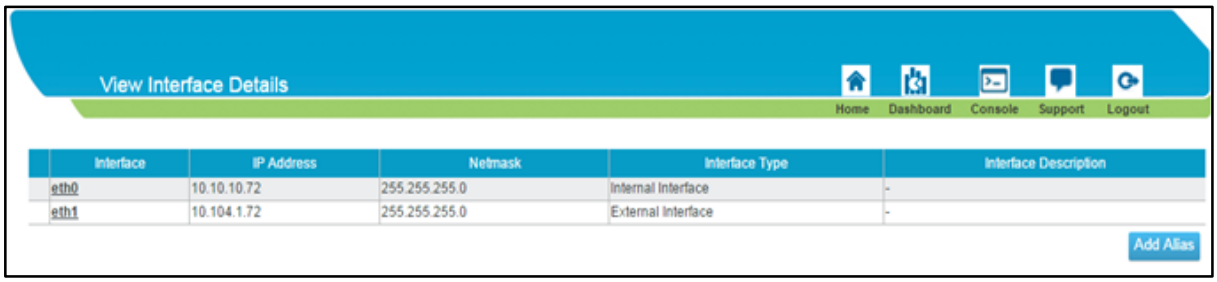

Figure: Interface Configuration

Interface Configuration	
Port	Displays names of ports defined in the appliance
Interface	Displays names of different interfaces configured in the system, against each port

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IP address	Displays IP defined for each port and its interface, in the system
Net mask	Displays Net-mask ID defined for each port and IP address
Interface type	Displays type of interface against each interface. Two types of interfaces appear: **Internal interface** for the LAN network defined in the system **External interface** is the WAN network defined in the system
Interface Description	**Interface Description** with field size of 50 characters is added where details can be provided useful to easily identify ports assigned.

Add Alias

Add Alias option is available in the Interface configuration. With the help of this option we can increase the number of interfaces and the number of networks. One can assign or bind more than one IP address to the same Ethernet or the Network card. These are Aliases. It is possible to define Aliases for both Internal as well as External network. Maximum eight IP addresses (Aliases) can be bound to a single Network card. The Alias can be added/ removed from the GUI itself with the option below.

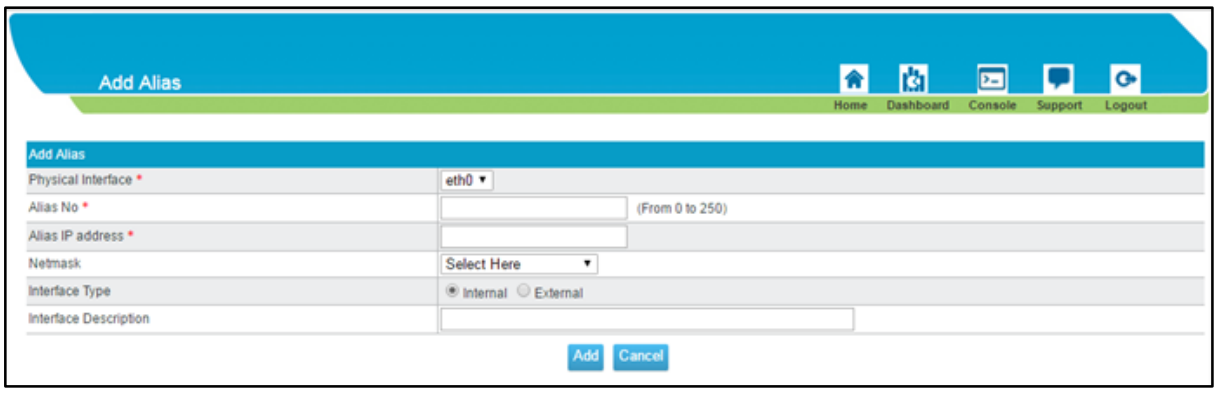

Figure: Add Alias

Interface Configuration	
Add Alias	
Physical interface	It's the interface that you have selected. Select the required interface from the drop-down box
Alias number	Can range from 0 to 250
Alias IP address	It's the alias IP that you wish to give. The Network IP can be configured from the GUI itself

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Net mask	Displays available list of net-masks
Interface	Can be of type Internal/External
Interface Description	**Interface Description** with field size of 50 characters is added where details can be provided useful to easily identify ports assigned.
Add	Select to add details

Gateway

Gateways are network points which act as point of entrance to another host. With the help of gateway, users in different network pass through the gateway and all requests to the users are served through it. There are default configurations in the system which can be used to setup the network. For configuring gateway, follow instructions given below:

Figure: Manage Gateway

Figure: Configure Gateway

Gateway Configuration	
Gateway Name	Specify name of gateway that best describes it
IP address	Define IP address of gateway
Weight	Define the gateway priority by entering relevant weight for it. Example: The value entered here as '1' will get highest priority and so on.
Save	After entering necessary details, select **'Save'**

DNS

DNS is abbreviation of Domain Name System. Basically, DNS is a system that stores complete information about different hostnames and domain names in a kind of distributed database on the

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network, like Internet. One can add multiple Domain Name Servers (DNS). 24online server processes DNS requests as per DNS Order. 24online server also works as a DNS server; you can also enable/disable DNS traffic redirection to 24online.

Define alternate DNS so that whenever the local DNS is down, query can be resolved through alternate DNS.

To configure DNS, select **System > Network > DNS** from GUI menu:

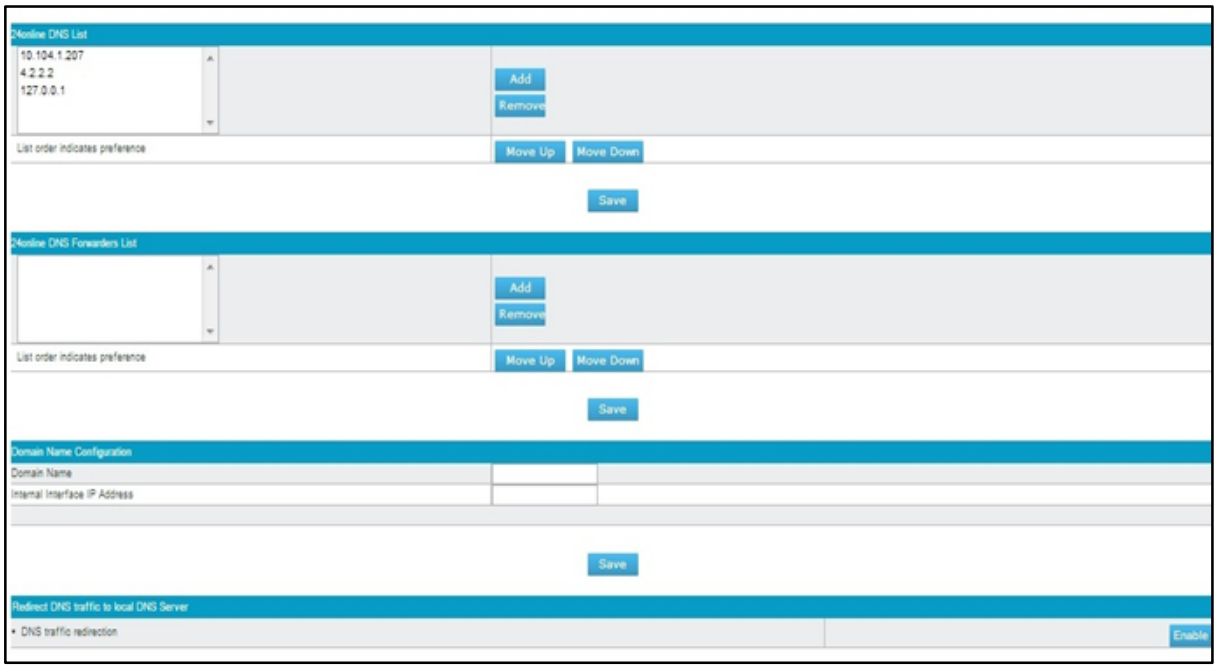

Figure: Add DNS

DNS Configuration	
Add DNS	
DNS list	Shows the names of DNS added in the system
DNS Forwarders List	Shows the names of DNS Forwarders configured
Add	Use the button to add IP address of the Domain Name Server (DNS) in the list ○ Enter the DNS IP in the pop-up box and click the 'OK' button ○ Multiple DNS server can be defined following the process ○ After adding the IP, select **'Save'** button
Remove	Use to remove any DNS IP from the list
Move Up	The DNS request is served in the same order as the names are arranged in the list. Use to push the IP address upwards
Move down	Use to push the IP address downwards

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Save	Click after all specifications have been completed
Domain Name	Enter the required domain name of your choice for accessing GUI and Portal pages
Internal Interface IP Address	Enter IP address provided to access GUI
Enable	From the same page, you can select the DNS where you want to redirect the traffic. After selecting the DNS from list, click the **'Enable'** button

Static Route

Router is a device that forwards data packets along networks. A router is connected to at least two networks, commonly through a LAN or WANs. Routers are located at gateways. Route is configured when communication is to set up in between different networks. The Host/Network ID can be configured; the net mask and the gateway can also be configured through which the traffic can be routed.

Route configuration enables to enter the Network ID/Host ID. The gateway can also be configured for the same.

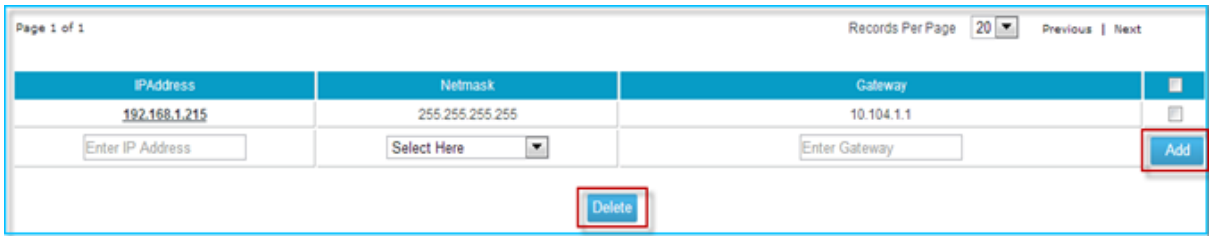

Figure: Static Route Configuration

Route Configuration	
Host ID/Network ID	Enables the administrator to enter the Host ID/Network ID of the network for which the gateway is to be configured
Net-mask	It's available where the net-mask of the network/Host ID can be entered
Gateway	Different networks follow different protocols. The Gateway is a network node. It acts as a point of interface for the different networks
Add	To add new network ID/Net mask/ Gateway
Delete	Select the checkbox against the Network Id that is to be removed

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Firewall

Firewall is a device where you can pre-configure a set of rules which permits/denies network transmissions. This protects your organization network from unauthorized access and guards the internal network against malicious access. However, firewall can also be used for limiting the number of internal access.

Main purpose of firewall is to deny unauthorized activity from accessing data in internal network. As per the defined rules, firewall determines whether the traffic should be allowed in or out of the internal network.

One can restrict access to certain IP address or domain names or block certain traffic by blocking the TCP/IP port used. Firewall can also inspect both inbound and outbound network traffic to determine, based on the configured rules, whether to allow the traffic or not.

With the help of different options given in the Firewall menu, you can create/manage different firewall rules and define Denial of Service (DoS) settings to protect from DoS attacks from any source. You can also define free sites (also known as walled garden) that you want to provide to users, from this menu. Let's understand each menu and functions in detail:

Create

Firewalls rules can be created and implemented in the system by which it prevents unauthorized Internet users from accessing private networks connected to the Internet, especially intranets. All messages entering or leaving the intranet pass through the firewall, which inspects each message and blocks those that do not meet the specified security criteria. With the help of create access options, you can define criteria required to match for accessing the network, and necessary action to be taken.

To create access, select **System > Firewall > Create** from GUI menu:

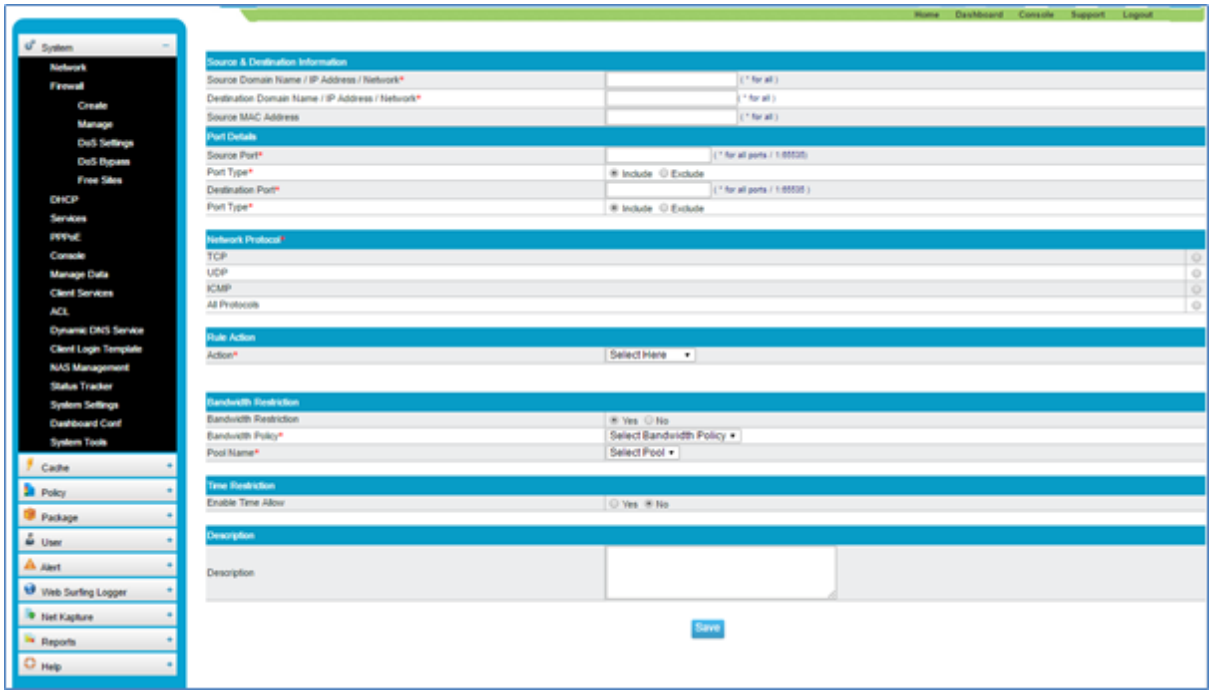

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Figure: Create Access

Create Access	
Source domain name/IP address/Network	It's the internal network address. Specify the source domain name, IP address or network for which the rule is to be defined. E.g. 10.104.1.10
Destination domain name/IP address/Network	It's the external address. Specify destination domain name or IP address or network for which the rule is to be defined. E.g. www.chat.com
Source MAC Address	Specify to define rule for any specific machine
Source Port	Enter the address. Range of ports can be specified using ':' E.g.20:25
Port type	Select **'Include'** to apply the rule on source port defined Select **'Exclude'** to avoid rule on source port defined Specify **'*'** for including all ports
Destination Port	Specify the destination port where rule should be applied
Port type	Select **'Include'** to apply the rule on source port defined Select **'Exclude'** to avoid rule on source port defined Specify **'*'** for including all ports
Network Protocol	**TCP** implements rule for entire TCP protocol requests **UDP** implements rule for entire UDP protocol requests **ICMP** implements rule for entire ICMP protocol requests **All Protocols** implements rule for entire requests for all protocols
Rule Action	**Accept** – Allows access, allows request to pass **Drop** – Denies access, drops the request **Proxy** – Allows access **Port Forwarding** – Allows access through forwarded port § Specify the IP address to which request is to be forwarded. (This option appears only if port forwarding action is selected) § Specify the port to which the request is to be forwarded. (This option appears only if port forwarding action is selected)
Bandwidth Restriction	Specify the bandwidth allocation for firewall policy. If selected **Yes** than bandwidth restriction will be applicable on firewall policy.
Bandwidth Policy	Select the policy in dropdown from available list.
Pool Name	Select the pool in dropdown from available list.
Time Allow	Select Yes or No for creating a Time-based firewall Rule.
Description	Specify the description, if required

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Save	Click after all specifications are completed. The system will save the provided information and create the rule in the system for configured source and destination address for defined protocol (s).

Manage (Firewall Rules)

24online offers Manage Firewall Rules page in GUI which assists to view all the created firewall rules in one page. Highly user-friendly page which eases your task to view and update any created firewall rule. From the manage access page, you can view complete details of each rule created in the system. With the help of different options you can arrange the rule order and with the help of 'Delete' option, you can remove unused or erroneous rules from the system.

Note: You cannot view the details of "Time Based" firewall rule from Manage Firewall Rules page once the Time-Limit is reached.

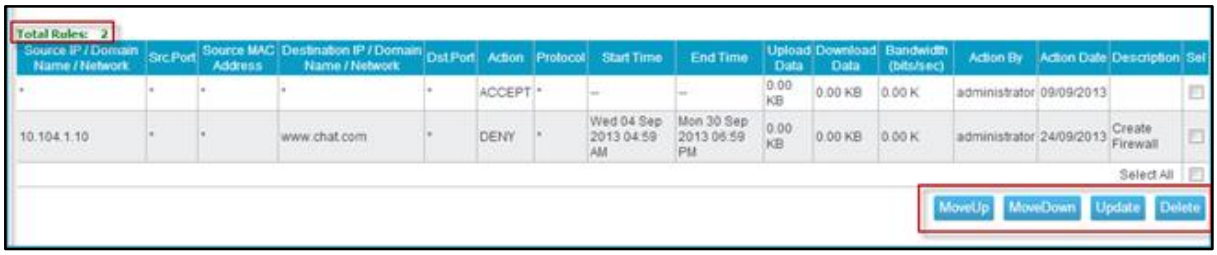

Figure: Manage Firewall Rules

Manage Firewall Rules	
Total Rules	Shows the number of rules created in the system
Source IP/Domain Name/ Network	Shows the details of the network defined. '*' means all the source IP, domain name or network on which the rule is defined
Source port	Shows the name of the source port define on which the rule is applied. **'*'** means all ports in the network
Destination IP/Domain Name/ Network	Show the name/IP of the destination source for which the rule has been defined
Destination Port	Shows the name of the destination port defined on which the rule is applied. '*' means all ports in the network.
Action column	Shows type of action to be taken against each destination source
Protocol column	Shows type of protocol defined against each source & destination network
Start Time	Displays start time in-case of Time based firewall rule

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End Time	Displays stop time in-case of Time based firewall rule
Upload Data	Shows amount of data uploaded by the defined traffic
Download Data	Shows amount of data downloaded by the defined traffic
Bandwidth	Shows amount of bandwidth used by the defined traffic
Description	Shows the description, if provided while creation of rule
Action By	Shows details who is going to take action
Action Date	Shows action date of firewall rule
Select	Use to remove or move up/down the rules

Changing Firewall Rule Order

Rules are listed according to their priority. When the rules are applied, they will be processed from the 'top to down' and the first suitable found is applied.

It's necessary to specify priority of rules in case of multiple rules. Otherwise, a general rule might allow a packet that you specifically have a rule written to deny later in the list. When a packet matches the rules, the packet is immediately dropped or forwarded without being tested by the rest of the rules in the list.

For Example:

Rule 1

- Source IP - 192.168.1.142
- Destination IP Address – www.yahoo.com
- Action – Deny

Rule 2

- Source IP – 192.168.1.142
- Destination IP Address – www.yahoo.com
- Action – Proxy

If the order is changed, i.e. Rule 2 precedes Rule 1 then Host 192.168.1.142 will be able to access www.yahoo.com even though the Deny rule is specified. Select the checkbox against the rule from the list and use '**Move-Up**' or '**Move-Down**' button. Click '**Move Up**' to move the selected rule one step up and click '**Move Down**' to move the selected rule one step down.

After necessary modifications, click 'Update' button to save the details.

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Denial of Service (DoS) Settings

DoS (Denial of Service) attacks typically target sites or services hosted on web servers such as banks, credit card payment gateways or even root name-servers. Varied forms of DoS attack are prevalent like ICMP flood, SYN flood, TCP flood, UDP flood, ARP flood etc.

24online DoS settings allow you to easily avoid malicious clients from creating network congestion. With the help of DoS settings, you can define the number of packets for different types of attacks that can occur in the network.

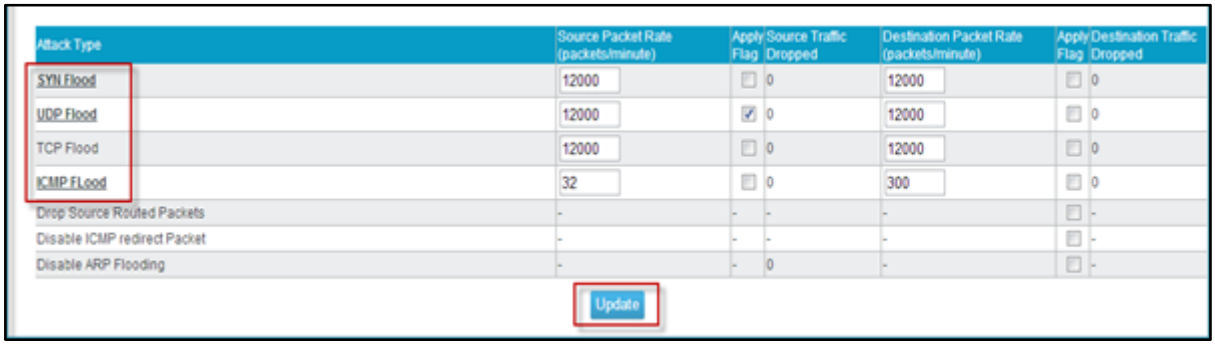

Figure: DoS Settings

DoS Settings	
Attack type	Displays different type of protocol attacks
Source Packet Rate (packets/min)	Specify details of SYN, UDP, TCP, ICMP flood rate per minute to be allowed
Apply Flag	Flag the type of attack for which the rule should be applied
Source Traffic Dropped	Specify the destination packets rate to be allowed per minute
Destination Packet Rate (packets/minute)	Specify details of destination rate per minute to be allowed
Apply Flag	Select flag to the attack type on which the rule should be applied
Destination Traffic dropped	Displays rate of destination packets dropped

To view the flooding details for any of the attack types (i.e. SYN, UDP, TCP, and ICMP) click on the name of attack type. The system will open a separate window in which you can see the details as shown below:

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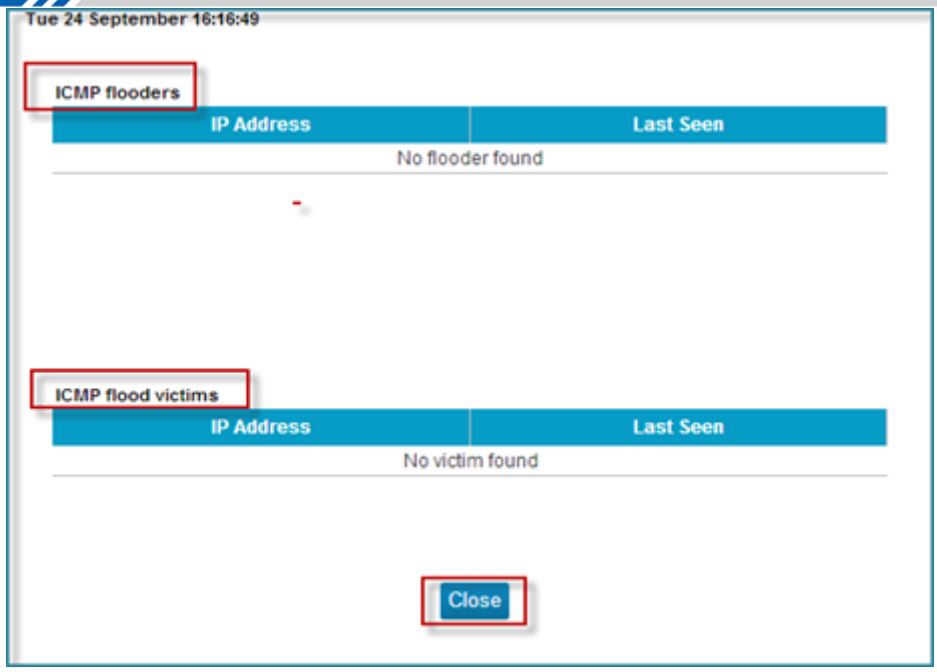

Figure: DoS Settings

On clicking ICMP, the window will display the ICMP flooders, and victims IP address and last seen details. Click on '**Close**' to close the window.

DoS Bypass

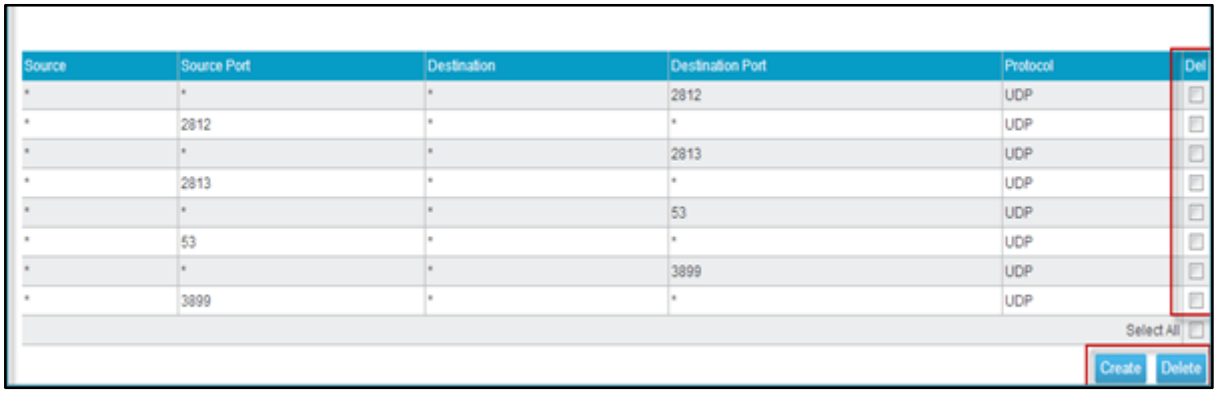

Figure: Manage DoS Bypass rule

Create the list of Source and destination port which has DoS bypass. Communications from the listed ports will not have DoS rules applicable. To create a new DoS Bypass rule, select Create.

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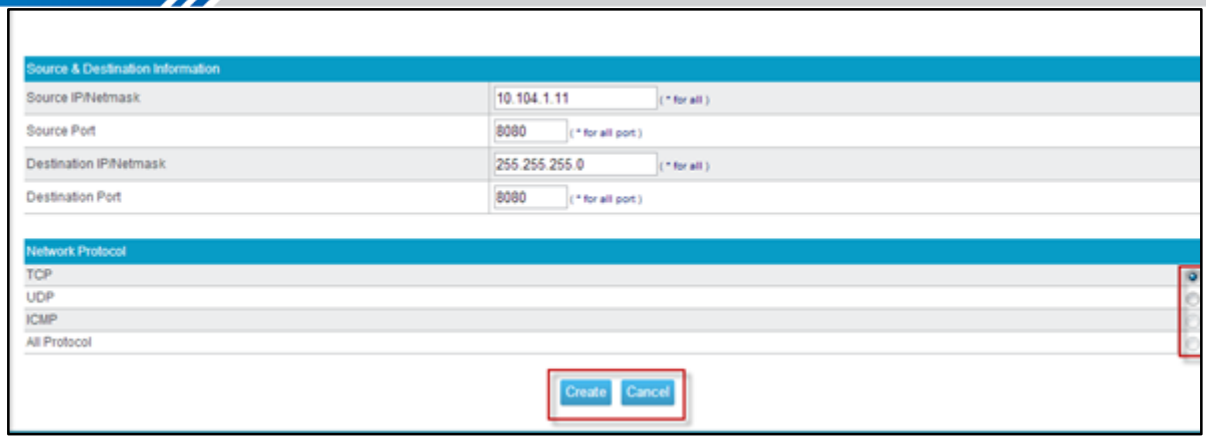

Figure: Manage DoS Bypass Rule

Manage DoS Bypass Rule	
Source IP/Net-mask	Specify the source IP/Net-mask
Source Port	Specify the Source Port
Destination IP/Net-mask	Specify the destination IP/ Net-mask
Destination Port	Specify the destination port
Network Protocol	Select the protocol for which you want to allow the traffic. To allow all traffic, select '**All Protocol**' button.

Free Sites

As a part of security measures 24online offers login or access only if user is authenticated. In-case you wish to allow user to surf any free-site without authentication process; you can define the domain name of the site and allow free surfing. With the help of this option, the user will be able to only view or surf the site, but not download or upload any information.

To add site information, select **System > Firewall > Free Sites** from GUI menu:

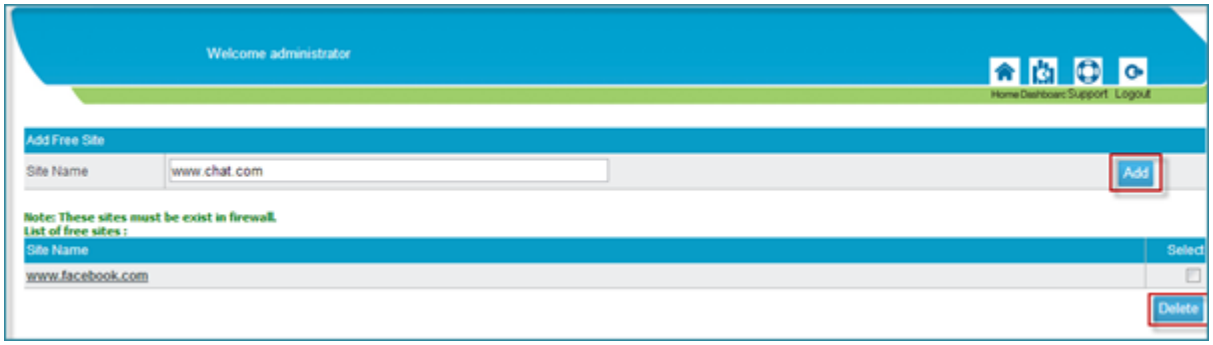

Figure: Manage Free Sites

Enter the domain name of the site in the text box and click the '**Add**' button.

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DHCP

DHCP stands for Dynamic Host Configuration Protocol which provides dynamic IP to hosts on request. With dynamic addressing, devices on the network can have different IP addresses every time it is connected to the network. This feature helps in maintaining track of IP addresses, rather than requiring an administrator for managing the task. For example, if a new computer is added to the network, then service provider can easily assign a unique IP address for it without any hassle, if DHCP is configured.

Note: For further details on configuring DHCP and interface on which it's configured in the systems, refer to Configure DHCP server in Config page.

Manage DHCP

To configure DHCP, select **System > DHCP > Manage DHCP** from GUI menu

Select the interface on which you wish to enable the DHCP from the list provided and click on '**Enable DHCP**' button. You can add multiple subnets in the same interface and define different set of IP range for different subnets and enable DHCP accordingly.

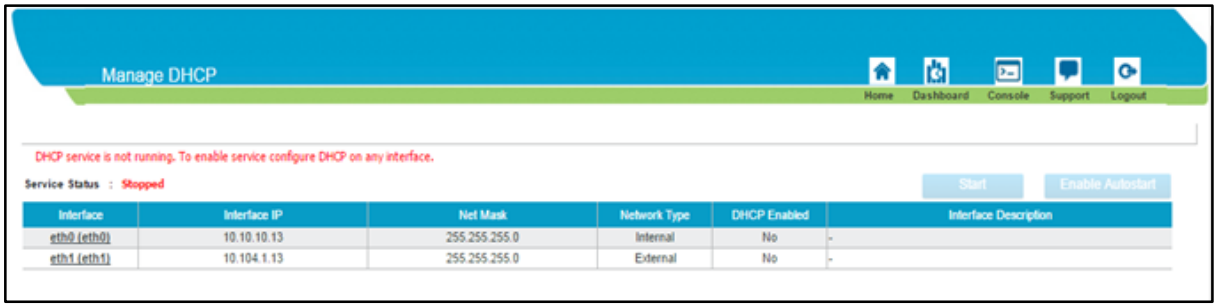

Figure: Manage DHCP

DHCP Interface Details

Click on any of the listed interface link to enter into its configuration. In configuration page, top most section provides information about interface details. Also there are various options to configure IP leasing.

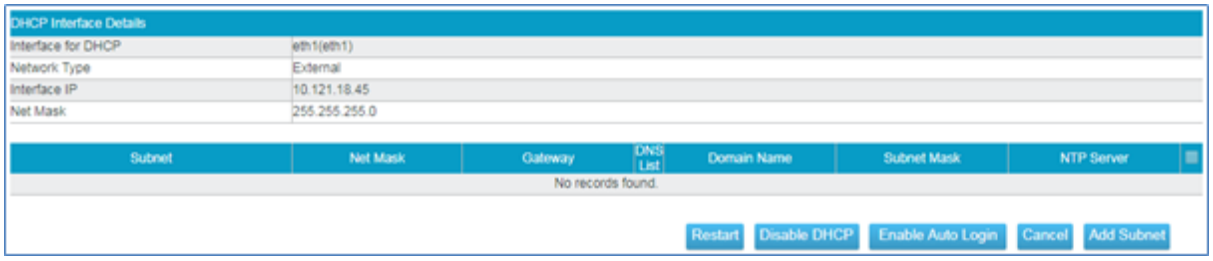

Figure: DHCP Interface Details

Following details about DHCP are given:

Value Type	Description with example

Interface for DHCP	Name of the Ethernet port. E.g. eth1(eth1)
Network Type	Is the port internal or external? E.g. External
Interface IP	The IP address of interface. E.g. 10.121.18.45
Net Mask	Netmask of interface. E.g. 255.255.255.0

A DHCP interface can have multiple subnets associated with it. The subnet is set of rules to include/exclude set of IP addresses and MAC addresses.

Every interface will have default subnet configured. To add new Subnet, click on 'Add Subnet' button at right bottom corner. A new page will open to enter the subnet details.

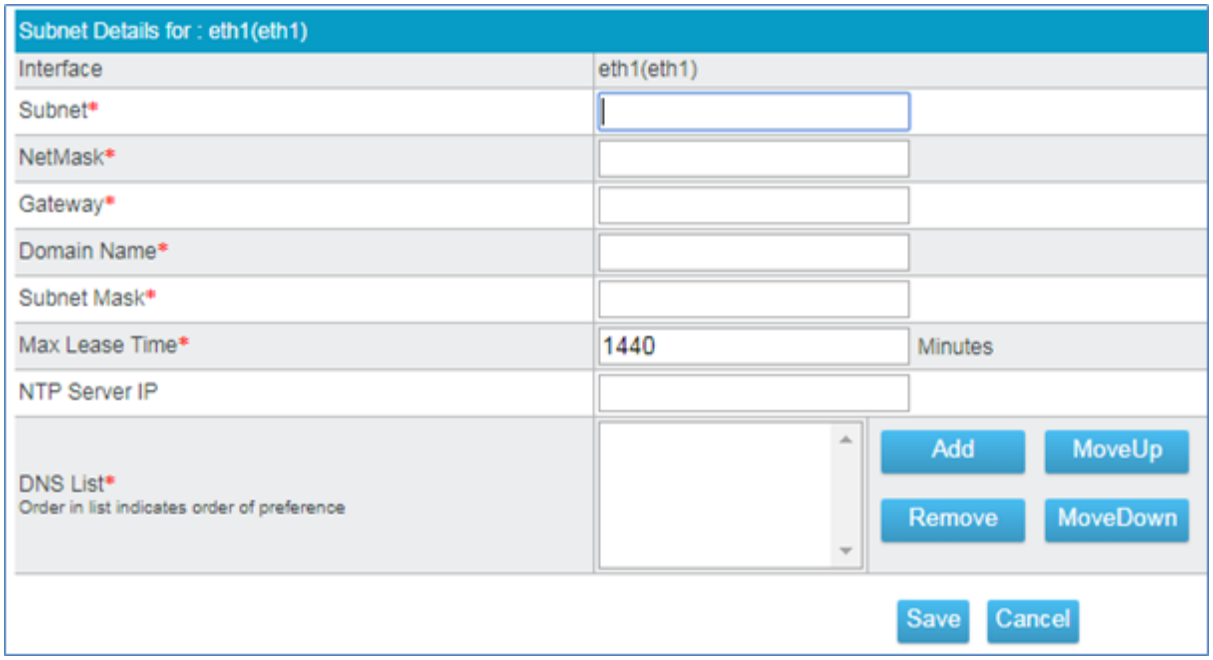

Figure: Add Subnet Details

Interface: Name of interface (non-editable field)

Subnet: Type the subnet IP address

Netmask: Type the NetMask IP address (Best value is 255.255.255.254)

Gateway: Type the gateway IP address

Domain Name: Type the name of domain

Subnet Mask: Type the subnet mask IP address (Best value is 255.255.255.254)

NTP Server IP: This is optional field. Provide value if NTP server is present.

DNS List: Add the DNS IP addresses to the subnet

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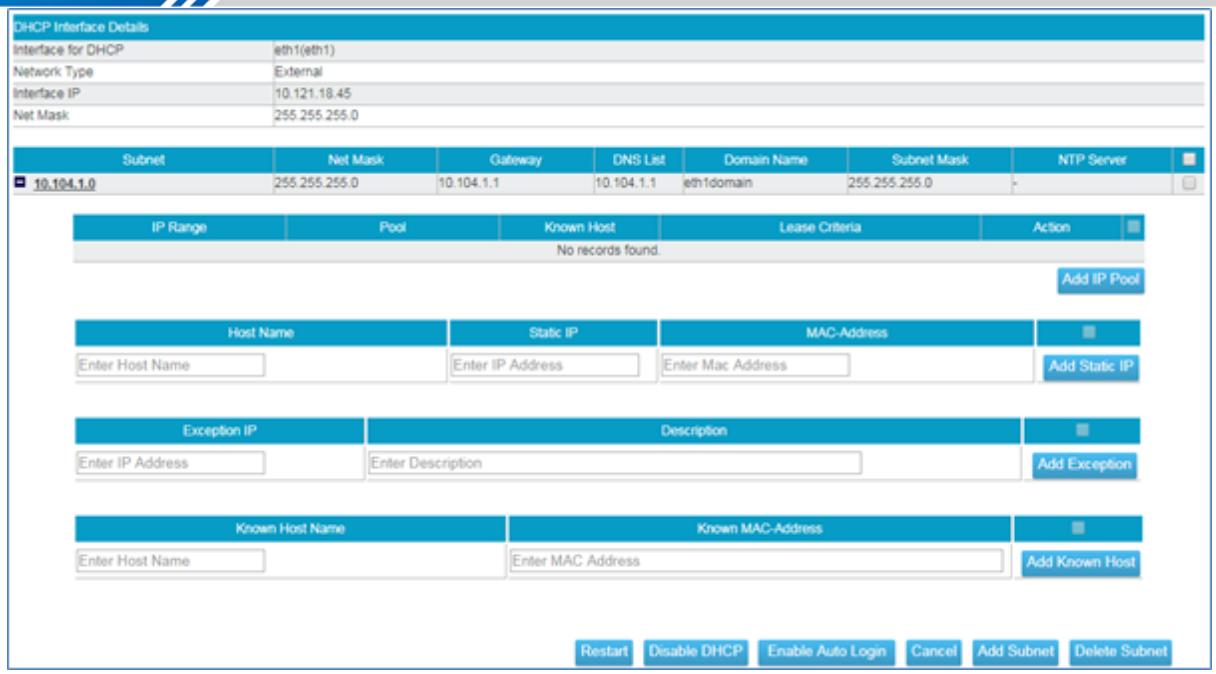

Figure: DHCP Interface Details

When a new Subnet is created, various options are provided to manage internet access for IP addresses.

Add IP Pool

Multiple IP pools can be added to DHCP. Also, only DHCP pools can be associated with subnet. The new IP pool can be added from 'Add IP Pool' button.

Add IP Pool will redirect you to a different screen.

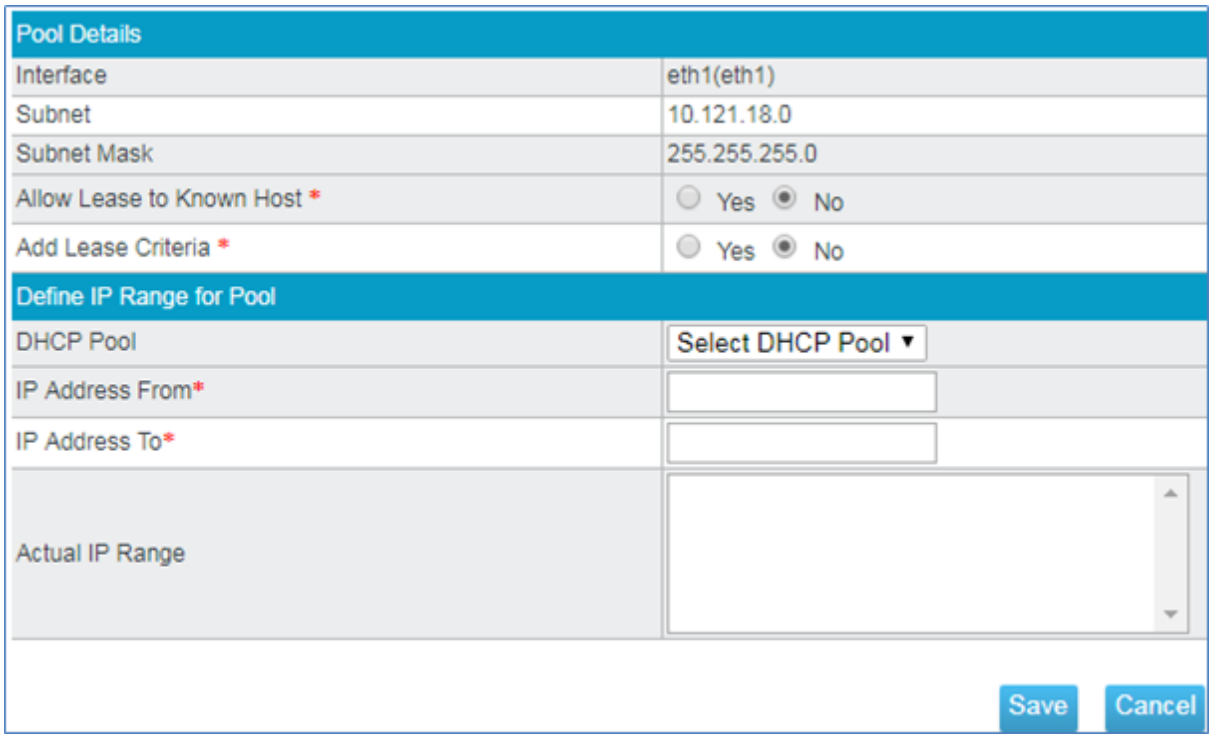

Figure: Configure DHCP Pool for Support

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- Allow Lease to Known Host: When selected 'Yes', the IP of known hosts falling under this pool will be leased with IP address. Else, IP leasing to them will be blocked.
- Add Lease Criteria: When selected 'Yes', the IP leasing will be subjected to either VCI or MAC prefix. To define criteria, system provides option to add lease criteria.

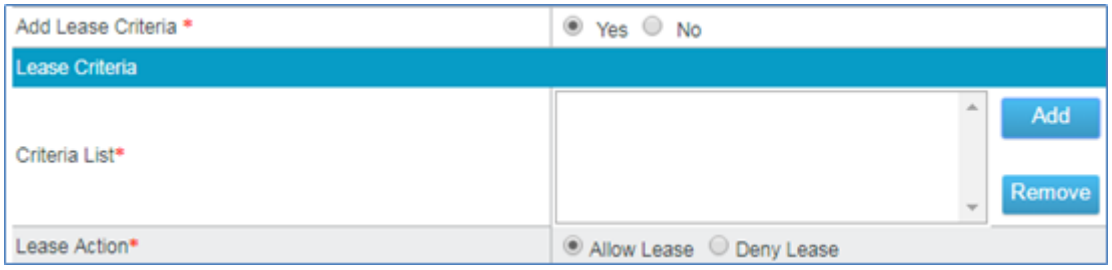

Figure: Lease Criteria

  - To add new criteria, click **Add**. A new popup window will open to define criteria.

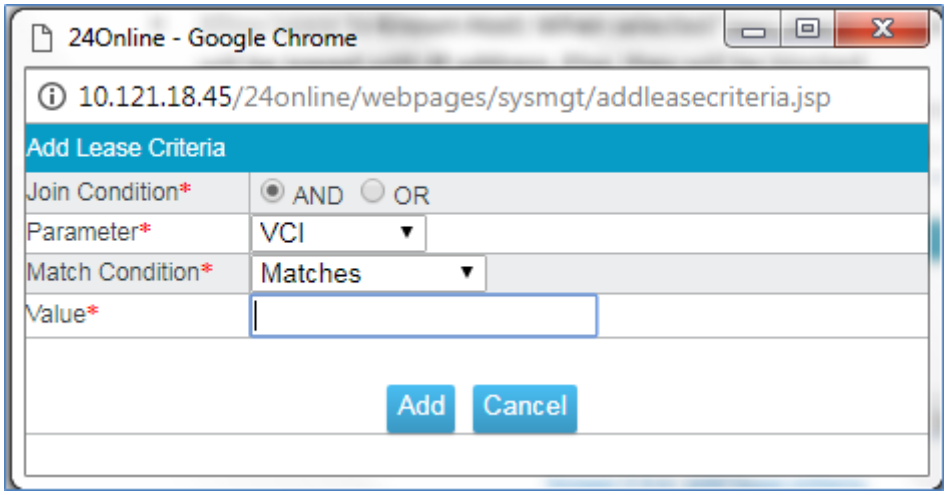

Figure: Add Lease Criteria

    - Join Condition: select the connector. AND connector will take action when all are true. OR connector will take action when any one is true.
    - Parameters: The parameter can be either: Vendor Class Identifier or MAC prefix.
    - Match Condition: The IP address 'Matches' or 'Do not Match' the criteria.
    - Value: The computation of criteria is performed on this value.
  - Multiple criteria can be added for evaluation.
  - Lease action: When the IP address match the criteria, the IP address will be leased or denied.
- DHCP Pool: Select the DHCP pool from the list. The list only shows the IP pools set as DHCP pool.
- IP Address From: It should fall under the Subnet IP range. Only last octet should be different.
- IP Address To: It should fall under the Subnet IP range. Only last octet should be different and greater than 'IP Address From' value.
- Actual IP Range: Shows the complete range of IP addresses between IP address from and IP address to.

Add Static IP

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It binds specific IP to the MAC address. Every time the same IP will be leased to this MAC and not leased to other MAC addresses.

Figure: Add Static IP

Add Exception

The IPv4 address in this section will not be leased to any person. Interface IP can also be added here so it doesn't get leased to any MAC. It can also be used to restrict the IP address for later use in static IP address.

Figure: Add Exception

Known Host

Known hosts are a set of MAC addresses. The addresses here can be used to allow or deny lease for given IP pool set. The addresses can be allowed lease for one IP pool and denied for other IP pool.

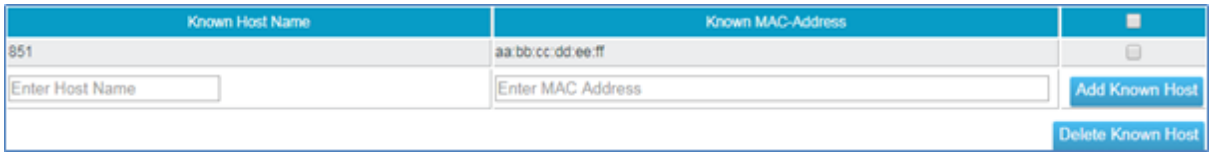

Figure: Known Hosts

IP Leasing Report

With the help of DHCP IP leasing report, you can generate the details required for understanding allocation of different IP addresses to different users in the network. The report offers detailed information about the IP address assigned to any user including Ethernet details to date & time of the usage. For complete understanding on how to generate the report and details, please follow the instructions given below:

To configure DHCP, select **System > DHCP > IP Leasing Report** from GUI menu:

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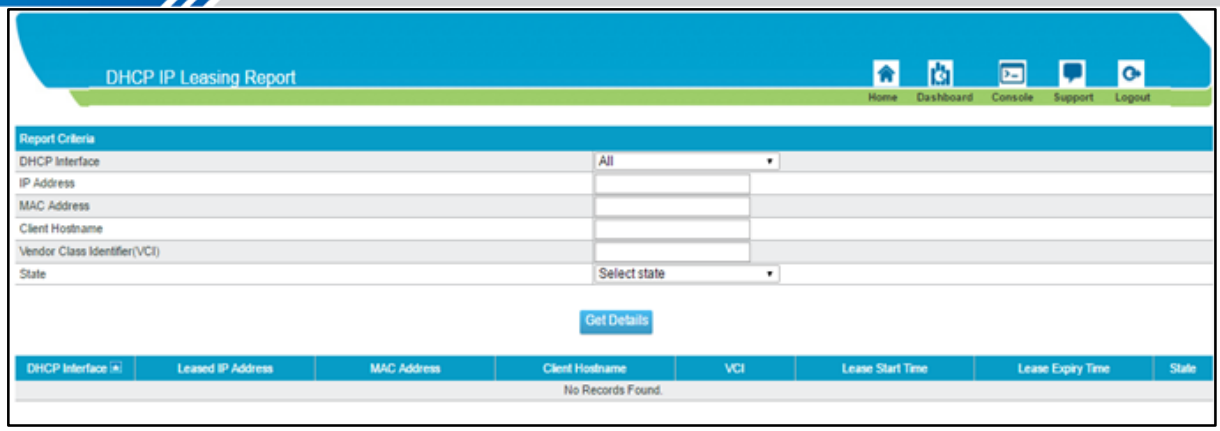

Figure: DHCP IP Leasing Report

DHCP-IP	
Leasing Report Search Criteria	
DHCP Interface	To search any specific Ethernet name on which the DHCP has been configured, click the drop-down box and select the Ethernet name from the list
IP address	Use to search by IP address
MAC address	Use to search by MAC address
Client Hostname	Use to search by client's hostname
VCI (Vendor Class Identifier)	Use to search by VCI
State	Search by state – by active state or by all state
Get Details	Click after all specifications are completed
Report Search Results	
DHCP Interface	Shows list of names of the Ethernet on which the DHCP has been configured
MAC address	Shows list of MAC address to which the IP address has been assigned
Leased IP address	Shows list of IP addresses leased by DHCP server
Client Hostname	Shows list of client's hostname that are been assigned
VCI	Shows list of VCI against each IP address leased from server
Lease Start Time	Shows starting time and date when the IP was leased

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Lease Expiry Time	Shows stop time and date when leased IP was expired
State	Shows information of the state

Services

There are different types of services running in the system which helps in performing different functions like DHCP, DNS, 24online Server, and Dynamic DNS Service. Each of this service has its own function and behaviour in the system. It is mandatory to keep these servers active to perform their functions. With the help of options given in the 'Services' page, you can start, restart or disable various configured servers, as per the requirement. To understand how to manage the servers, please follow the instructions given below:

To manage services, select **System > Services** from GUI menu:

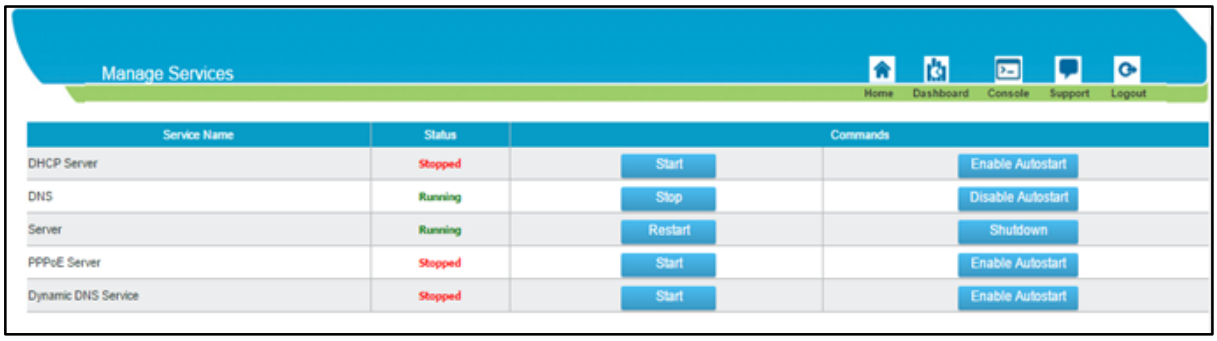

Figure: Manage Services

Manage Services	
Service name	Shows name of different servers running in the 24online solution
Status	**Running** – If the server is in active mode **Stopped** – If the server is in inactive mode
Commands	Use '**Start**' button to start any stopped server Use '**Stop**' button to stop any active server Use '**Enable Auto-Start**' button, by which the system will automatically start the server with the start-up of 24online server Use '**Disable Auto-Start**' button to eliminate the auto-start action Use '**Restart**' button to restart all the servers with '**Enable Restart**' status Use '**Shutdown**' button to shutdown the 24online server and system. Once the 24online server is shutdown using this option then you need to start the server manually using the '**Power On**' given in the appliance

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Console

Reset Console Password

With the help of options on this page, you can change the text based console login password, if required. There are three simple steps using which the passwords can be changed. Follow the instructions given below for complete understanding on how to change the password:

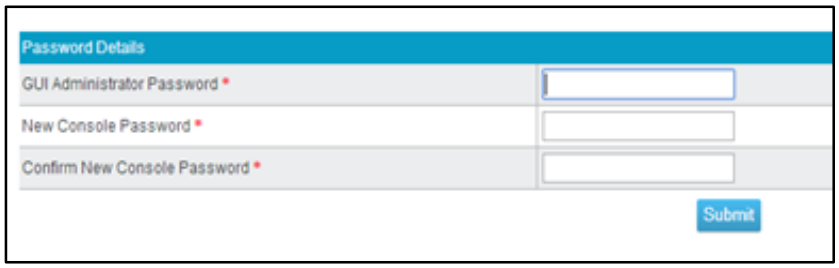

Figure: Console Password

Console Password	
GUI administrator password	Enter GUI administrator login password. This is to confirm that the password change action is taken by the administrator rights entity only.
New Console Password	Enter new password to be assigned to the text based console in '**New Console Password**'
Confirm New Console Password	Specify same password as mentioned in '**New Console Password**' box for confirmation

Manage Data

To err is human! As the famous proverb goes…but to be organized is always divine! 24online offers Manage Data option in GUI which helps you to have regular backup, so that in-case of disk failure, file corruption or accidental deletion, the necessary details can be recovered from the backup. There are many ways to take back-ups and just as many types of media to use as well.

24online provides facility of taking regular and reliable data backup which maintains the log of each and every session and action of the system. Backup consists of all the policies, logs, and all other user related information. But taking regular backup of the data manually also becomes hectic and if missed can lose important data from the system. For such reason, 24online allows you to define automatic backup schedule by which the system itself takes the back-up information and stores it in the required disk (configurable). There are several other options using which you can manage the backup data in the system efficiently. Let's understand each menu and option in-detail, in the below section:

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Backup

With the help of this backup option you can take immediate back-up from the system manually, as and when required.

To take backup from system, select **System > Manage Data > Backup** from GUI menu:

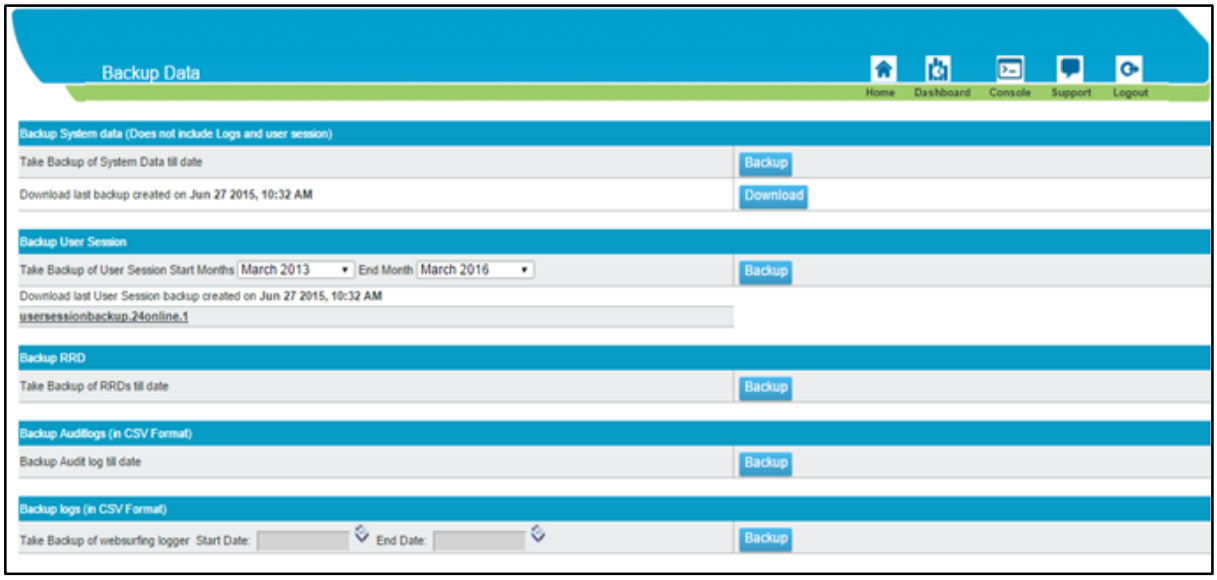

Figure: Backup Data

Backup Data	
Backup System Data	It includes logs of pools, policies, packages etc. created in the system.
Backup User Session	It Includes logs of sessions created by users of the system.
Backup RRD	It includes logs of different types of graphs files in the system. (Graph files can include bandwidth graph, data transfer graph etc files)
Backup Audit logs	It includes complete audit logs till the date selected. [Shows audit logs only if "Audit logs" module is enabled].
Backup logs	It includes backup of websurfing logger from the starting date selected till the end date selected.
Backup	Click **"Backup"** button for back up of System Data/User Session/RRD/audit logs/logs. Select desired month from the calendar for user session backup.

24online maintains five types of logs:

- **Web Surfing Log** offers detailed information of all the websites visited by all users in the system.
- **Audit Log** offers details of all the actions performed by the 24online administrator.

Note:

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- **Web surfing log details can be generated only if the Web Surfing Log module is enabled**
- **Audit Log details can be generated only if the Audit Log module is enabled**
- **These are add-on modules, kindly purchase them from 24online. Refer to Web surfing logger and Audit Log report document for further details**

Backup Schedule

With the help of this option, you can set the backup schedule required to automatically take backup from the system. There are different options given in the page using which you can define the time period of backup and types of logs to be taken.

Figure: Set Backup Schedule

Set Backup schedule	
Backup frequency	Define interval of time when the system should regularly take the backup. ○ **Daily** takes daily backup ○ **Weekly** takes weekly backup ○ **Monthly** takes monthly backup ○ **Never,** if you do not want to define any schedule for data backup
Notify By	Define option to store the files. Backup files will be in CSV format, which can be sent to ftp server (configurable) or directly to defined email ID. **FTP:** Define the FTP server IP address using which 24online will directly communicate with the server. Specify the username and password using which 24online will login the server to store the files **Email ID**: You need to define the email ID to which the back files have to be sent
User Session Back up	Define interval of time when the system should regularly take the backup. ○ **Daily** takes daily backup ○ **Weekly** takes weekly backup

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	○ **Monthly** takes monthly backup ○ **Never,** if you do not want to define any schedule for data backup
Log Type	Backup of log files will be taken in CSV format. Available logs for backup: ○ **Web Surfing Log** ○ **Audit Log** (Only if Audit Log module is registered)
Incremental Backup of log files	Select '**Daily**' option to take daily backup Select '**Weekly**' option to take weekly backup Select '**Never**' if you do not want to define any schedule for Log files
Backup of RRD files	Select '**Daily**' option to take daily backup Select '**Weekly**' option to take weekly backup Select '**Monthly**' option to take monthly backup Select '**Never**' if you do not want to define any schedule for RRD files

Restore

Apart from taking backup from the system, 24online also offers the facility by which you can restore backup in the system. According to the data restored in the system, all user information will be updated and modified accordingly. To understand how to restore backup in the system, please follow the instructions given below:

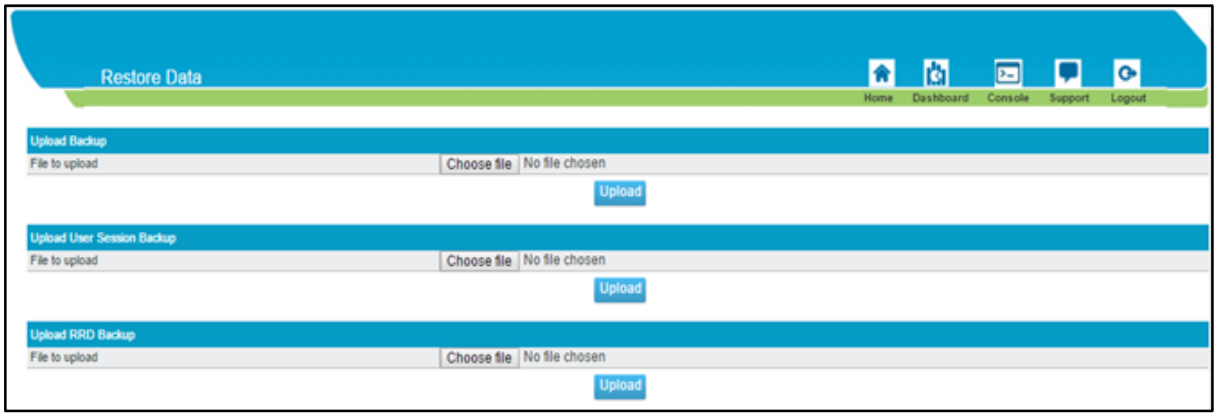

Figure: Restore Backup

With the help of restore backup options, you can upload backup data, which includes user details like policies, packages, usage etc. And you can also upload the RRD files required for understanding the user's usage graphs. Similarly, upload audit log data as well.

To upload files you need to click the '**Browse**' button and select the appropriate path where you have saved the file in your system. Click the necessary file and use the '**Upload**' button.

Note:* "Upload Audit log Backup" is available only if Audit Log module is enabled.

Auto Purge

Periodical removal of data from the system is known as purging of data. When there are hundreds and thousands of user details and logs in the system, purging unused and old data from system is

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necessary. So, 24online provides auto purge and manual purge facility for deleting logs records. With the help of auto purge, you need not periodically remember to remove logs and users from the system, 24online allows you to define a schedule for purging logs and according to the defined schedule it will remove all the unnecessary data (logs) from the system. To understand how to configure auto purge options follow the instructions given below:

Figure: Configure Auto Purge

Set Backup Schedule	
Purge Web Surfing Logs every	Define number of days after which web surfing log should be purged automatically

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Purge Archive Users	Define number of days after which archive user logs should be purged automatically
Purge Users Idle From	Define number of days after which logs of those users who have not logged from the preconfigured days should be purged automatically. Here idle users can be specifically selected from 'Deactive Expired Users' or from 'All User' options available.
Purge Notification	
Enable Alert Popup	Pop-up notification will be displayed before purging the logs. If you do not want the pop-up notification then leave it unchecked
Auto Purge Invoice	
Keep Invoice of Deleted Users for	Define number of days after which invoice details of deleted users should be purged automatically.
Keep Invoice of Active Users for	Define number of days after which invoice details of active users should be purged automatically.
Keep Invoice of Deactive Users for	Define number of days after which invoice details of Deactive users should be purged automatically.
Auto Purge Audit Log	
Keep Audit Log for	Define number of days after which audit logs should be purged automatically. [Only if Audit Log module is enabled, this option will be available].
Auto Purge SMS Log	
Keep SMS Log for	Define number of days after which SMS logs should be purged automatically.
Auto Purge Renewal History Log	
Keep Renewal History Log for	Define number of months after which renewal history logs should be purged automatically.
Auto Purge Archive Users	
Keep Archive Users for	Define number of days after which archive users should be automatically purged.
Auto Purge Expired Pins	

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Keep Expired Pins for	Define number of days after which expired pins should be purged automatically.
Auto Purge Pin History	
Keep Pin History for	Define number of days after which history of pins should be purged automatically.
Auto Purge Auth Messages	
Keep Auth Messages for	Define number of days after which auth messages should be automatically purged from the system.
Auto Purge for Acquisited Users	
Keep Acquisited Users for	Define number of days after which acquisited users should be automatically purged.
Auto purge for Registration and Renewal device count history	
Keep device count history for	Define number of days after which the device count history should be automatically purged.

Manual Purge

Manual purge option is provided so that you need not wait for the schedule to run and purge details, you can purge as and when required even without scheduling. With the help of this option, you have the facility to select the type of logs that you wish to purge. You can select the date, and the system will purge all logs and users **created before the selected date**. To understand how to use the manual purge option, follow the instructions given below:

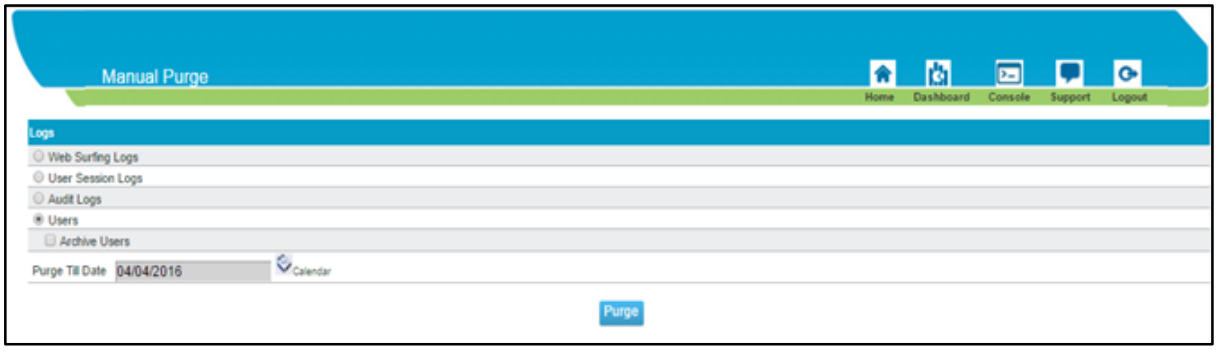

Figure: Manual Purge

Manual Purge- Logs	
Web Surfing Logs	Will purge all Web-Surfing details of the users created before the selected date

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User session logs	Will purge all user session details of the users created before the selected date
Audit Logs	Will purge all administrative logs of actions performed using admin login, before the selected date. (Only if the Audit Log module is registered)
Users	Will purge users created before the selected date. Option to delete Archive users can also be availed from here
Pin Action History	On selection pin action history will be purged before the selected date.
Purge Till Date	Select date from the calendar for manually purging records.
Purge	Select after all specifications are completed

Migrate User

With the help of migrate users, you can easily take backup of users from any server and migrate it into 24online server. Please follow the instructions given below to migrate users:

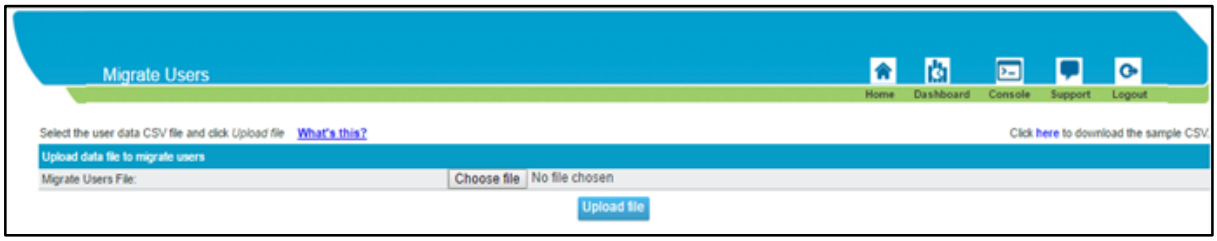

Figure: Migrate Users

Select the '**Choose File**' button and browse/select the file where you have saved in your system, and click the '**Upload File**' button.

Please note following points as given below while creating the CSV file(s) for migrating users:

- Maximum 2000 users are suggested to migrate in each CSV file
- The first row of the CSV file should contain main titles of the data like – username, password, name, packagename, usedminutes(in minute)/remainingminutes(in minute),uploaddata(in bytes),downloaddata(in bytes), macaddress(in xx:xx:xx:xx:xx:xx format), bindtomac(Y or N), expiredate(DD/MM/YYYY hh:mm:ss)

  Format of header row:

  - Compulsory first field: username
  - Optional fields in any order: password, name, packagename, expiredate, usedminutes/remainingminutes, uploaddata, downloaddata ,bindtomac, macaddress, ipaddress, birthdate, email, address1, address2, city, state, country, zip, phone, state, status
- Titles should be in the given format, without any space or character between the words. Titles are case sensitive and should be mentioned exactly as given above

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- ‘username’ must be the first column of the file. While specifying the details in ‘name’ field, ensure that you specify comma after each user name and leave no space between the comma and username. Remaining fields like password, packagename etc. are optional and can be added in any order in different columns after ‘username’
- Rest of the rows is values corresponding to the header fields. If values mentioned in the rows do not match to the corresponding header then system will display error
- Number of fields in each row should be same as in the header row
- Error will be displayed if data is not provided for any field specified in the header
- If password field is not included in the header then it will set same as username
- If name field is not included in the header then it will set same as username
- All the name listed in "name" field should be unique, and if any of two name matches, then those users should be considered as all users in single customer name
- If packagename is not included in the header, administrator will be able to configure package at the time of migration.
- Usage values of fields usedminutes/remainingminutes,upload,download must not be negative
- If usage values will be greater than package allotted values then it will be reset to package allotted values e.g. If usedminutes is 610 and package allottedminutes is 600 then usedminutes will be reset to 600
- If ipaddress is not in the pool, then IPRestriction for user is 'Allowed From All Node'
- If expiredate is entered in form of DD/MM/YYYY, then it will automatically take as DD/MM/YYYY 00:00:00.
- Blank rows will be ignored
- Status field contains value for status of user, it is active or Y, deactive or N ,acquisited or A and archive or D.

Note: Please ensure that you select the check-box against the username for all the users you want to migrate and register.

Authentication Logs

Administrator of 24online system can view User authentication logs from the following menu. The log generated can be viewed ‘Live’ or can also be downloaded in CSV format. User information like user IP, NAS IP, date and time of login, request-response at the time of login can be viewed in the User authentication logs.

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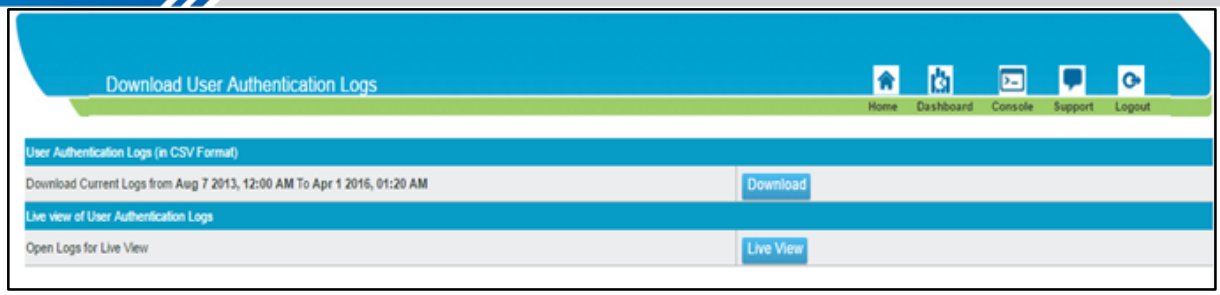

Figure: Download user authentication logs

Client Services

Client Services is facility using which you can configure and set various messages that will display to end user. With the help of this facility you can send different welcome messages, advertising messages or any system information etc. Client Services can be used to:

Set various messages which will be sent to users on clicking particular option on website/login page etc

- Specify URL to open every time when a user logs on
- Upload the images or company logo to be displayed in My Account page
- Specify no. of records to be displayed per page
- Set grace period for renewal
- Configure mailing schedule of proactive periods

Parameters

Parameters menu option lists the client customization preference page. This page includes the site to be opened after client logs on, configure usage carry forward policy for renewal, number of records to display per page, enable/disable live alerts for HTTP-Client Users, no. of days to reset password, configure user comments, configure user comments, configure global expire date, configure post-login page etc. The table given below lists all the options available in the page. For easier understanding the screen is divided into four parts (a), (b), (c) and (d)

Select **System > Client Services > Parameters**

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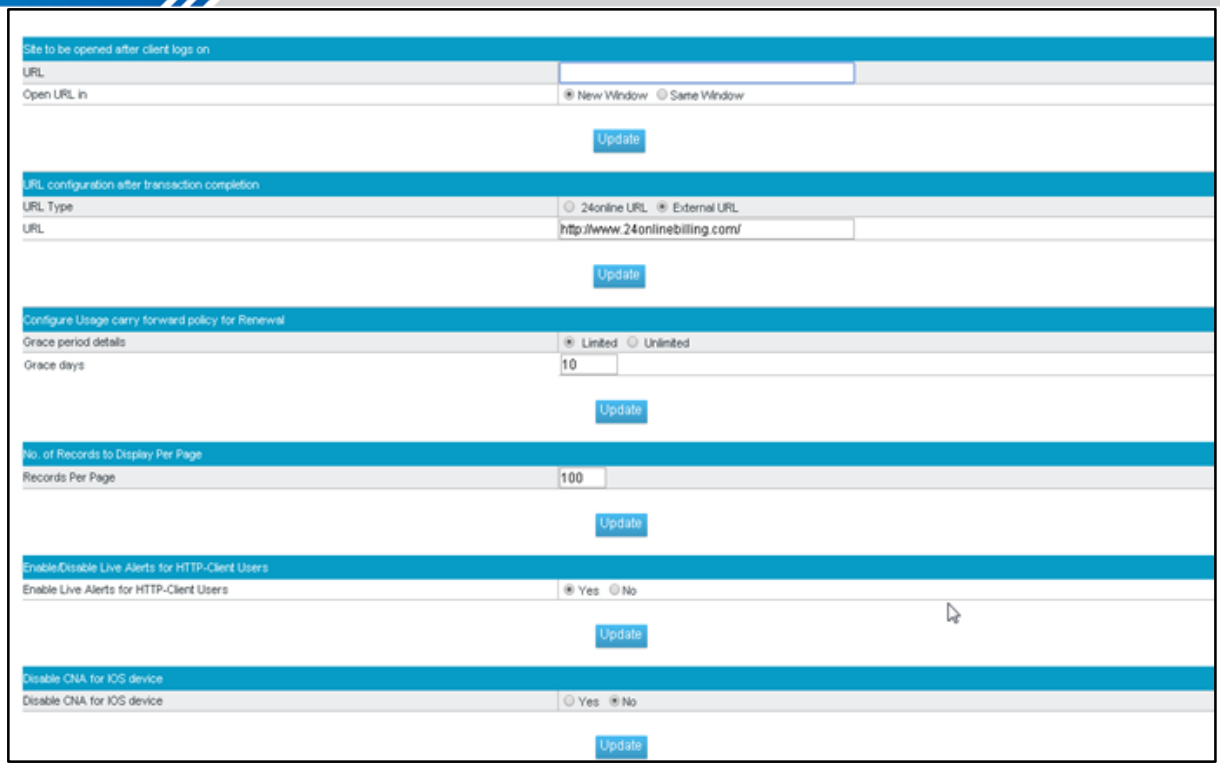

Figure:(a) Customize Client Services

Customize Client Preferences-Screen (a)	
Site to be opened after client logs on	Specify the URL that will appear whenever client logs in. In-case, you do not want any URL or page to open while client login, then please leave the field empty.
Open URL in	Select from the option available to open specified URL either in New Window or Same Window. After necessary specifications select **Update.**
URL Configuration after transaction completion	Select from the option available to open 24online URL or some external URL after transaction completion. In case of 'External URL' option selection, specify URL in 'URL' field.
Configure Usage carry forward policy for renewal	**Grace Period Details:** Additional time provided after the subscription is expired for renewal. If user renews the account within the grace period then user's remaining usage shall be carry forwarded. Grace days can be implemented in two ways: **Limited** – Remaining usage is carried forward only if user renews the account within the provided grace period/days. **Unlimited** – Remaining usage is carried forward whenever package is renewed. **Grace Days**- This option appears only if 'Limited Grace Period' option is selected. Specify the number of days that allowed for renewal of the subscription/account. Select the Update button to save and carry forward the policy details. After necessary specifications select **Update.**

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No. of records to display per page	Enter the number of records that is to be displayed in a single page. After necessary specifications select **Update.**
Enable/Disable Live alerts for HTTP client users	Enable/Disable Live alerts for HTTP users. Select **'Yes/No'** for live alert service. After necessary specifications select **Update.**
Disable CNA for iOS device	Enable/Disable CNA for iOS devices from here.
Byte Reducer	Enable/Disable byte reducer by **'Yes/No'.** After necessary specifications select **Update.** This option is visible on the client login page, which shows the remaining amount of data and surfing time available with the user.

The (b) of the image is as shown below. The screen elements are also explained below.

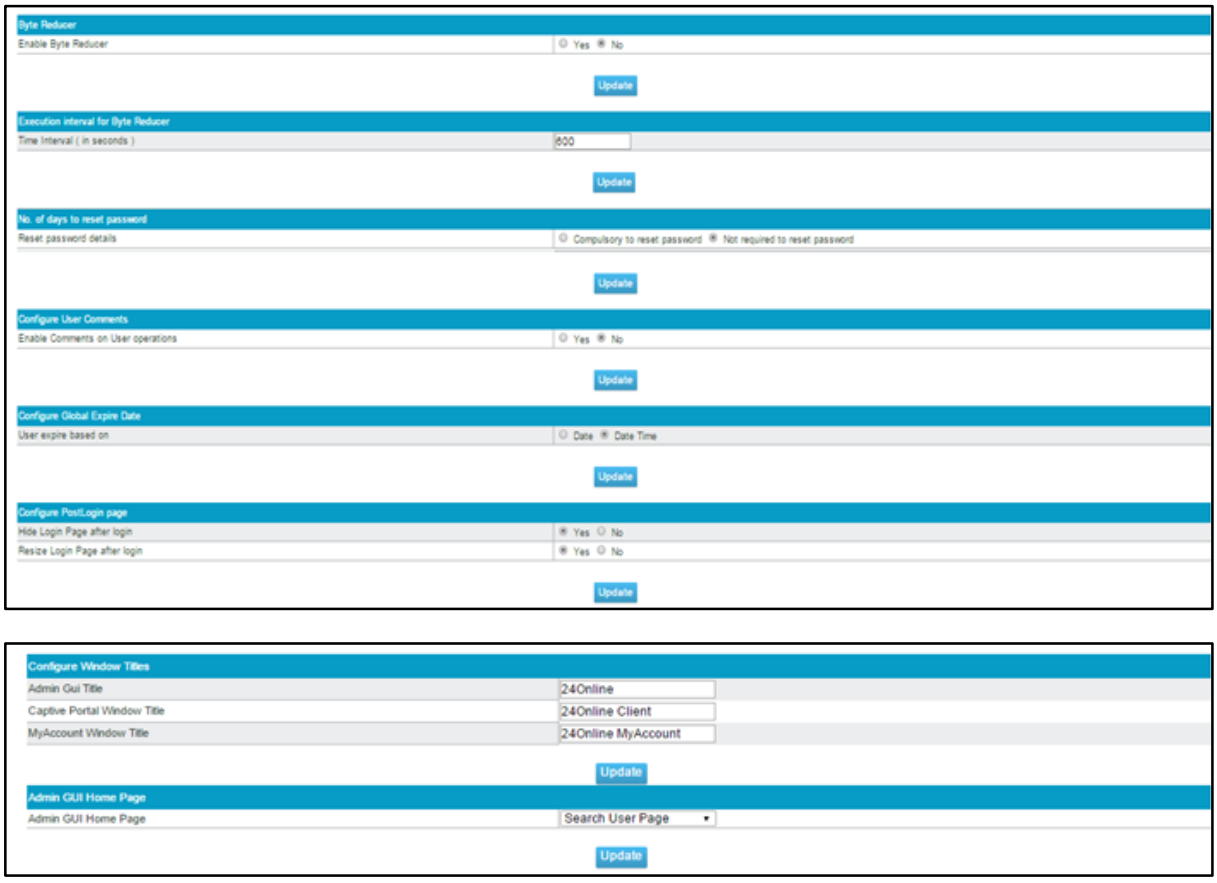

Figure: (b) Customize Client Preferences

Customize Client Preferences-Screen (b)	
Execution interval for byte reducer	Enter the execution interval time. Time entered should be greater than equal to 600 seconds i.e. 10 minutes. Byte reducer will update the time remaining in the post-login page after the specified time-limit is reached.

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No. of days to reset password	**Compulsory to reset password** – Selecting this option will prompt the user to regularly change the password after specified time period. **Not required to reset password** – Select the option if you don't want to reset password as per the mentioned time period. User can reset password as and when required. The User comments can be enabled by selecting the radio button '**Yes/No**'. **No. of days**-(This option appears only if 'Compulsory to reset password' option is selected) Specify the number of days allowed for password reset of the user account. After necessary specifications select **Update.**
Configure User Comments	Allows enable/disable the comments on the user operations. Select **'Yes/No'** to enable user comments. After necessary specifications select **Update.**
Configure Global expire date	Select **'Date-Time/Date'** to configure global expiry. After necessary specifications select **Update.**
Configure Post Login page	Configure post-login page as **'Hidden/Re-sized'**. This page is visible after the login is done. After necessary specifications select **Update.**
Configure Window Titles	Configure admin gui title, captive portal window title and MyAccount window title from here.
Admin GUI Home Page	The home page for admin GUI can be configured from here.

The (c) of the image is as shown below. The screen elements are also explained below.

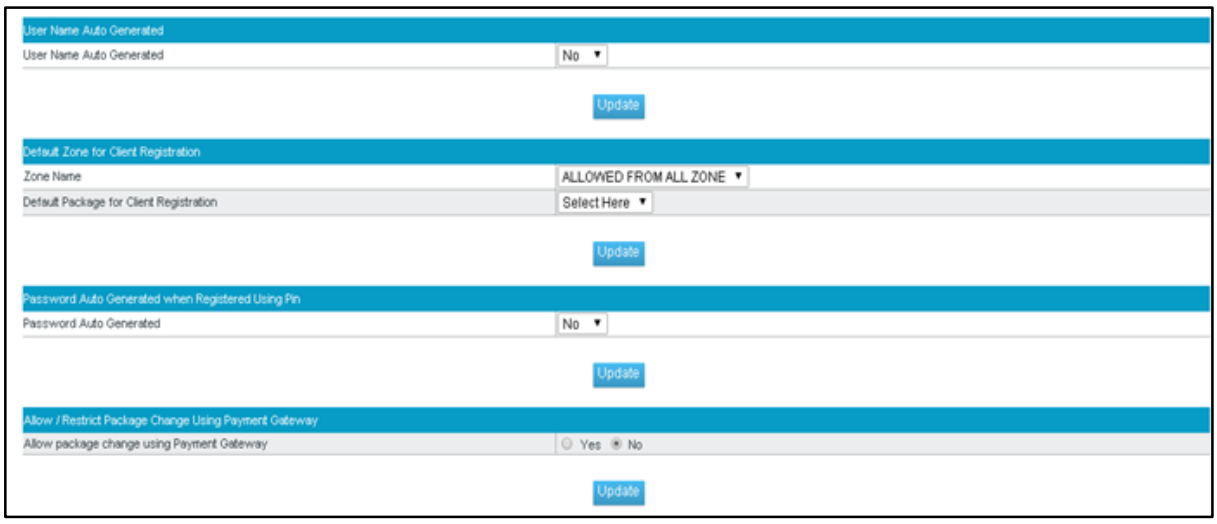

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Figure: (c) Customize Client Preferences

Customize Client Preferences-Screen (c)	
Admin GUI Homepage	Configure admin homepage as **'Live User's page/Search User's page/Manage Package'**. After necessary specifications select **Update.**
Username Auto-generated	Username auto generation option can be selected from here.
Allow/Restrict Package Change using Payment Gateway	Configure whether to allow or restrict user to change package using payment gateway. After necessary configuration, select **Update**.
Hide Pin Password	From this configuration option, the pin password can be hidden from users. On selecting 'Yes' only admin will be able to view pin passwords.
Pin-password configuration	Whenever user is **registered/ renewed/ top-up**, captive portal page is displayed which asks for the information required. **Pin and Password**- means that User will be shown the captive portal where he has to enter the Pin and the password at Top-Up time/Registration/ Renewal. **Password** - then only the password is required. After necessary specifications select **Update**

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Top-up account configuration	**Part Payment** - User account can be credited balance with top-up recharge. Top-up amount will be deducted from the available user balance. Remaining amount will be available in the user account. In part payment only a part of the user's available amount will be debited. **Full Payment** - User can be credited balance with the amount present his account. There will be no remaining amount available here as the account will be recharged with the whole amount in the user account. After necessary specifications select **Update.**
Only password authentication configuration	In-case you wish user to enter only password in captive portal. Select '**Yes/No**'

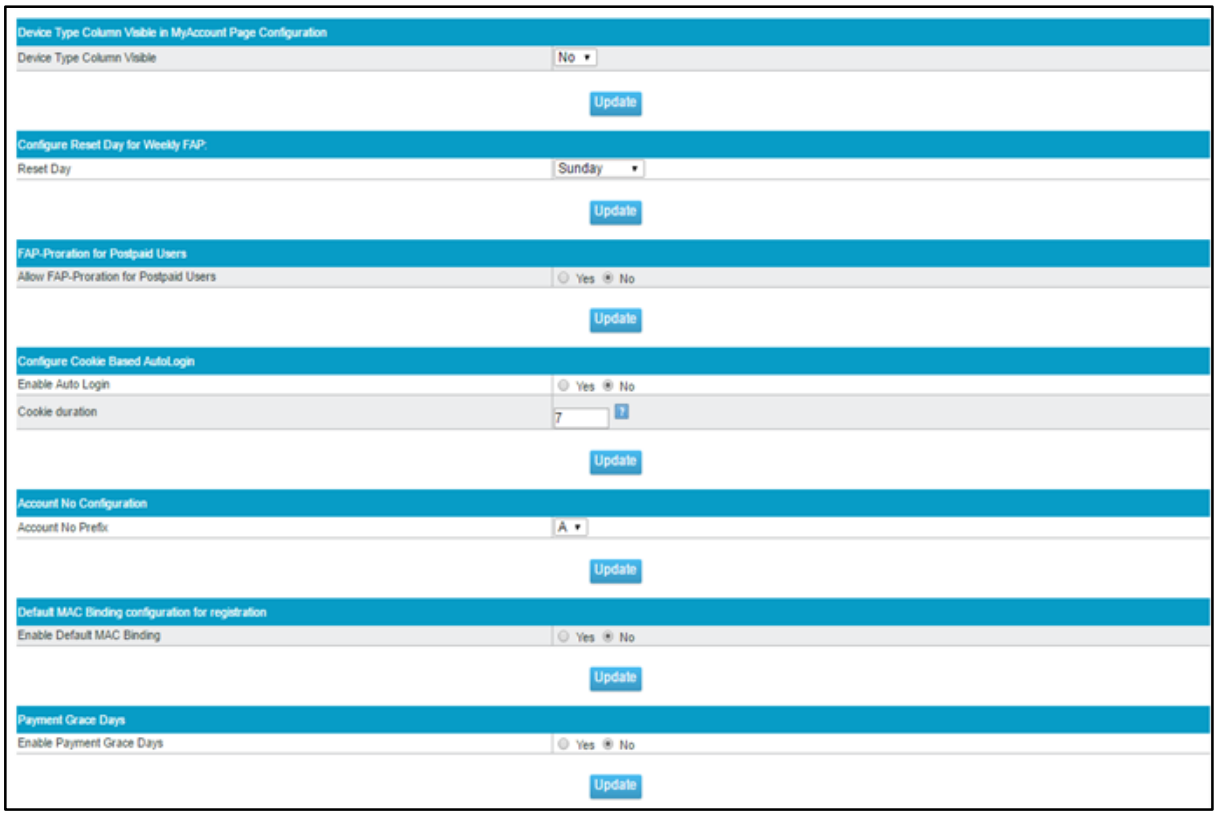
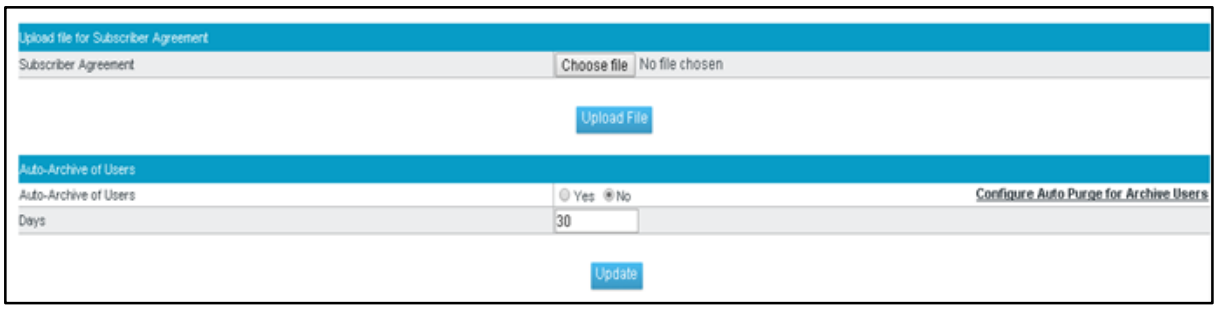


Figure: (d) Customize Client Preferences



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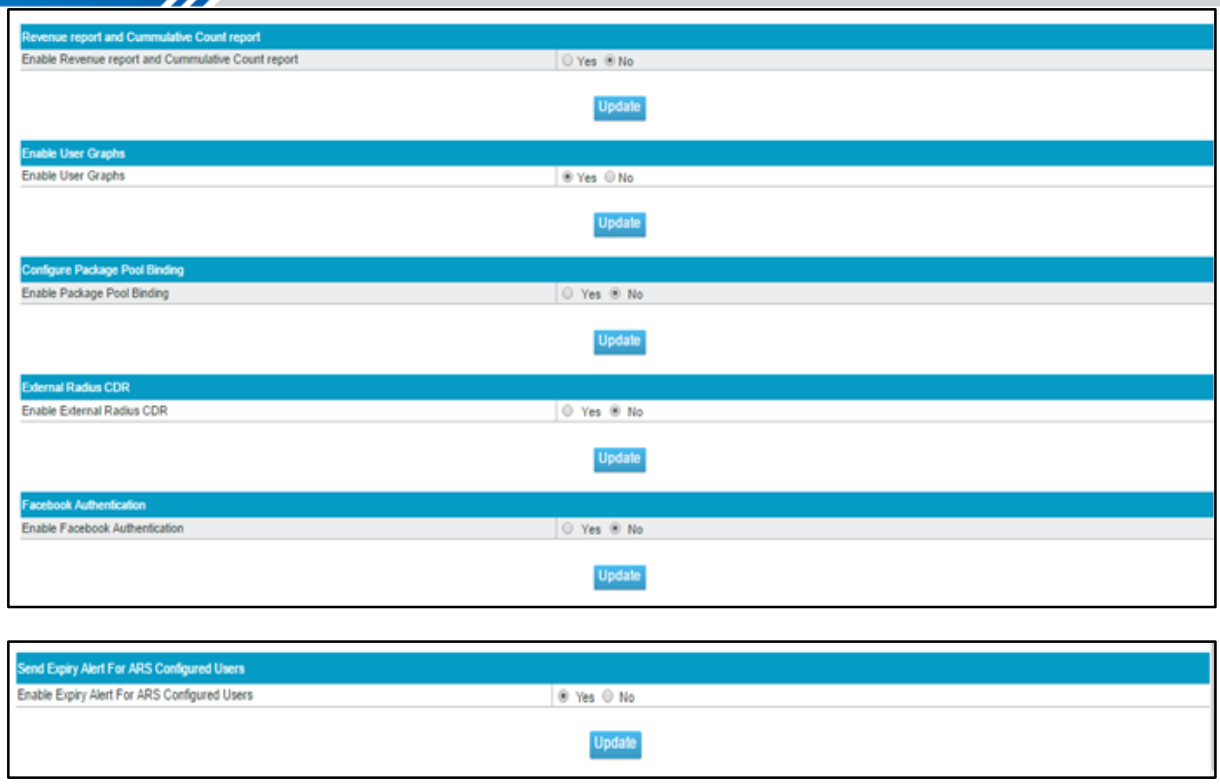

Figure: (e) Customize Client Preferences

Customize Client Preferences-Screen (d and e)	
Device Type Column visible in My Account Page Configuration	If you want user's to view the different types of devices using which they have accessed the internet, select '**Yes**' from the drop-down box.
Pin Type Option Visibility Configuration	If you want to '**hide/show**' the pin type option, select either '**Yes/No**' as per your requirement.
FAP-Proration for post-paid users	Offer prorated FAP to user using this option. E.g.: 2GB/month plan is availed by a user on 15th of a month; user will be given 1GB/half-month. This is useful in-case user subscribes a package and wishes to disconnect after some days or a user can be charged according to the days he has used
Configure Cookie-based auto-login	To configure Cookie-based auto-login select **'Yes/No'**. Cookie will be saved for number of days entered in 'Cookie Duration' section. Once this option is enabled user doesn't have to enter username and password while using the same browser. After necessary specifications select **Update.**
Account No configuration	Select the prefix from A-Z, 0-9. Account number will start with the prefix selected. After necessary specifications select **Update.**

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Default Mac configuration for registration	To enable default Mac binding, select radio button **"Yes"** else select **"No".** This Default Mac binding selection will be visible is **"Add User "**Page
Upload file for Subscriber Agreement	To Upload subscriber agreement, click on **"browse"** button and select the path where the file is saved, then click on "**Update"** button. This subscriber agreement will be displayed in **'User My Account'** page as displayed in screen 1.8.3.
Auto-Archive of Users	To automatically archive users, option can be selected from "Yes" or "no". No. of days can be entered in "**Days**" field for the same purpose.
Revenue Report and Cumulative Count Report	The Revenue report and cumulative count report can be enabled/disabled from this configuration.
Enable User Graphs	Select "Yes" for enabling user graphs feature.
Configure Package Pool Binding	Select "Yes" to enable Package Pool Binding feature. With Package Pool binding enabled, system will facilitate to make only preferable packages displayed to users on captive portal page by binding them to the pool.
External Radius CDR	Select "Yes" checkbox from here for enabling external radius CDR option.
Facebook Configuration	Select "Yes" to enable Facebook configuration feature. With Facebook Configuration option enabled, system will facilitate to do configuration for "Login through Facebook" account credentials.
Send Expiry Alert for ARS Configured Users	Select 'Yes' to enable expiry alerts for ARS configured users and 'No' to disable the same.

Customized Images

Advertising and marketing plays a vital role in a prosperous and flourishing business. Essential feature i.e. Company logo is an important graphical identity of the business. With the help of this option you can add company logo to user my account page or advertising material in form of images etc. You can find different parameters to add images, using the options given on this page. The image size should be according to the dimensions defined on the page.

To customize the page, select **System > Client Services > Customized Images** from GUI menu:

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Figure: Customize Image

Customized Images	
Upload For Top and Bottom bar images on My Account	· **'Browse'** facilitates to upload specified dimension (i.e. 700*80) of image which will be displayed in the top bar of **My Account Page** · **Browse** facilitates to upload specified dimension (i.e. 700*80) of image which will be displayed in the bottom bar of **My Account Page** · **'Browse'** facilitates to upload specified dimension (i.e. 140*110) of image which will be displayed in the top left corner of **My Account Page** · '**Preview**' facilitates to see the sample of top and bottom image in the page · Once done click on **"Upload File"** to upload the chosen images

Forgot Password

With the help of this option you can define the interval of time by which the system will prompt you regularly to change the admin password. This feature helps in maintaining the security of the password and avoids any kind of misuse of the same.

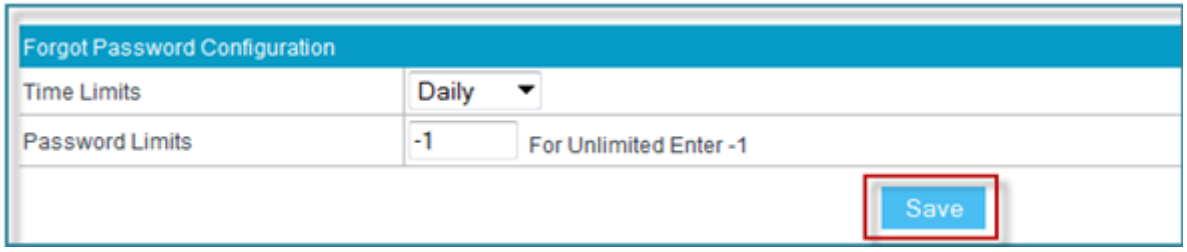

Figure: Forgot Password

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Time Limits	Click the drop down box and select the interval of time i.e. Daily/Weekly/Monthly according to which the system will prompt you to change the password of admin GUI
Password Limits	• Specify the number of passwords to be allowed in each interval of time • For Unlimited enter -1

Client GUI URLs

24online is a flexible solution that can act as local, external or other external server as per your requirement. With the help of different options in the "client GUI URLs" page, you can define links to which the system should direct the user for different actions. Let's understand each option in detail in the below section:

Figure: Manage Client GUI URLs

Manage Client GUI URLs	
Radius Location	**Local –** 24online server acts as the local RADIUS **External 24online** – Select this option if you are using some other resource as RADIUS and want 24online to use as external server **External other** – Select this option if you are using other resources for RADIUS, and want 24online to act as other external resource
Register Using Pin URL	Specify registration URL for pin user to directly register using pin details
Renew Using Pin URL	Specify renew pin URL from where the user can renew the account using pin
Top Up using Pin URL	Specify renew pin URL from where the user can renew the account using top up Coupon

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My account URL	Specify my account page URL of the user, by which user can edit/manage necessary information, as and when required
Recover Password URL	Specify the URL from where the user can recover the password
Reset Password URL	Specify the URL from where the user can reset password

Websurfing Config

With the help of web-services administrator can easily create, update and delete user without accessing 24online GUI.24online server will authenticate the username and password and perform the actions.

Administrator can configure default parameters of Web Service and create 'User' through web service parameters. Instead of providing list of details while creating a user, default template can be configured by using GUI interface. Pre-paid packages can be registered as well as registered/renewed. Default package can be changed on renewal. Let's understand each option in detail in the below section:

To configure web service parameters go to: **System > Client services > Web service config**

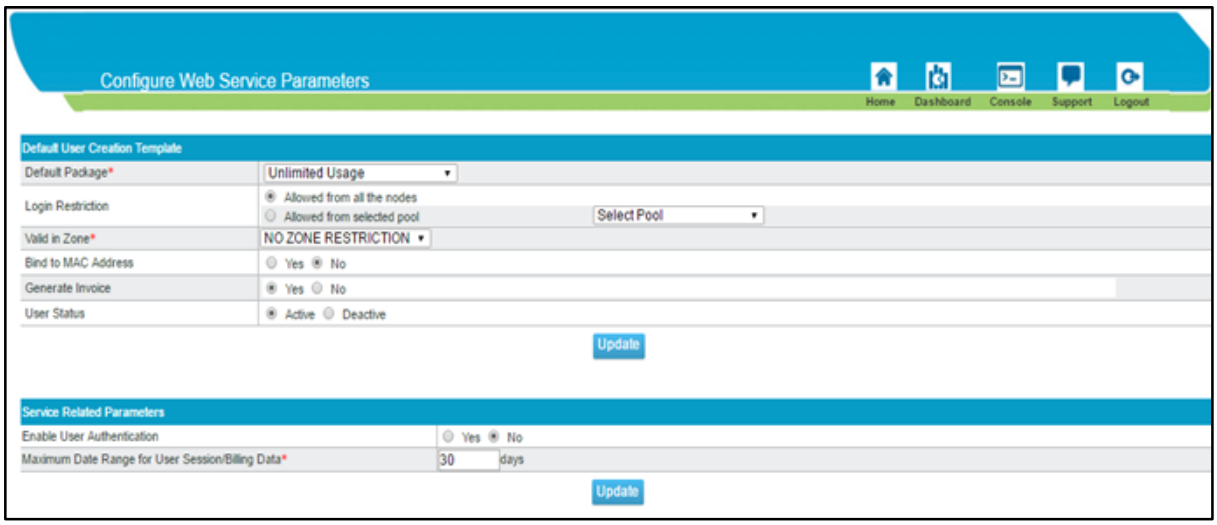

Figure: Configure web services parameters

Configure Web Service Parameters	
Default User Creation Template	
Default Package	This box displays list of packages that can be assigned to the user. Packages are created using following parameters: (a) Online Package (b) Pre-paid Package (c) User Type Package (d) Registration/Registration-Renewal Select the drop down box and select the default package to be

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	assigned to the user on registration.
Login Restriction	Following options allow the user login as per the configuration: Select **'Allowed from all nodes'** to allow the user from any network IP address. Select **'Allowed from selected pool'** to allow the user from a select pool in the network. Select the drop down box next to the option and select the pool from the list in which the user is added.
Bind to MAC Address	Specify whether the user should be bind to MAC address or not. This option would record the MAC address of the user that is received on first login and authenticate the same on every login.
Generate Invoice	24online offers default invoice option which can be used to generate default user invoice. Specify whether the invoice should be generated or not. Select **'Yes'** to generate invoice.
User Status	Specify whether the user registered in the 24online system should be directly activated or should be in de-active state.

Service Related Parameters	
Enable User Authentication	Specify whether web service should authenticate the user from where the request has been sent or not.
Maximum Date Range for user session data	User session data is maintained in the 24online system. Specify the number of day(s) user session to be retrieved from the system in single search.

Password Config

24online is a flexible solution that allows administrator to configure the password for PINs. Type of Password can be configured with help of options provided in Password Configuration page. Password type suggests the type: numeric (0-9 numbers supported), alphabetic and alphanumeric, mix-case (upper and lower case) alphabets and special characters are also supported.

Password configuration types –

1] **Auto generated Password**: On selecting this option, system will automatically generate passwords.

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2] **Password Validation**: On selecting Password Validation option, passwords with different patterns can be created using different formation types.

3] One Time Password: On selecting One Time Password option, one time password will be automatically created and sent through SMS. It is important to have SMS Gateway Module registered for enabling this configuration option.

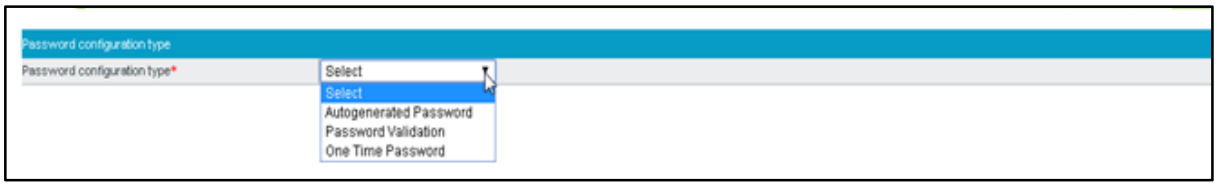

Figure: (a) Password Configuration

Figure: (b) Password Configuration

Password Configuration	
Password Configuration Type	Select Password configuration type from the drop-down options available.
Minimum Password Length	Define minimum password length needed here.
Password Type	Select the type of password i.e. None, Numeric, Alphabetic or Alphanumeric
Formation Type	In-case of alphabetic or alphanumeric, select formation type - Mix-case : For using mix case like uppercase and lowercase Special Characters: For using special characters like {! $ @ * _ : }

Access Control List

Access control specifies which user(s) processes are granted access to the object(s), as well as what operations are allowed on given objects. When an admin user entity performs any operation in any of the feature (e.g. Add User), the system first checks whether the user entity requesting for an operation is authorized or not.

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24online offers facility to specify the access to all features and functions in the system for all users managing 24online (i.e. Managers/Operators/Zone Manager/Zone Operator etc.). Define actions i.e. add/manage/delete/update.

Note: Zone Management is add-on module which includes Zone Operator and Zone Manager

ACL helps define rules to restrict admin access to individual IP address or subnets, by which misuse of admin rights and login can be avoided. Let's understand how to define the access control for each entity in the system:

Access Control

To define ACL, select **System > ACL > Access Control** from GUI menu:

Figure: Access Control List

Access Control List	
User Type	• Click the drop down box and select the user type for which you want to define the access control. • The system shows list of modules and access rights allowed for the selected user type.

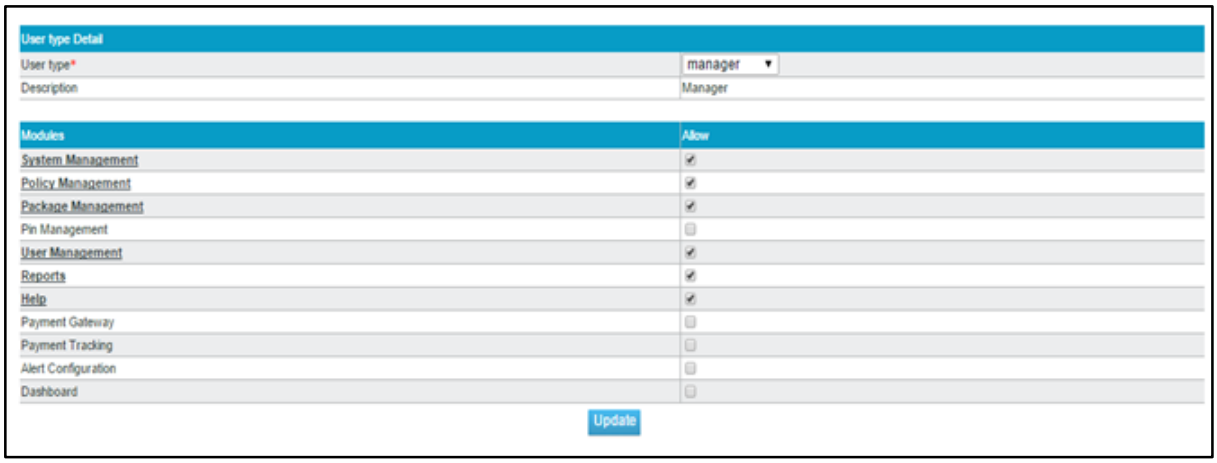

Figure: Access Modules List

Access Module List	
User Type	Click the drop down box and select the user type for which you want to define the access control. The system shows list of modules and access rights allowed for the selected user

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	type.
Modules	The module list shows names of different modules registered in the system. Use the allow column to assign rights to use the features of different modules. To assign rights, select the checkbox against the name of the module.

Even after from allowing access to the module, you can further restrict user from performing certain actions in each sub-module of each module. You can also define the actions allowed for each feature. Click on the name of the module for which you want to define the action access rights:

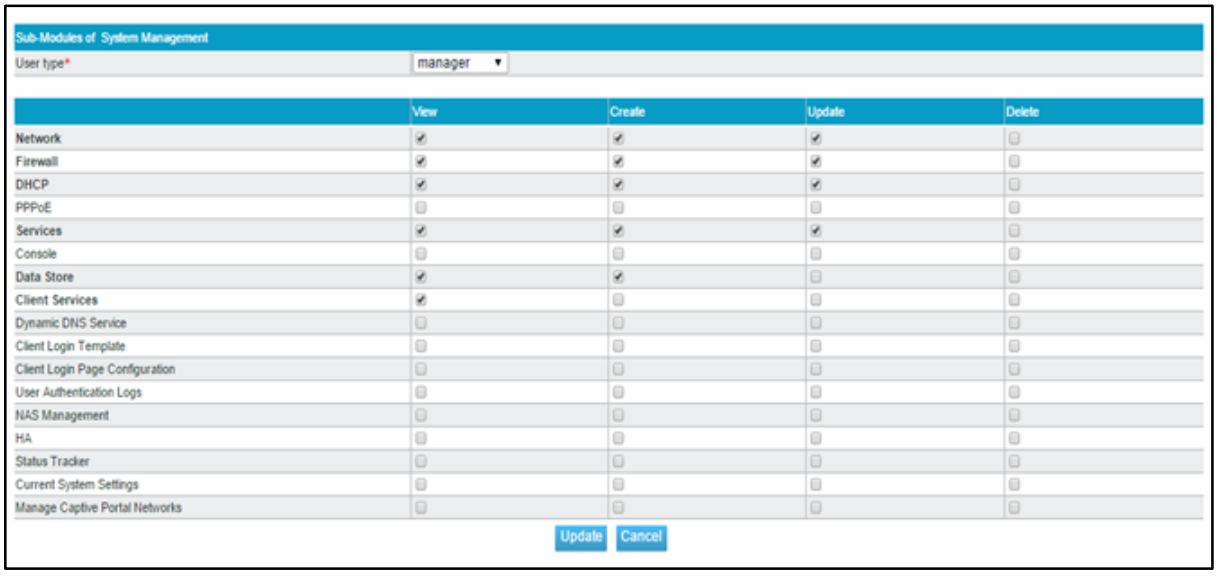

Figure: (c) Access Control List - Sub Modules

- Sub-modules column shows list of sub-menus in the selected module i.e. User Management

Access Control List- Submodules	
View	Select the checkbox against each sub-module you want to allow the rights to **View** all details. The manager user type will be able to view all the details of the sub-module(s) for which the '**View**' rights has been assigned
Create	Select the check box against each submodule you want to allow the rights to **Create**. The manager user type will be able to create required details in the sub-module(s) for which the '**Create**' right has been assigned
Update	Select the checkbox against each submodule you want to allow the rights to **update**. The manager user type will be able to update required details in the sub-module(s) for which the '**Update**' right has been assigned.
Delete	Select the check box against each submodule you want to allow the rights to **delete**. The manager user type will be able to remove required details in the sub-module(s) for which the '**Delete**' right has been assigned.

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Similarly, after allowing access to the sub-modules, you can further restrict user from performing certain actions in each feature of sub-module. You can define the actions **allowed for each feature**. Click on the name of the sub-module for which you want to define the action access rights:

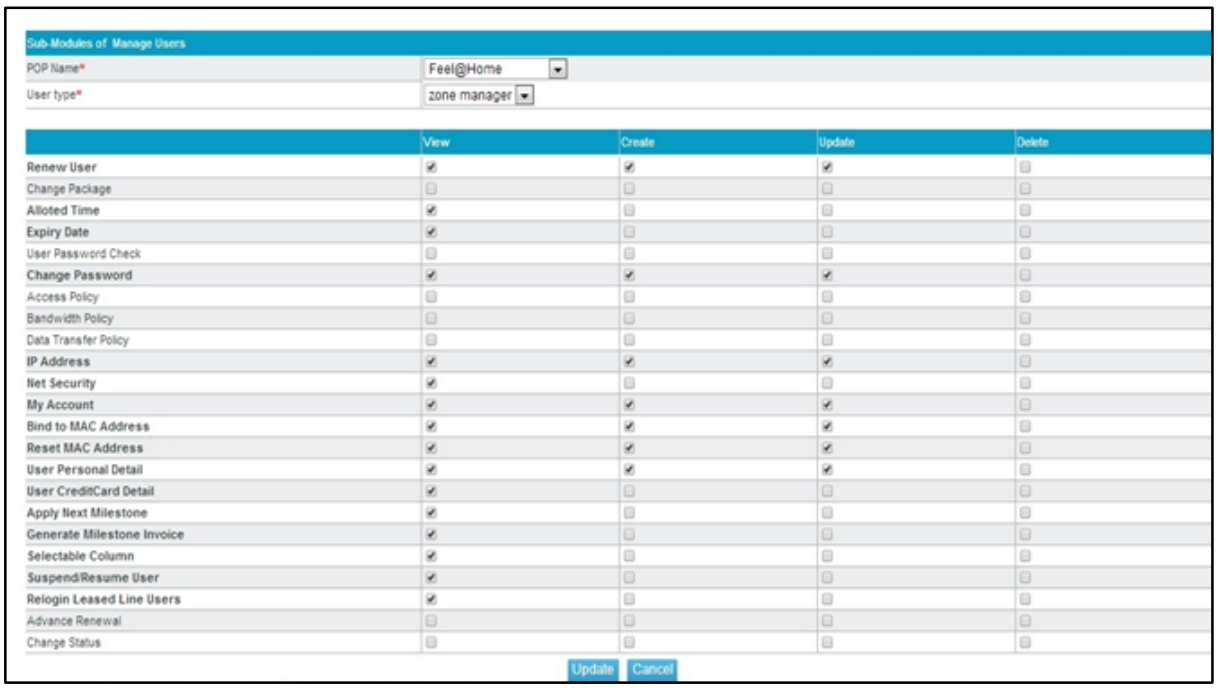

Figure: (d) Access Control List - Features

Access Control List- Features	
View	Select the check box against each submodule you want to allow the rights to **View** all details. The manager user type will be able to view all the details of the sub-module(s) for which the '**View**' rights has been assigned
Create	Select the check box against each submodule you want to allow the rights to **Create**. The manager user type will be able to create required details in the sub-module(s) for which the '**Create**' right has been assigned
Update	Select the checkbox against each sub-module you want to allow the rights to **update**. The manager user type will be able to update required details in the sub-module(s) for which the '**Update**' right has been assigned.
Delete	Select the checkbox against each sub-module you want to allow the rights to **delete**. The manager user type will be able to remove required details in the sub-module(s) for which the '**Delete**' right has been assigned.

User Type Management

In-order to operate the 24online system efficiently, systematic rights of access and authorization should be provided to every user managing the solution. Depending upon the rights assigned, user can perform all or any of the four actions: Add, Delete, View, and Update. For authorization and access control, **24online has following predefined user types**:

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- **Administrator** – As per the default setup, 24online Administrator user is provided with all rights of creating, updating, and deleting system configurations and user information.
    - Administrator can create multiple administrator level users as well.
- **User** - As per the default setup, User is the users who login to access the Internet, so does not possess any admin rights.
- **Zone Manager** (Only if Zone Management module is registered) – As per the default setup, 24online Zone Manager User is provided with rights of creating, updating, and viewing information of users belonging to the zones assigned to him.
    - As a Zone Manager, the user would not be able to perform Delete action.
- **Zone Operator** (Only if Zone Management module is registered) – As per the default setup, 24online Zone Operator User is provided with only the right of viewing user information belonging to the zone assigned to him.
    - As a Zone Operator, the user would not be able to perform Create, Update or Delete actions.
- Leased Line - As per the default setup, Leased Line Users can access Internet without logging on to 24online Client.
- **Walk-in User**- As per the default setup, Walk-in users can buy walk-in-pins and surf internet.
- **Pop Manager**- As per the default setup, 24online POP Manager User is provided with rights to create, update and view user information.
    - As a POP Manager, the user would only be able to view the information.
- **Dynamic User** (Only if MAC based customization is enabled) - As per the default setup, dynamic users can login and surf internet.
- **Manager** - As per the default setup, 24online Manager User is provided with rights to create, update and view user information.
    - As a Manager, the user would not be able to perform delete action.
- **Operator** – As per the default setup, 24online Operator User is only provided with right of viewing the user information.
    - As an Operator, the user would not be able to perform Create, Update or Delete actions. (To assign rights, refer to Access Control List)

When a new user is registered and assigned with 'User Type', the registration status will define the status of that user. If the user type is selected as acquisited, all new users falling under this type will need their registrations approved before they can access the internet. With user status set as active for given user type, the users can directly access the internet.

Apart from above mentioned user type, additional user type can also be created, as and when required.

With the help of options given in the User Type Management page, you can create additional users as per your requirement. After creating the user, you can also define the required access rights of the user using ACL option. Currently, let's understand how to create additional admin users in the system:

To create user type, select **System > ACL > User Type** from GUI menu:

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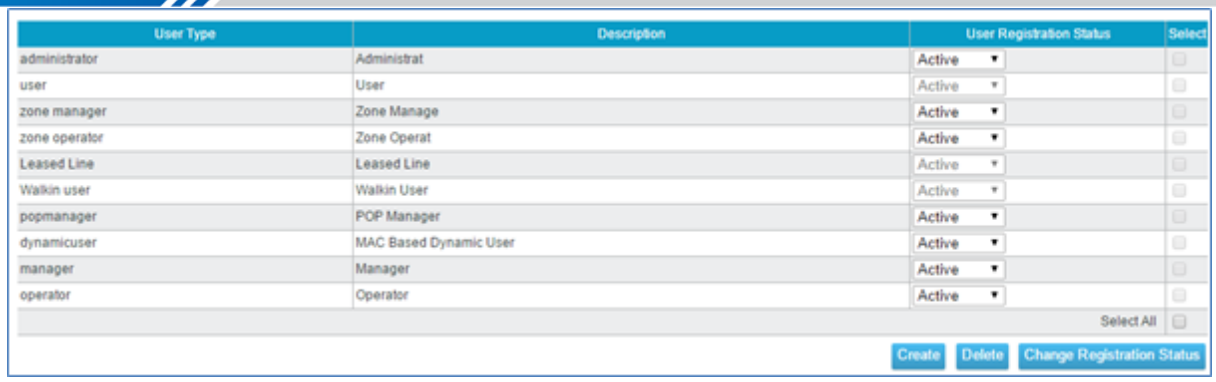

Figure: (a) User Type Management

User Type Management	
User Type	· The user type column shows predefined types of users created in the system. · Default user types cannot be deleted from the system.
Description	· Displays the description of each user type
User Registration Status	· The registered user can either be in active status or acquisited status. ○ Active: The user can access the internet ○ Acquisited: The user needs approved registrations to access the internet.

- Use the create button to create a new user type in the system. On clicking the 'Create' button the system will display the following screen:

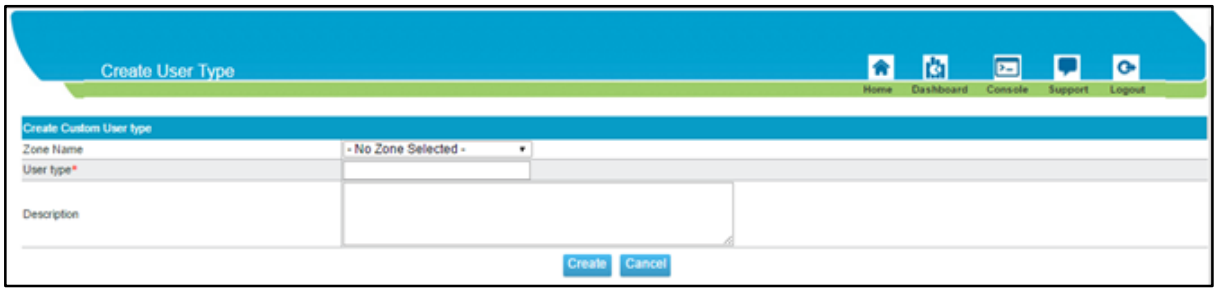

Figure: (b) Create User Type

User Type -Creation	
User Type	Enter the name of the user type to be created.
Description	• Describe the details of the user type to be created in the system. • After entering the details, click the **'Create'** button.

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User Access

As an admin, there are several options and functions which are confidential and secured including user details, payment receipts, revenue generation etc. In such it is very necessary to use the admin login in limited space with secured access. For such reason, 24online offers the facility using which you can define specific IP addresses, only using such IP addresses you can access the text based console and graphical interface, as admin.

To configure access, select **System > ACL > User Access** from GUI menu:

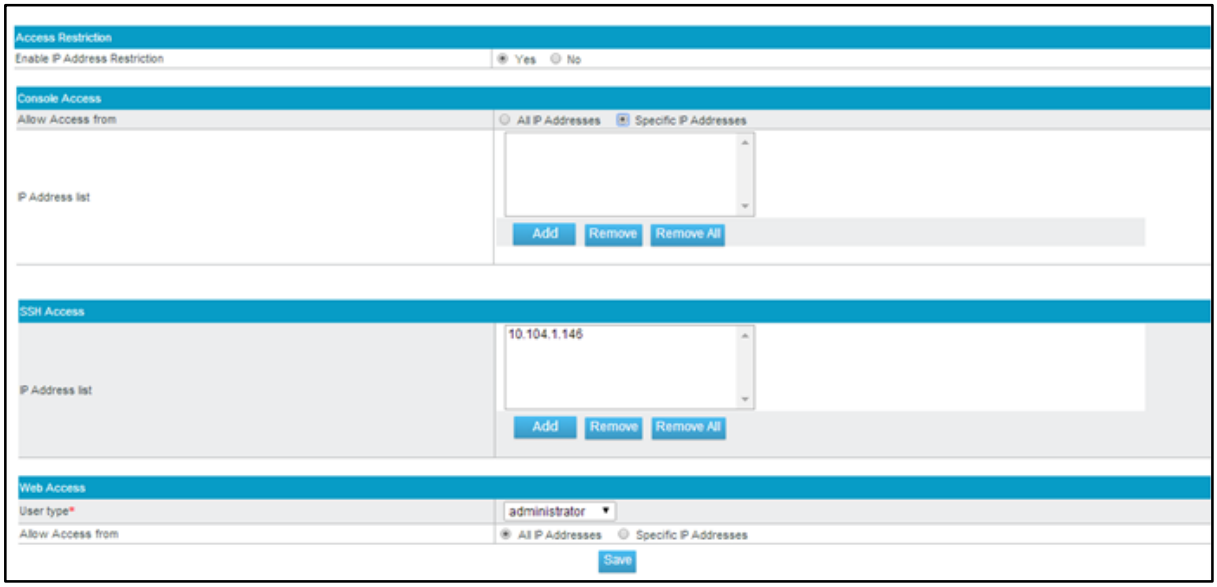

Figure: Access Configuration

Access Configuration	
Access Restriction	Use the enable IP address restriction and define whether you want to enable the restriction or not. Selecting '**Yes**' will give you options to enable. To avoid any restrict use '**No**'.

Console Access	• Using the 'Allow Access From' options define whether the access should be allowed from all IP address in the network or specific IP.
	• Using the 'IP Address List' options specify from which IP addresses access to text based administration console should be allowed. (This option appears only if Specific IP Addresses option is selected)
	  ○ Click **'Add'** to add IP address or a range of IP addresses to the list
	  ○ Click IP Address and use **'Remove'** to delete IP address from the list
	  ○ Click '**Remove All**' to remove all IP address from list

SSH Access	• Using the 'IP Address List' options specify from which IP addresses access to SSH should be allowed. • Click 'Add' button to add IP addresses or a range of IP addresses to the list. • Click 'Remove' button to remove some IP address from the list. • To remove all IP addresses in the list, click 'Remove All' button.

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Web Access	• Specify which user has access to web based administration console.
	• Click the drop down box and select the user type from the list.
	• 'Allow Access From' option defines whether the access should be allowed from all IP address in the network or specific IP addresses.
	• Using the 'IP Address List' options specify from which IP addresses access to text based administration console should be allowed. (This option appears only if Specific IP Addresses option is selected)
	  ○ Click '**Add**' to add IP address or a range of IP addresses to the list
	  ○ Click IP Address and use '**Remove**' to delete IP address from the list
	  ○ Click '**Remove All**' to remove all IP address from list

Console ACL

ACL rights for console can be provided to the users from this section. 24online allows providing different ACL rights for different console service modules. On selecting specific user type from the drop down menu, specific rights can be defined to allow them to perform specific operations.

To configure Console ACL, select **System > ACL > Console ACL** from GUI menu:

Figure: (a) Console ACL

On selecting user type from the drop-down, ACL rights can be defined for different service modules -

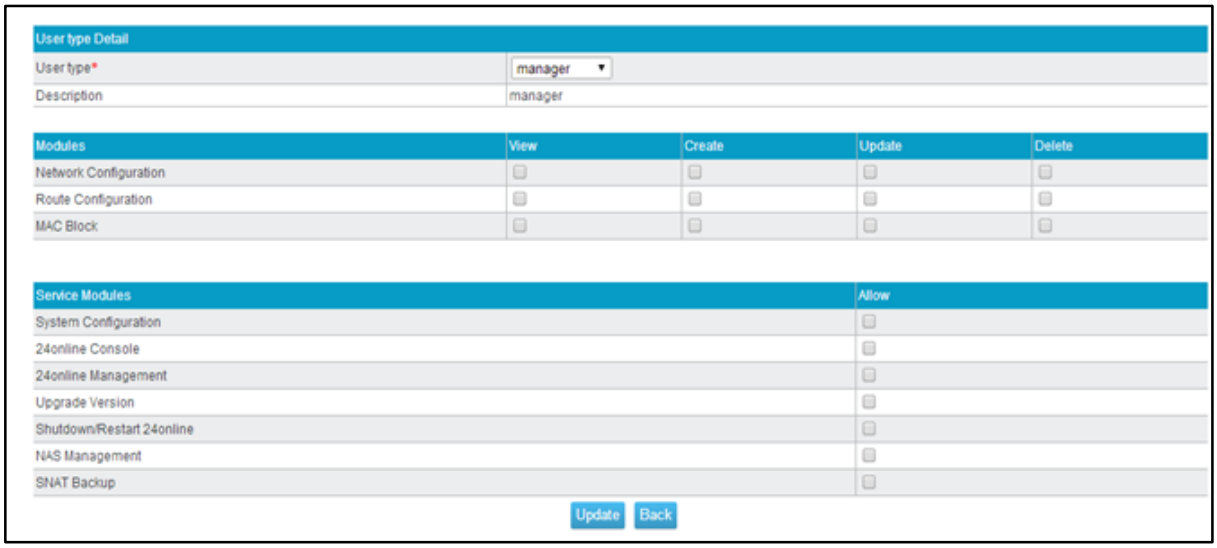

Figure: (b) Console ACL

Console ACL

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User Type Detail	Select user type from the option available to define console rights for the user
Modules	The 'view', 'create', 'update', and 'delete' rights can be configured here for three available console modules.
Service Modules	Access rights configuration for different console service modules can be done here.
Update	Click 'Update' button after entering all specific details.

Dynamic DNS Service

Normally when a user connects to Internet, the user is assigned an unused IP address from a pool and the IP address is used for duration of period when the user is connected. Dynamic DNS system is a method of defining domain name to a changing IP address, whereas not all computers use static IP address.

Register Host

With the help of options given in the Dynamic DNS service page, you can register and manage the dynamic DNS service in 24online.

To register host, select **System > Dynamic DNS Service > Register Host** from GUI menu:

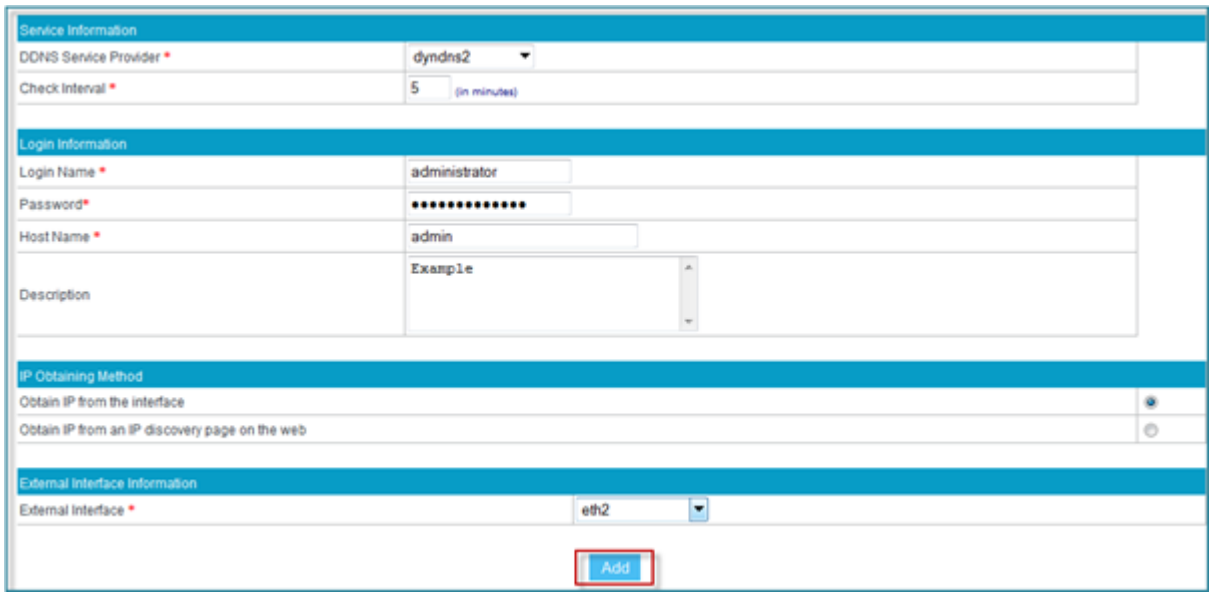

Figure: Dynamic DNS Service

Dynamic DNS service

DNS Service Provider	Select the drop down box and select the service provide name from the list
Check Interval	Specify the interval time of the DNS host in minutes. E.g. 1 minute, 10 minutes etc
Login Name	Define the login name for the Dy. DNS using which the system
Password	Define the password for the Dy. DNS using which the system
Host name	Specify the hostname of the Dynamic DNS
Description	Describe specific information about the dynamic DNS to be added in the system
IP obtaining method	Select the required radio-button
Interface Information	Click the drop down box and select the interface on which the dynamic DNS has been configured

Manage Hosts

In-order to view all the created dynamic DNS, 24online offers facility of Manage Dynamic DNS page in GUI. This page is user-friendly and makes it easier to update any information in created dynamic DNS. The manage page not only offers you the facility to modify existing DNS but also with the help of '**Delete**' option, you can remove unused dynamic DNS from the system.

To manage dynamic DNS, select **System > Dynamic DNS Service > Manage Hosts** from GUI menu:

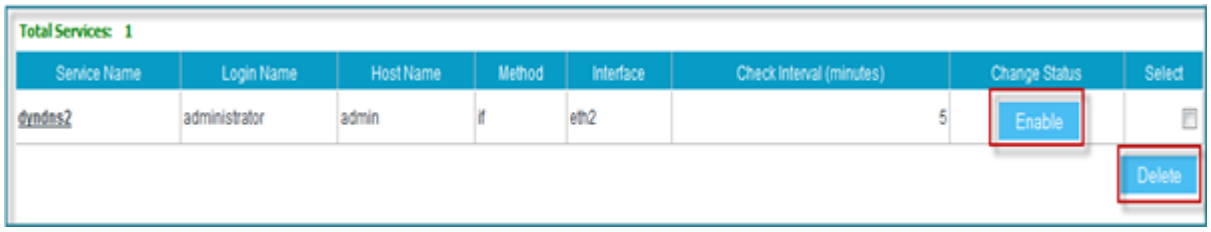

Figure: (a) Manage DNS Service

- To Enable the DNS service in the system, select 'Enable' button
- Similarly, to remove the DNS from the list, select DNS and then click on 'Delete' button
- To modify the information in existing DNS service, click on the name of the service. The system will directly take you to the DNS service page, from where you can update the required information.

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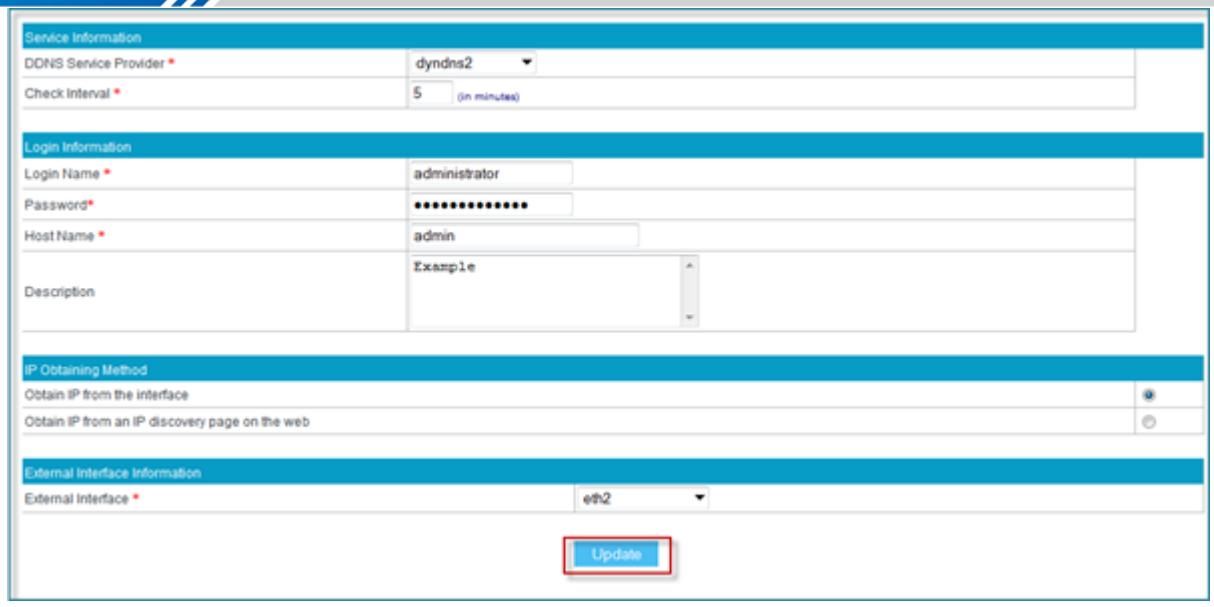

Figure: (b) Manage DNS Service

Client Login Template

24online makes client login process more attractive with the help of this feature. Using this feature administrator can create customized template for client pre, post login page and welcome page for leased line users. Administrator can add URL to redirect client page to a personal website. This feature helps in adding promotional advertisements and introducing new websites to the customers with the help of images and URLs. Administrator can even design customized client login pages through What You See Is What You Get (WYSIWYG) editor or even can upload pages.

Create

Select **System > Client Login Template > Create**

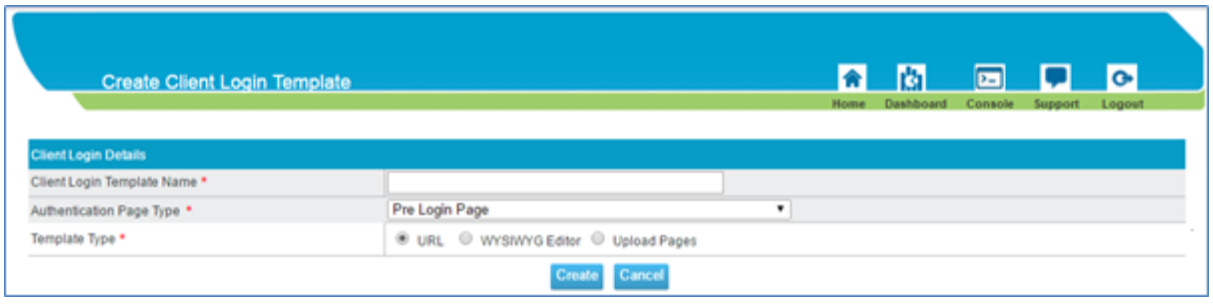

Figure: (a) Create Client Login Template

Create Client Login Template

Client Login Template Name	Specifies the name of the template in maximum 30 characters in combination of A-Z, a-z, 0-9, '_'
Authentication Page Type	Specifies whether the customization of the page to be added: • Pre Login Page - The page before a client logs in. • Post Login Page - The page after the client logs in • Leased Line Page- The welcome page for Leased line users • Change Password on Login Page– The page for resetting password. [This option will be available only on selecting 'Compulsory to reset password' option and configuring no. of days for the same from **System > Client Services > Parameters** section]. • Forgot Password Page – The page when end-user clicks on 'Forgot Password' option can be configured from here. • Self Registration Page – The page where client can create his own account by registering itself. • Register Using Pin Page – The page where the client registers himself and access the service using the values of pin. • Renew Account Using Pin Page – The page where the client renews the services using values of pin. • Buy Package/Pin Using PG Page – The page where client purchase the package or the PIN using payment gateway. • Renew Account Using PG Page - The page where client renew the account using payment gateway. • My Account Login Page – The page used by client to login into his account. • PG Purchase Confirmation Page – The page appears after a purchase is confirmed through payment gateway.
Template Type	Specifies whether the page should be customized by below mentioned template types: • Redirect URL- Add URL to redirect clients to a personal website • WYSIWYG Editor- Design client login page through WYSIWYG editor • Upload Pages- Upload images, JavaScript and html pages to create desired client login template
Create	Select after all specifications are completed
Cancel	Select to cancel the current operation

Creating Redirect URL Template

In order to redirect pre-login page to a specific URL, select **System > Client Login Template > Create**

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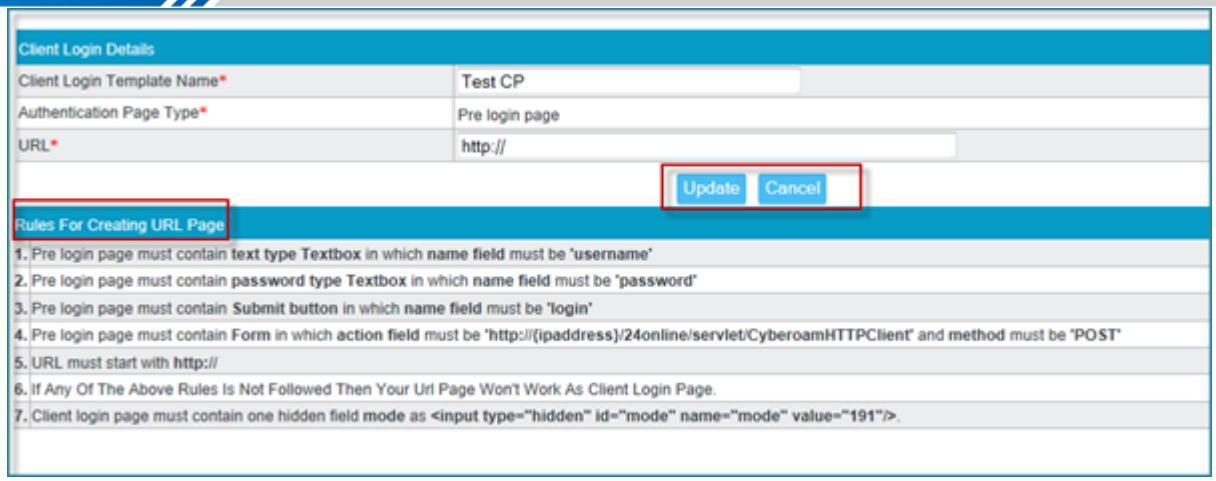

Figure: (b) Redirect page to specified URL

Redirect Page to specific URL	
Client Login Template Name	Displays name of template
Authentication Page Type	Displays authentication type of page
URL	Specifies details of URL where page will be redirected
Update	Select after all specifications are completed
Cancel	Select to cancel the current operation
Rules for URL page	Displays rules of URL page, please read carefully

Creating WYSIWYG Template

In-order to create pre-login customized page, select **System > Client Login Template > Create**

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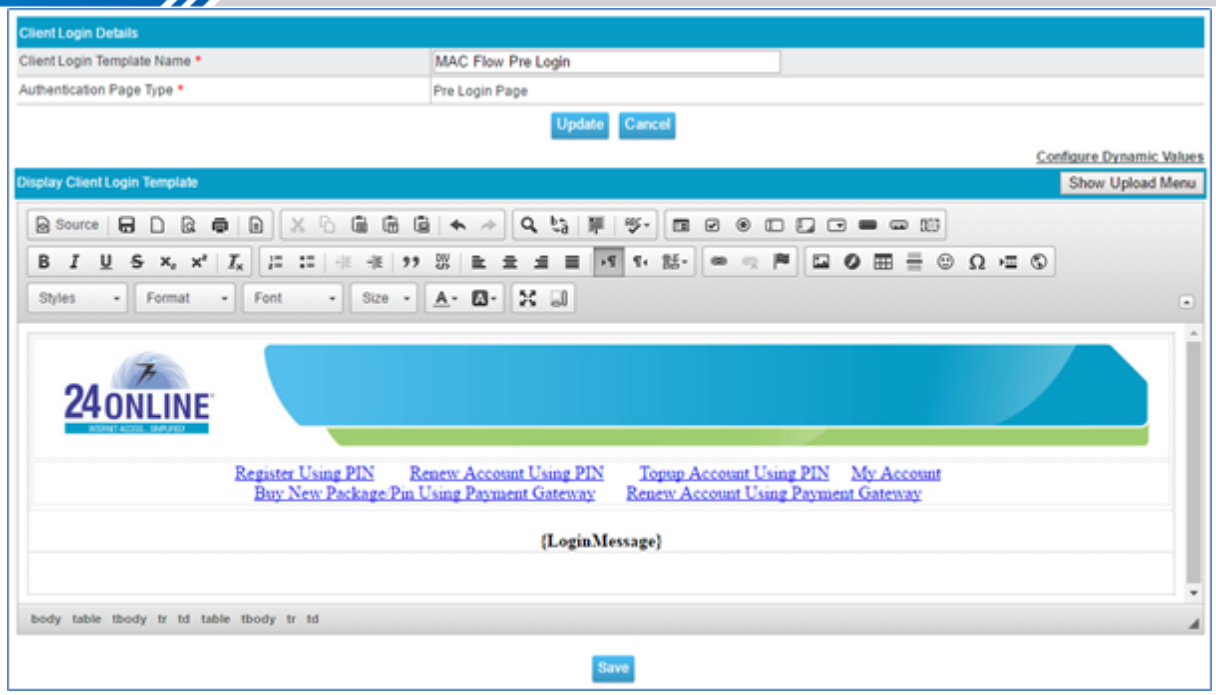

Figure: (c) Create Client Login Template

Create Client Login Template	
Client Login Template Name	Displays name of template
Authentication Page Type	Displays authentication type of page

Creating 'Upload Pages' Template

In-order to upload pre-login customized page, select **System > Client Login Template > Create**

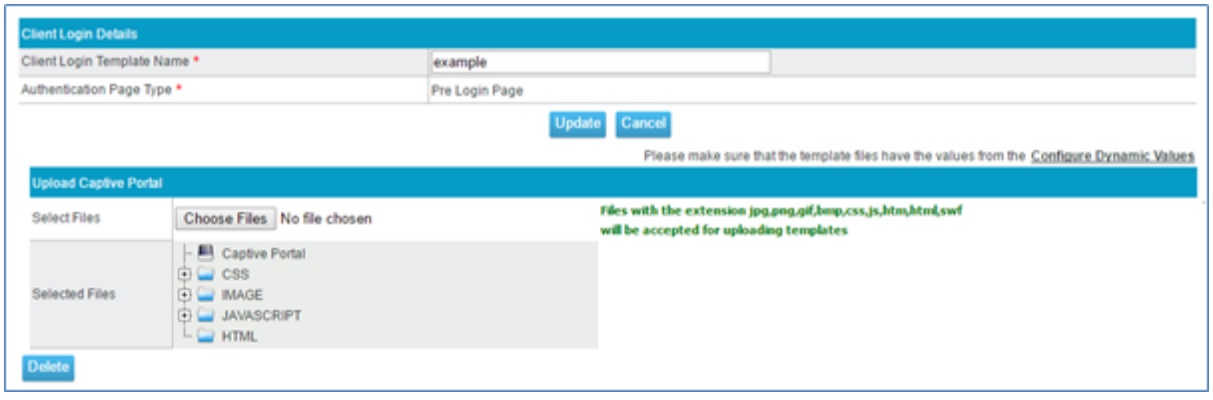

Figure: (d) Edit Client Login Template - Upload Pages

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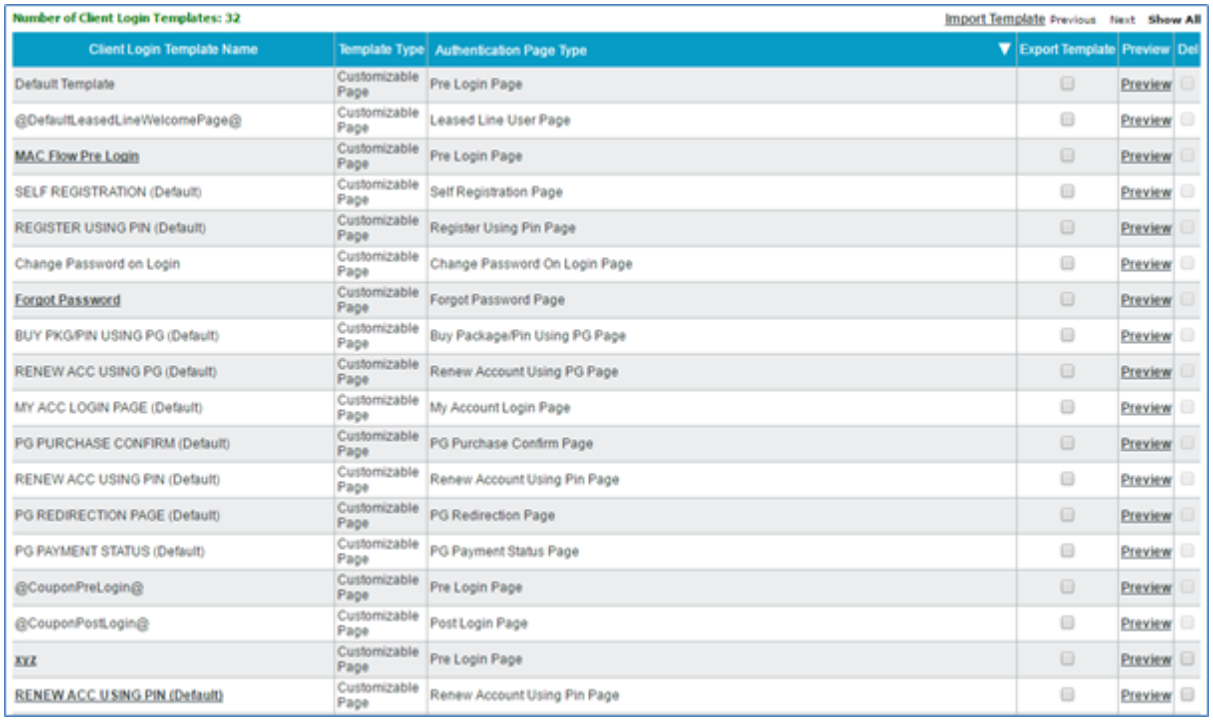
Edit Client Login Template	
Client Login Template Name	Displays name of template
Authentication Page Type	Displays authentication type of page
Update	Select after all specifications are completed
Cancel	Select to cancel the current operation
Upload Captive portal	
Select Files	24online supports following files extensions - jpg, png, gif, bmp, css, js, htm, html to create captive portal
Selected Files	All the uploaded images as per their categories will be displayed
Delete	You can delete the selected image using 'Delete' option

Manage

To manage client login template, select **System > Client Login Template > Manage**. The default templates cannot be updated or modified. The non-editable default page is a safe approach in case if user creates a vulnerable page. The new templates can be imported and the existing ones can be exported.



Number of Client Login Templates: 32 — Import Template — Previous Next Show All

Client Login Template Name	Template Type	Authentication Page Type	Export Template	Preview	Del
Default Template	Customizable Page	Pre Login Page		Preview	
@DefaultLeasedLineWelcomePage@	Customizable Page	Leased Line User Page		Preview	
MAC Flow Pre Login	Customizable Page	Pre Login Page		Preview	
SELF REGISTRATION (Default)	Customizable Page	Self Registration Page		Preview	
REGISTER USING PIN (Default)	Customizable Page	Register Using Pin Page		Preview	
Change Password on Login	Customizable Page	Change Password On Login Page		Preview	
Forgot Password	Customizable Page	Forgot Password Page		Preview	
BUY PKG/PIN USING PG (Default)	Customizable Page	Buy Package/Pin Using PG Page		Preview	
RENEW ACC USING PG (Default)	Customizable Page	Renew Account Using PG Page		Preview	
MY ACC LOGIN PAGE (Default)	Customizable Page	My Account Login Page		Preview	
PG PURCHASE CONFIRM (Default)	Customizable Page	PG Purchase Confirm Page		Preview	
RENEW ACC USING PIN (Default)	Customizable Page	Renew Account Using Pin Page		Preview	
PG REDIRECTION PAGE (Default)	Customizable Page	PG Redirection Page		Preview	
PG PAYMENT STATUS (Default)	Customizable Page	PG Payment Status Page		Preview	
@CouponPreLogin@	Customizable Page	Pre Login Page		Preview	
@CouponPostLogin@	Customizable Page	Post Login Page		Preview	
xyz	Customizable Page	Pre Login Page		Preview	
RENEW ACC USING PIN (Default)	Customizable Page	Renew Account Using Pin Page		Preview	

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Figure: Manage Client Login Template

Note: Similarly post login pages can be created

Client Page

24online allows different client login pages for each and every zone as created. With the help of this option you can assign separate pre and post login page for each zone.

Select **System > Client Login Template > Client Page** from GUI

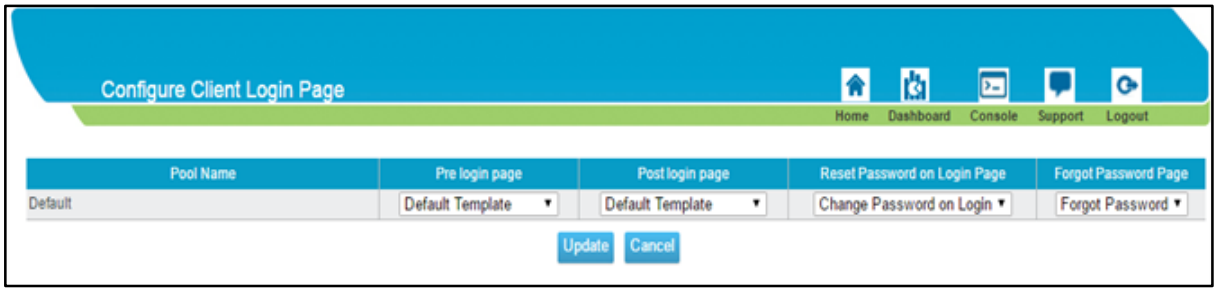

Figure: Configure Client Login Page

Configure Client Login Page	
Pool Name	Displays list of pool created in the system
Pre-login page	Select the drop down box and select the pre-login template for each pool. Each template can be different from each other
Post-login page	Select the drop down box and select the post-login template for each pool.
Reset Password on Login Page	Select the drop down box and select the reset password on login page template for each pool.
Forgot Password Page	Select the drop down box and select the forgot password template for each pool.

Mobile Page

To create and configure mobile client login pages, assign pre and post login pages for each pool. Select **System > Client Login Template > Mobile Page** from GUI

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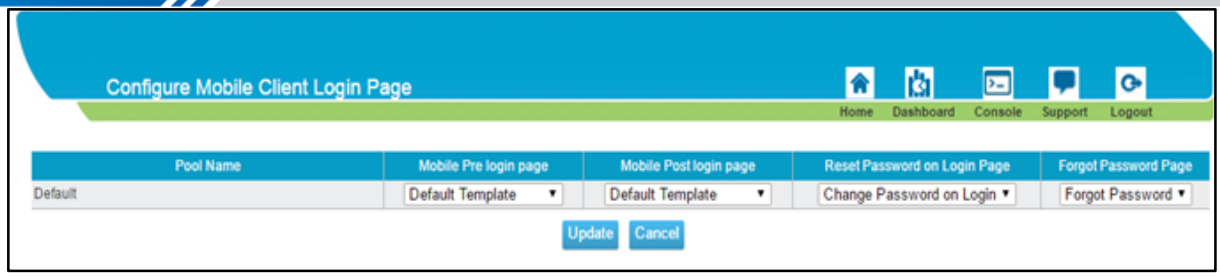

Figure: Configure Mobile Client Page

Configure Mobile Client Login Page	
Pool Name	Displays list of pool created in the system
Mobile Pre-login page	Select the drop down box and select the pre-login template for each pool. Each template can be different from each other
Mobile Post-login page	Select the drop down box and select the post-login template for each pool.
Reset Password on Login Page	Select the drop down box and select the reset password on login page template for each pool.
Forgot Password Page	Select the drop down box and select the forgot password template for each pool.

Portal Networks

Captive Portal Network is the facility available where the Network ID can be defined .The users in the defined network require to be authenticated with the captive portal. The Captive Portal requires the username and password for the user authentication. The network ID and the net-mask can be defined in the page. All the users/subscribers can be registered in this page, so that proper billing and bandwidth management can be done.

Note: Users/Subscribers not defined in the list will not be displayed in the Captive Portal. They will also not be able to surf. IPSET entry will not be done

Select **System > Client Login Template > Portal Networks**

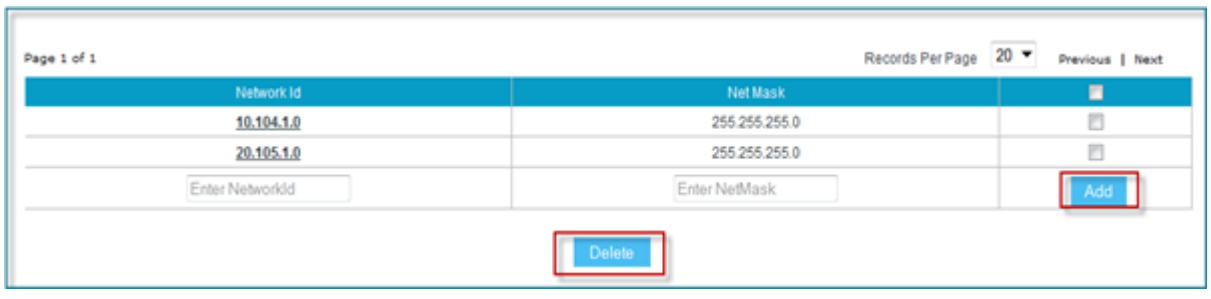

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Figure: (a) Manage Captive Portal Networks

Manage Captive Portal Networks	
Network ID	Enter the network ID which should display the captive portal when the user in that network is trying to connect to the Internet
Net mask	Enter the net-mask
Select	Select the checkbox in-case you have to delete the network or the net-mask
Add	Add a new network ID and new net-mask. Select 'ADD' button to add the network in the list
Delete	Select the checkbox and select delete to delete the network or the net-mask

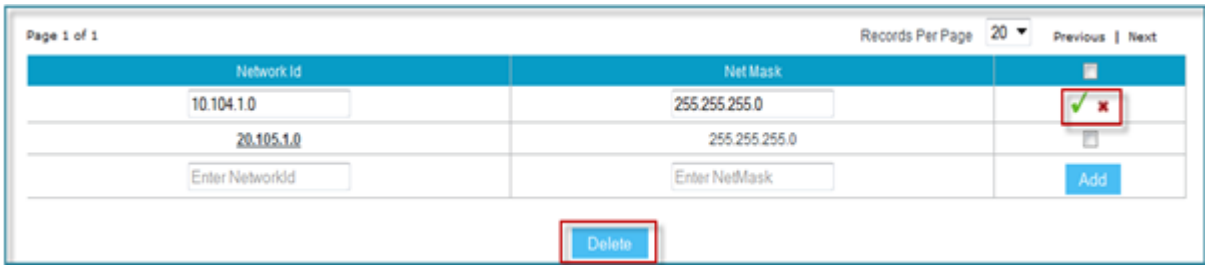

Figure: (b) Manage Captive Portal Networks

On clicking on the '**Network Id**' and the '**Net Mask**', they can be edited. After the changes have been made and you wish to save them, select the 'tick' symbol. If there is no change the 'cross' symbol can be selected and the changes can be reverted.

Leased Line Page

To configure leased line user welcome page for the pools available in the system. Select **System Management > Client Login Template > Leased Line Page**

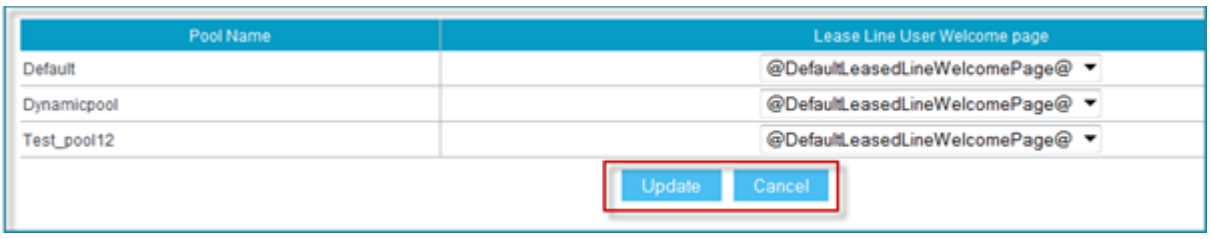

Figure: (a) Configure Leased Line Page

Configure Leased line page	
Pool name	Name of the pool to which Leased line user belongs to.

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Leased Line user welcome page		Its Respective Welcome page.

Messages

Messages help you to notify users about problems as well as alerts in areas such as access, user sessions, incorrect password, and successful log on, log off etc. You can define the messages that would be displayed to users upon performing certain actions. The messages configured by default are already displayed on the screen along with the message code. Each message has been formed using dynamic values which can be configured as per your requirement.

E.g. on successful login of the user the message, '**You have successfully logged in**' would be displayed. If you want to update the message, you can edit the message as per your requirement. To modify the messages, follow the instructions given below:

The '**Message Management**' section is enhanced and categorized in this version [8.3.6.8.0]. Three tabs are available now for Messages section, that are, Messages for Login Actions, Live Alert Message Configuration, and Messages for Captive Portal Actions.

To manage messages, select **System > Client Login Template > Messages** from GUI menu:

'Messages for Login Actions' tab

Figure: (a) Message Management

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Message Management	
Messages for Login Actions	
Message Code	Displays the list of messages types provided by default in the system which are showed to user at certain actions
Description	Displays the type of messages against each message code

You can update the message, by clicking on the name of message code:

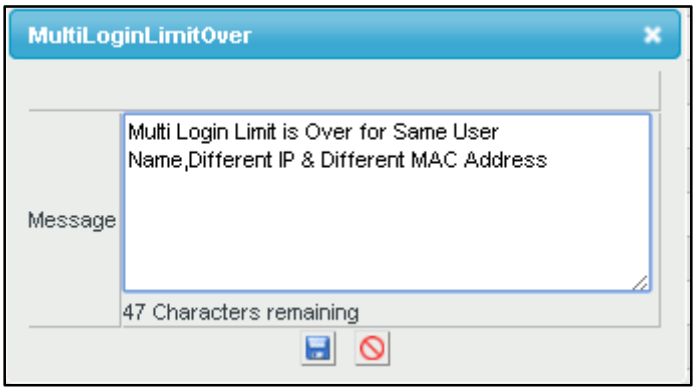

Figure: (b) Edit Message

24online offers default messages which can be updated as per your requirements. Enter the message you want to display considering the action type (message code) and click the 'Save' button.

'Live Alert Message Configuration' tab

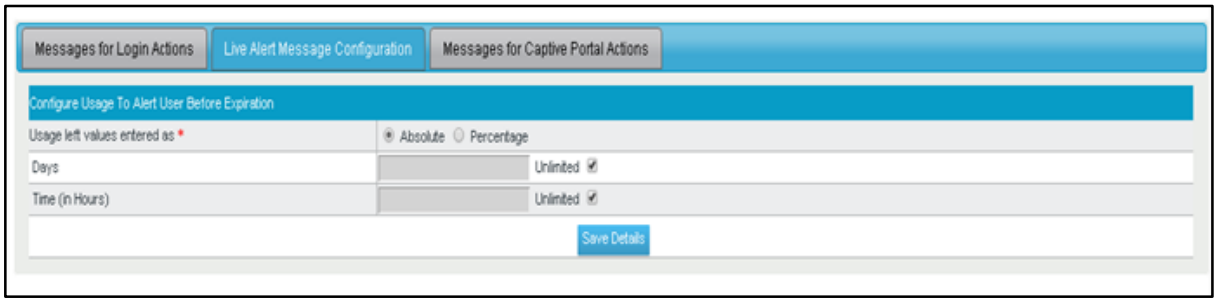

Figure: (c) Live Alert Message Configuration

The 'AlertMessageData' is an alert message which is created using dynamic values and can be updated as per your requirements as shown above. This message is sent to users for renewal of package before the specified number of days and hours; or specified percentage.

By default message shall display as: {u} you have {d} days and {h} hours remaining where, {u} – username {d} – remaining days {h} – remaining hours

It can also be displayed as:

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Dear {u},

Your subscription expires after {d} days, please renew as soon as possible.

'Message for Captive Portal Actions' tab

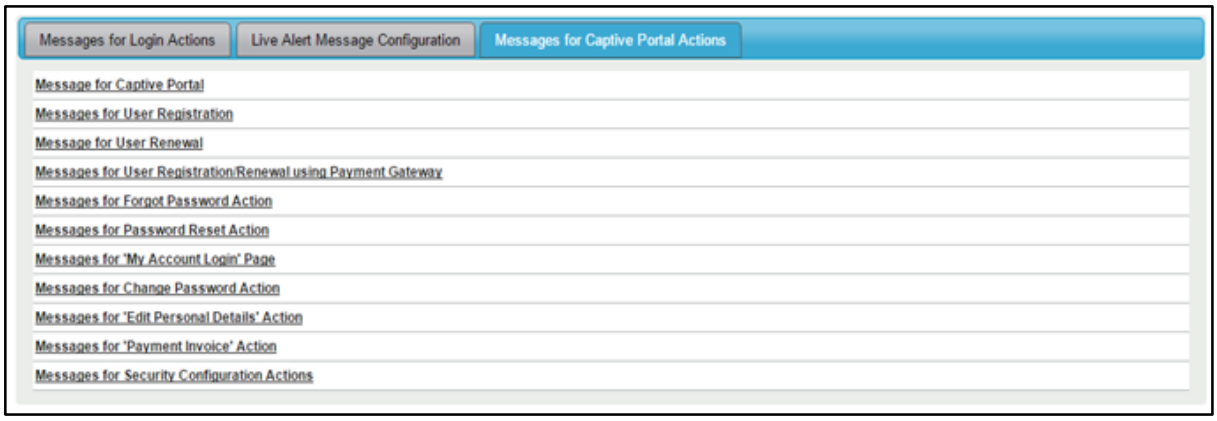

Figure: (d) Messages for Captive Portal Actions

Portal config

Configuration of Terms and Conditions, Favicon Icon, and Notes on Captive Portal Pages can be done from here. Select **System > Client Login Template > Portal Config**

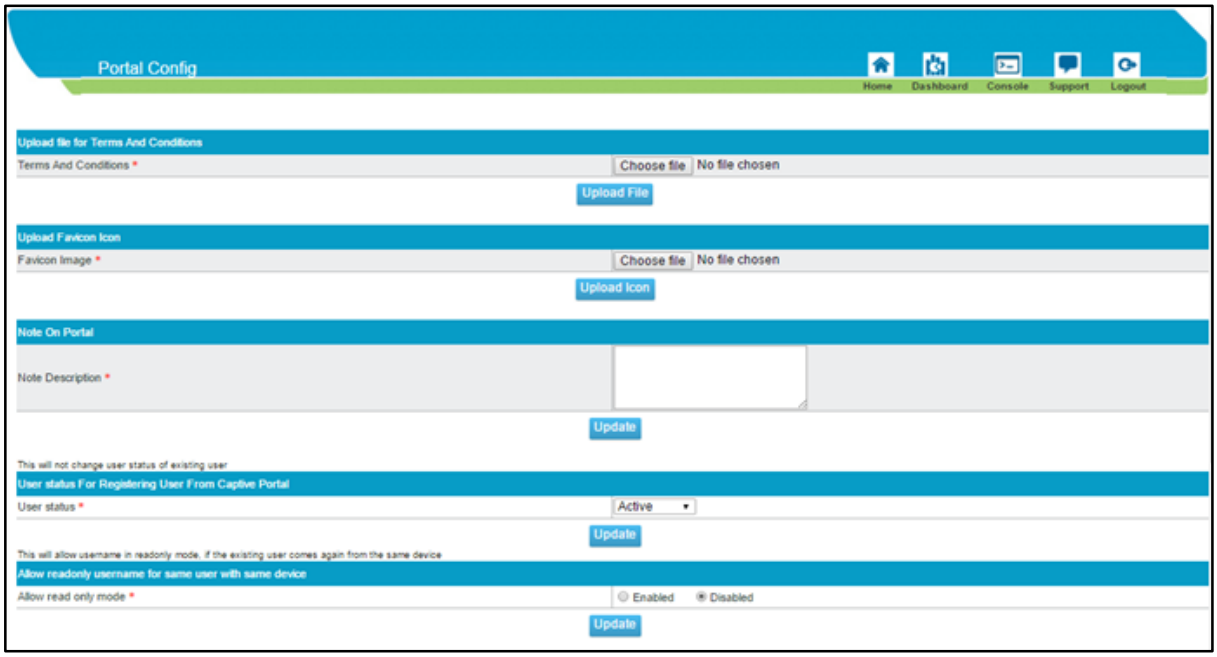

Figure: (a) Portal Config (½)

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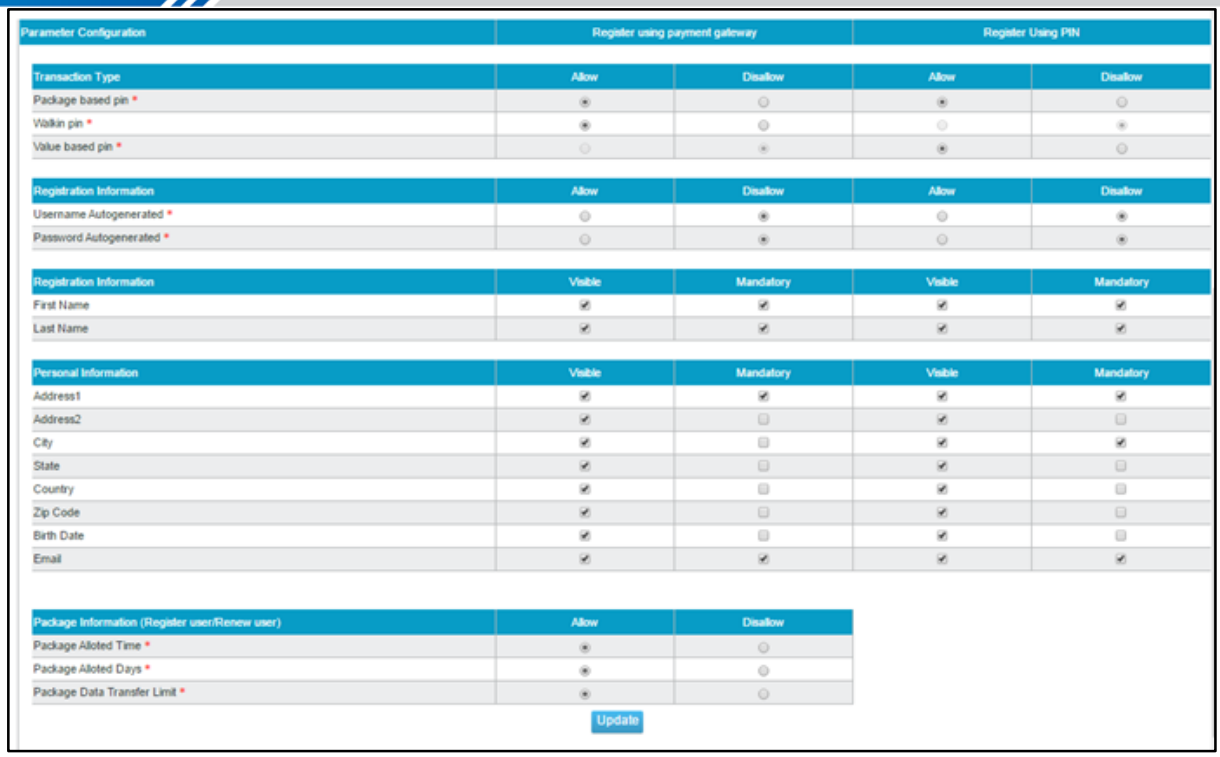

Figure: (a) Portal Config (2/2)

Portal Config	
Upload file for Terms and Conditions [Choose File]	Choose file which needs to be added on portal by clicking “Choose File” button. Click “Upload File” after selecting the file.
Upload Favicon Icon	Click “Choose File” and select a Favicon Icon which you desire to add on portal. Click “Upload Icon” after selection.
Note On Portal	Required note can be added here for portal. Click “Upload” button after adding a note.
User Status for Registering user from captive portal	The user status can be selected from here which will be applied when user is created through a captive portal page.
Allow read only username for same user with same device	Configuration for whether to enable or disable allowing use of existing username from the same device can be done from here.

Configure Profile

A new feature is introduced which facilitates admin to create different captive portal profiles and manage multiple realms for each profile. This feature will help admin to create captive portal profiles and configure realms with different prefix and postfix values.

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Create Realm

Select **System > Client Login Template > Configure Profile > Create Realm** to create realm as required –

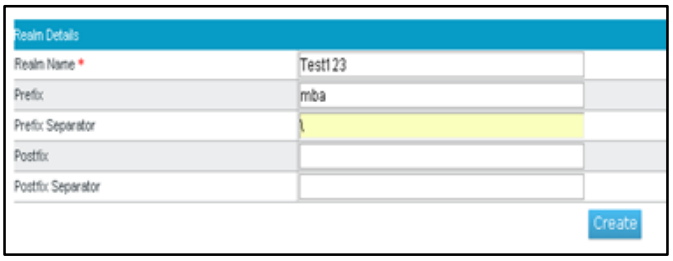

Figure: (a) Create Realm

Create Realm	
Realm Name	Enter required Realm Name here.
Prefix	Enter prefix text in this field
Prefix Separator	The prefix separator value is to be entered here.
Postfix	Enter postfix text in this field.
Postfix Separator	The postfix separator value is to be entered here.

Manage Realm

Select **System > Client Login Template > Configure Profile > Manage Realm** to view realm's along with its details or to edit/delete them as required –

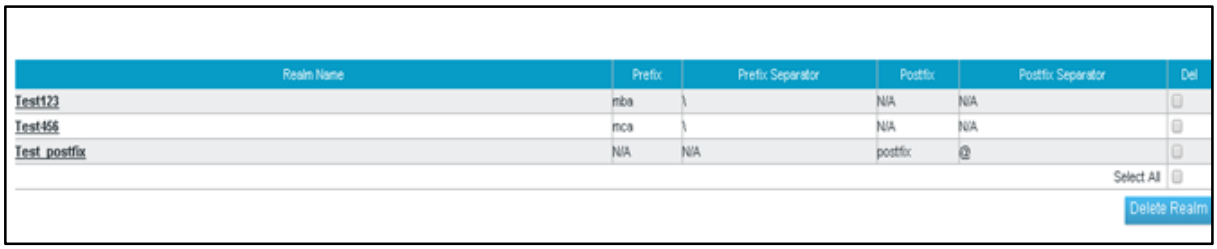

Figure: (b) Manage Realm

To edit and update realm, click on Realm Name value –

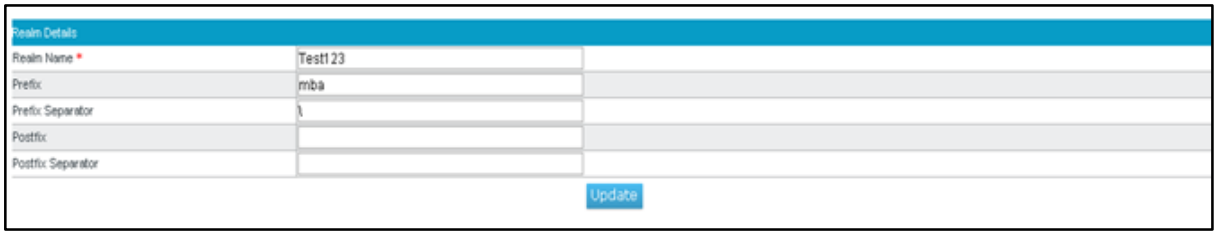

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Figure: (c) Update Realm

Manage Realm	
Realm Name	The realm name is displayed here. Click on 'Realm name' text to edit that realm.
Prefix	Prefix text of the realm is displayed here.
Prefix Separator	Prefix separator value of the realm is displayed here.
Postfix	Postfix text of the realm is displayed here.
Postfix Separator	Postfix separator value of the realm is displayed here.

Create Profile

After creating necessary realms, create captive portal profile with necessary configuration from **System > Client Login Template > Configure Profile > Create Profile** –

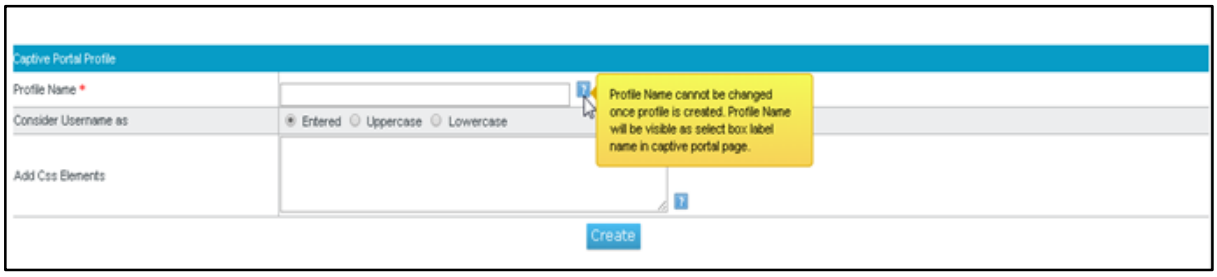

Figure: (d) Create Profile

Create Profile	
Profile Name	Enter required captive portal profile name here. The profile name entered has to be configured manually in Dynamic element of Client Login Page. The captive portal label will show the Profile name entered here.
Consider Username as	The username entered can be considered as 'as entered', 'uppercase', or 'lowercase' as required. The selection can be done from 3 options available here.
Add CSS Elements	The CSS elements if required can be entered here. With this, combo boxes style displayed in captive portal page can be changed as needed.

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On creating captive portal profile, the below window will open from where realms as needed can be added in the profile. On adding realms and updating the profile, it would appear in the captive portal login page.

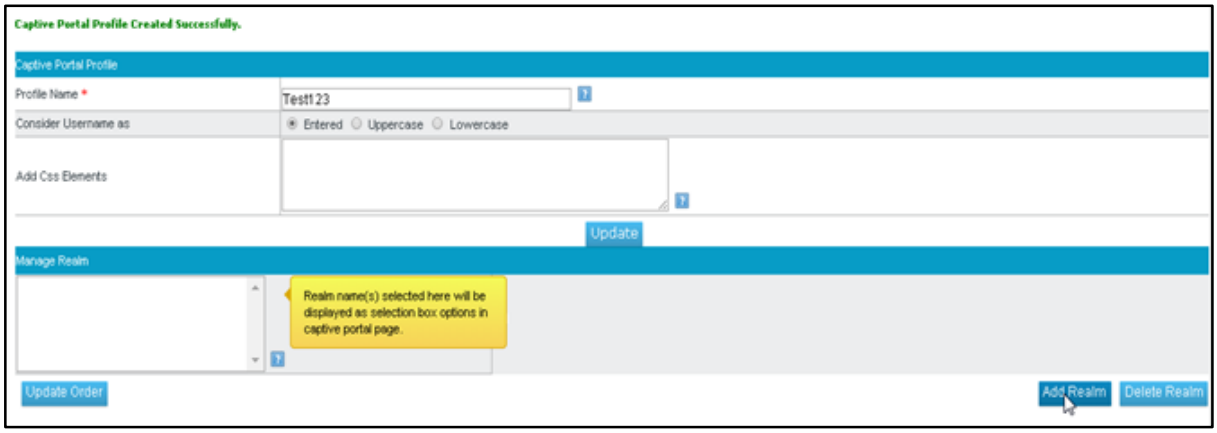

Figure: (e) Create and update profile

Create and Update Profile	
Profile Name	Enter required captive portal profile name here.
Consider Username as	The username entered can be considered as 'as entered', 'uppercase', or 'lowercase' as required. The selection can be done from 3 options available here.
Add CSS Elements	The CSS elements if required can be entered here.
Manage Realm	The required realms can be added here in the profile. Add realm by clicking 'Add Realm' button. The order of the realms added can be updated from upper arrow and lower arrow buttons available.

Manage Profile

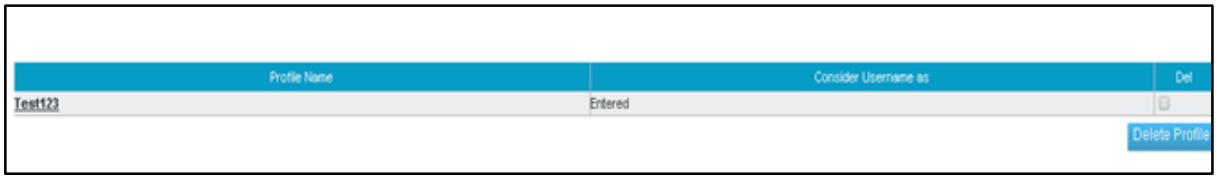

Figure: (f) Manage Profile

Manage Profile

Profile Name	The captive portal profile name is shown here. Click on captive portal profile name to edit and update the profile.
Consider Username as	The considered username value selected for the profile is shown here.
Del	Select the checkbox of this column to delete the profile from the system.

Security Configuration

OTP and Captcha based security configuration can be done from this menu section. This configuration can be done for user registration and user login actions.

Note:* SMS gateway module registration is required to send OTP via SMS.

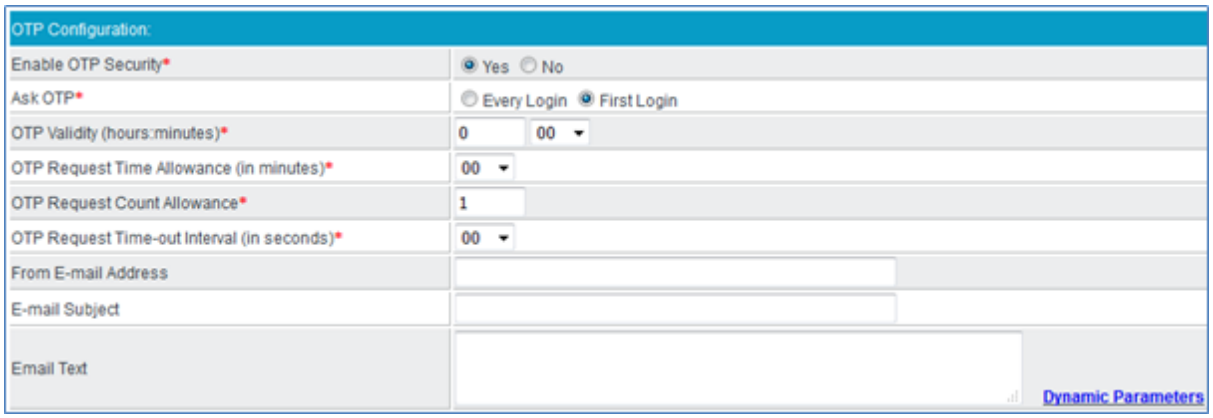

Figure: (a) Manage Security Configuration

	Manage Security Configuration
Operation Type	Select operation type from the drop down menu for which security configuration needs to be done.
Enable OTP Security	Select "Yes" checkbox option for enabling OTP security configuration for the operation type selected.
Ask OTP	To enable OTP every time when guest logs in, select 'Every Time'. To enable OTP security only when guests logs in for first time, select 'First Time'.
OTP Validity (hours: minutes)	Select Hours: Minutes value from the drop down to configure validity of the OTP.
OTP Request Time Allowance (in minutes)	Select number of minutes time value for allowing OTP request.

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OTP Request Count Allowance	Enter OTP count to be allowed for each request.
OTP Request Time-out Interval (in seconds)	The time out interval value has to be entered here for the OTP request.
Message Text	The message text for the alert message has to be entered here.
Enable Captcha Security	Select "Yes" checkbox for enabling Captcha security configuration for the operation type selected.
From email address	Provide the email address from which email address of OTP will be sent. (Customer will need to configure SMTP settings for the email).
Email Subject	Provide the subject of email that will be sent to guests.
Email Text	Provide the message body or text that will be sent as email.

Dynamic Parameters

- {Security Code}: One time password
- {Username}: Username

Use the parameter as it is in email text or subject. 24online will replace the code with one time password.

Social Media Config

A new feature is commenced with X.3.7.2.0 version, which facilitates to allow end-users login via their social media accounts credentials.

With this feature, users can login via their Facebook, Instagram, Twitter, Google+, Yahoo, LinkedIn, or Pinterest account credentials. Configuration for different social media platforms enabling this feature can be done from here as shown in below screen –

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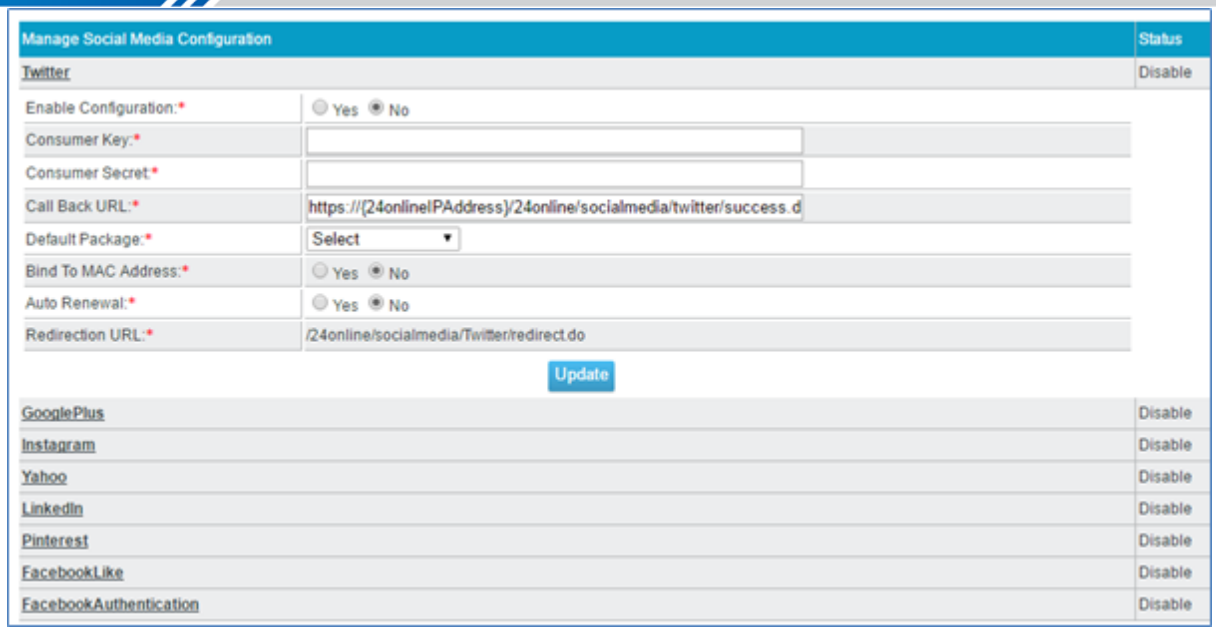

Figure: (a) Social Media Configuration

Social Media Configuration	
Enable Configuration	To enable configuration for particular social media platform, select 'Yes' from the option. To disable, select 'No'.
Consumer Key	The consumer key available while creating a social media application needs to be entered here for configuration.
Consumer Secret	The consumer secret available while creating a social media application needs to be entered here for configuration.
Call back URL	The call back URL needs to be entered here.
Default Package	The default package to be configured with the social media login needs to be selected from the drop down menu options.
Bind To MAC Address	To enable or disable 'Bind To MAC Address' option needs to be configured from here.
Auto Renewal	To enable or disable 'Auto Renewal' option needs to be configured from here.
Redirection URL	The redirection URL is configured here. Use the unregistered domain name to construct URL.

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CP Registration Policy

A new policy type is introduced in X.3.7.3.0 version – Captive Portal Registration Policy [CP Registration Policy]. A policy for MAC registration flow and/or Self-registration flow can be created from here as per the requirements. These policies can be binded with Pool to successfully implement the configured registration flow.

The policy can be created by entering necessary details as shown in below screen –

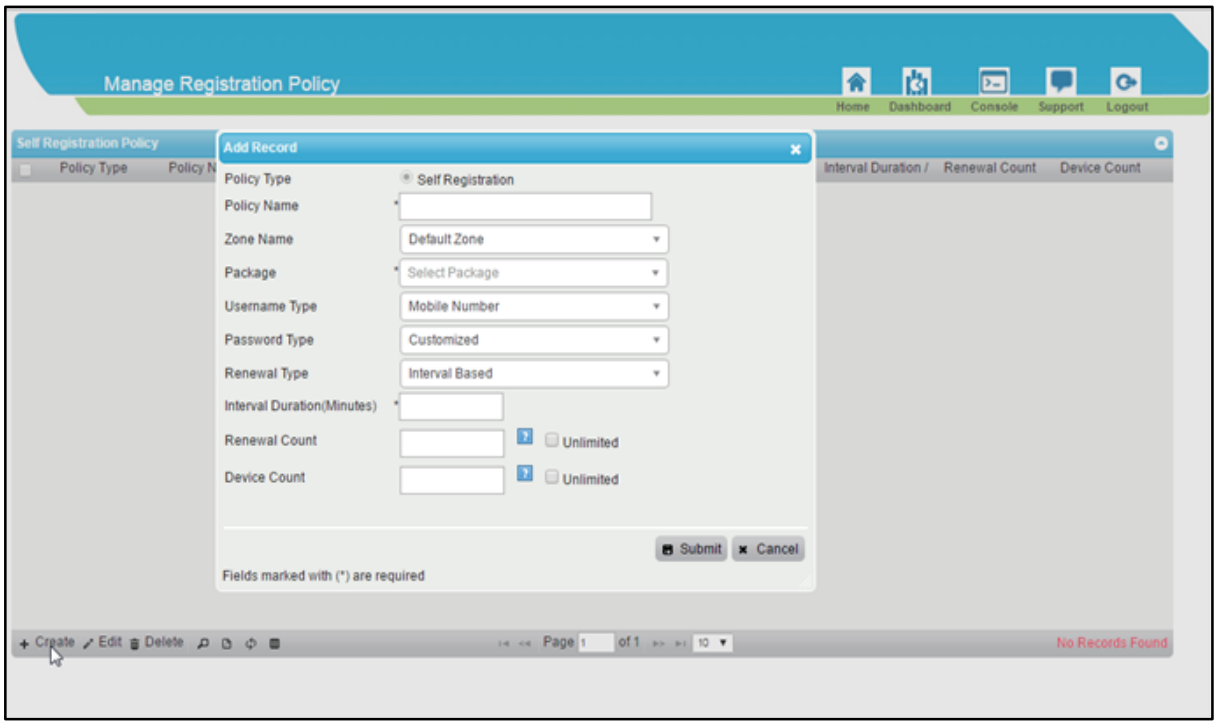

Figure: (a) CP Registration Policy Configuration

CP Registration Policy	
Policy Type	Select CP registration policy type from here. The two options available are – Self Registration flow and MAC Registration flow.
Policy Name	Enter the required name for the policy.
Zone Name	Select Zone name from the drop-down list.
Package	Select the package for this configuration.
Username Type	Select the required username type from the drop down list. The option selected here will be considered as username for the users.
Password Type	Select the required password type from the drop down list. The option selected here will be considered as password for the users.
Renewal Type	The renewal type of the package can be selected from the drop

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	down list.
Interval Duration	The duration for which user will not be allowed to renew
Renewal Count	The total number of count for user renewal to be allowed needs to be configured here.
Device Count	The number of count to be allowed for user registration or renewal for one device needs to be configured here.

On successfully creating a policy, this policy can be binded with pool from Pool Management menu section to effectively implement the configured registration flow.

NAS Management

24online provides flexible solution that is easy to install and easy to use. 24online is capable of acting as NAS acting as a single point of access to the all users in the network. By acting as a gateway guard to protected resource, 24online server sends the entire login requests received from the end users to external RADIUS for confirmation of credentials received are valid or not. Based on the reply received from the external RADIUS, 24online allows access to the end user. 24online is offered with default setup, you are free to further modify or configure the server as per your requirements.

NAS IP Configuration

For NAS IP Configuration, select **System > NAS Management > NAS IP Configuration** from GUI menu:

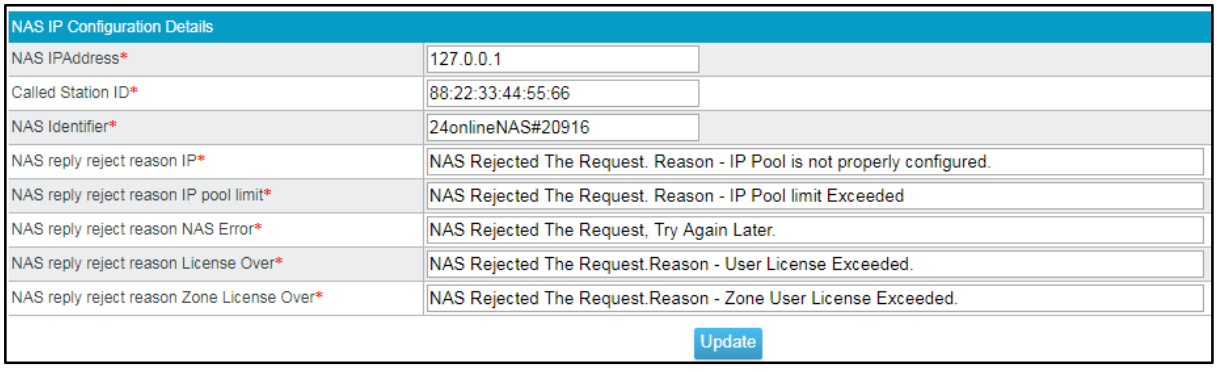

Figure: NAS IP Configuration

NAS IP Configuration	
NAS IP address	Displays IP assigned for the NAS server i.e. 24online. Modify if required
Caller station ID	MAC ID of the NAS server. Modify if required

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NAS identifier	In-case of multiple NAS network, each NAS is given an identifier. Every user request from different NAS is sent with the identifier so that it can be easily identified. The NAS identifier is the unique identity ID defined for each NAS
NAS reply reject reason IP	Displays the message shown to users attached with this NAS, when the NAS rejects any IP address. You can modify the message as per your requirements.
NAS reply reject reason NAS error	Displays the message shows to users attached with this NAS when the NAS rejects user request due to some NAS error. You can modify the message as per your requirements
NAS reply reject reason license over	Displays the message shown to users attached with this NAS, when the number user license is exceeds than the offered
NAS reply reject reason zone license over	Displays the message shown to zone manager/operator when the zone module license is expired in 24online system

RADIUS Configuration

24online offers default global radius configuration required for immediate plug-n-play. Default configurations can be modified as per your requirement, but cannot be deleted from the system. You can add additional global radius using the options given in this page.

To configure additional global Radius, select **System > NAS Management > Radius Configuration** from GUI menu:

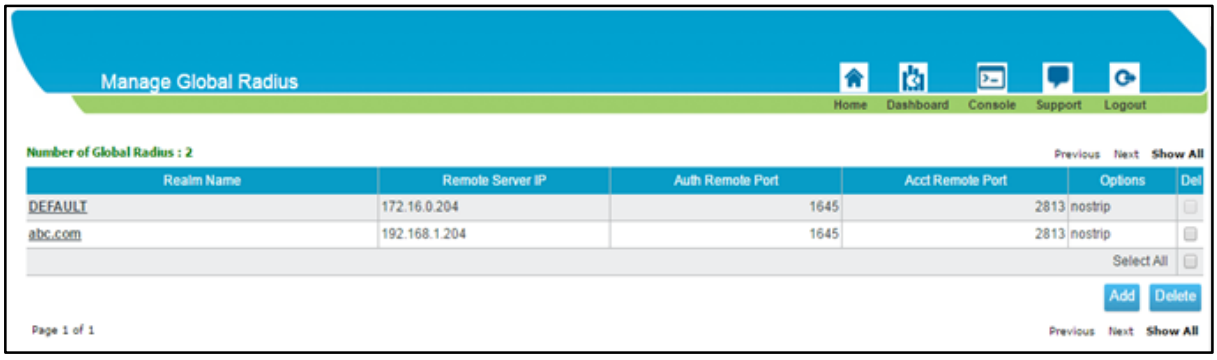

Figure: (a) Global RADIUS Configuration

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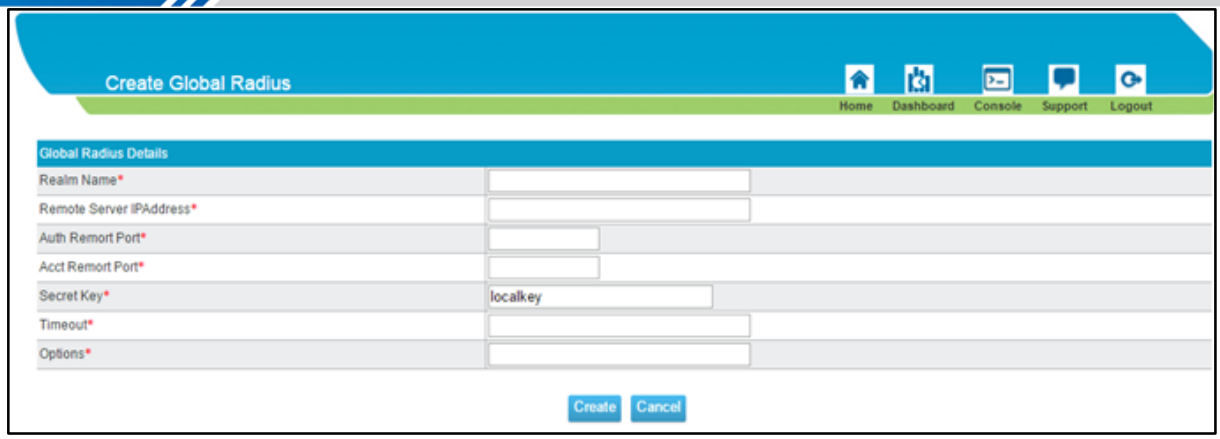

Figure: (b) Global RADIUS Configuration

Global RADIUS Configuration	
Realm Name	Specify realm name i.e. part of the login name
Remote Server IP address	Specify remote server IP address of the RADIUS with which 24online communicates
Remote Port	Define the port number using which all request received from the remote server will be catered
Secret Key	For Radius and NAS communication define the secret key of the NAS/RADIUS
Time out	Configured radius timeout will be considered to notify the client. I.e. if 2000 mili sec (2 sec) is configured and radius does not reply by 2 seconds NAS will sent the time out request.

NAS Configuration

24online offers default radius client configuration required for immediate plug-n-play. Default configurations can be modified as per your requirement, but cannot be deleted from the system. You can add additional radius clients using options given in this page.

To configure Radius-Client, select **System > NAS Management > NAS Configuration** from GUI menu:

Figure: (a) NAS Configuration

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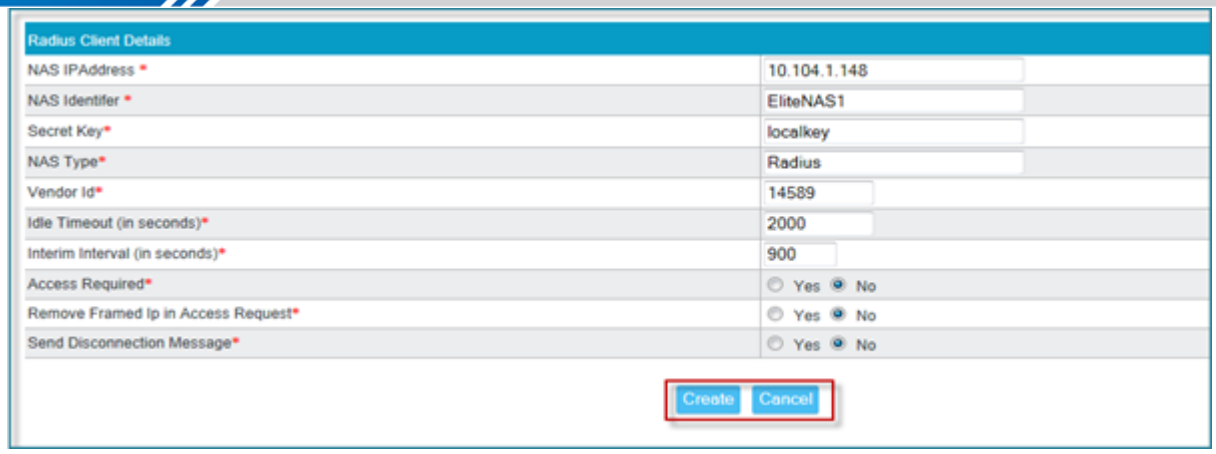

Figure: (b) NAS Creation

NAS Creation	
NAS IP address	Specify the IP address of the network access server to be added in the system
NAS Category	Displays the type of NAS
NAS Identifier	Define the unique identifier assigned for the NAS
Secret Key	Define the secret key of the NAS using which the RADIUS server and NAS can communicate with each other
NAS Type	Define the NAS type in the text box
Vendor Id	Define the vendor ID of the NAS
Idle Timeout(sec)	Define the idle time out for NAS, after which the communication will be stopped
Interim Interval(sec)	NAS sends a request the Radius, in an interval of time to check whether the RADIUS is in active mode to communicate or not. The interval of time for request is known as Interim. Define the interim (in seconds) in this parameter
Access Required	Define the access privileges
Remove Framed IP in access request	Define whether you want to remove the framed IP with every request or not
Send Disconnection Message	Define whether you want to send disconnection message or not

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Preferences

Network Access Server (NAS) preferences includes parameters required to configure any access server in the system. If 24online is acting as a RADIUS, and needs to communicate with any third party access (TPA) server, in such case the necessary details of the TPA NAS has to be defined in the following parameters.

NAS preferences are by default configured by 24online while deploying the solution. In-case of requirement, you are free to modify the configurations as required.

To modify NAS preferences, select **System > NAS Management > Preferences** from GUI:

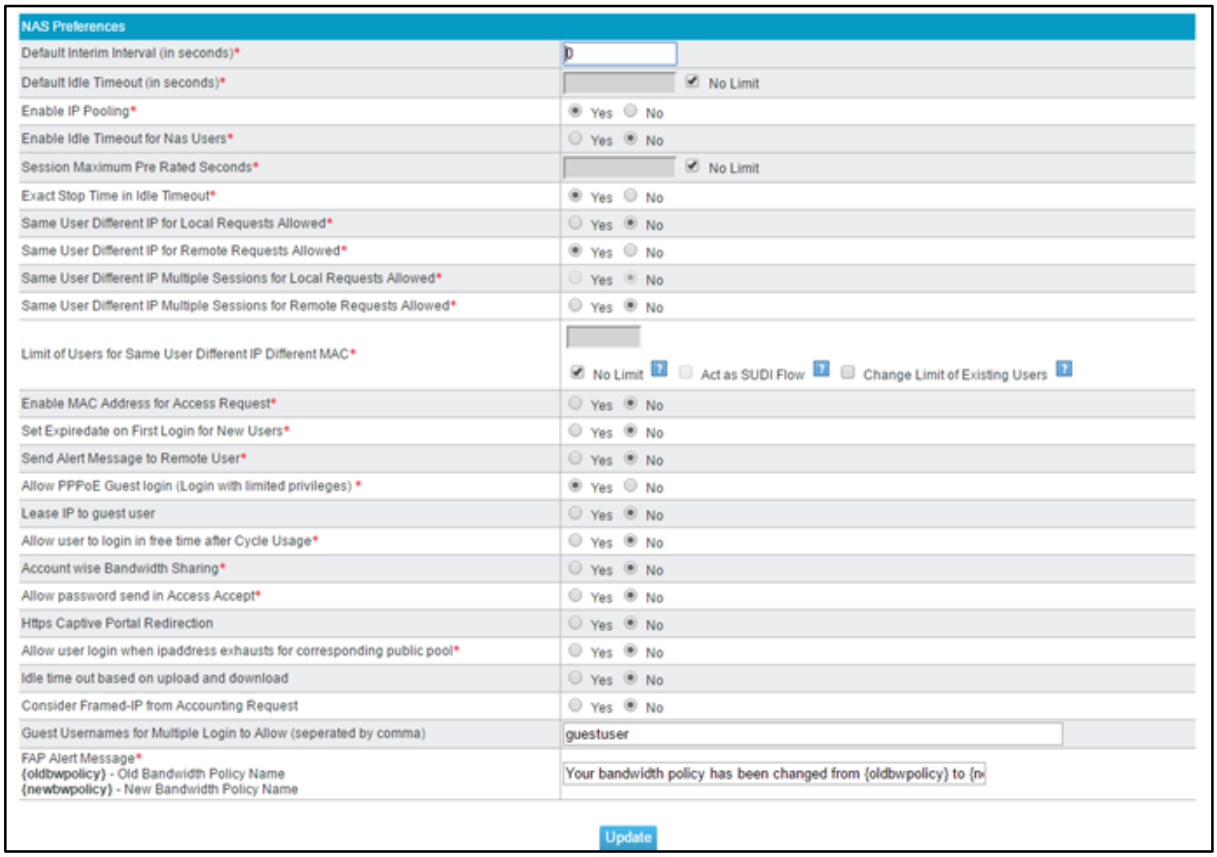

Figure: NAS Preferences

NAS Preferences	
Default interim interval	Time-period defined to generate communication between NAS and RADIUS. Interim needs to be defined in seconds. As per the defined time limit, both the servers will keep communicating with each other.

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Default Idle Timeout	Time-limit defined to disconnect the connection when access server stops communicating due to any reason. Idle time out should be defined in seconds. After the defined time limit, if the communication request is not accepted by NAS server, RADIUS will automatically disconnect the connection and consider it is failed request. In such case, user connected through the same NAS will be also be disconnected by the RADIUS
Enable IP Pooling	Select **'Yes/No'**. Only on allowing IP pooling you will be able to manage pools efficiently
Enable Idle Timeout for NAS users	Default Idle time out is the time limit defined to disconnect the user from the NAS, when there are no packets received from the user machine. The default limit defined by 24online is fifteen minutes. You need to select an appropriate option whether the system should logout the user while experiencing idle time out. To enable select '**Yes**', if not, select '**No**'
Session Maximum Pre-rated	Displays maximum session timeout defined for users. (-1 indicates maximum time allowed for user session)
Exact stop time in idle timeout	Resource monitor which keeps the track of user active status is an inbuilt application. It runs every 15 min to check the live status. In-case of no packets received from user during the interim, the resource manager intimates the idle time out experienced. Select **'Yes/No',** whether the system should disconnect the user when resource manager gets the update or immediately when the NAS experiences the idle timeout.
Same User different IP for Local Requests allowed	When 24online is configured in multimode Status, it generates both Radius and NAS requests; specify whether you want to allow same user request with different IP addresses.
Same User different IP for Remote requests allowed	When 24online is configured in distributed mode; specify whether you want NAS to allow same user sending surfing request with different IP addresses. When 24online is configured in multimode, select appropriate option to allow same user sending surfing request from different IP address.
Same User different IP Multiple Sessions for local requests allowed	
Same User different IP Multiple Sessions for Remote requests allowed	When 24online is configured in distributed mode, select appropriate option to allow same user sending surfing request from different IP address and different MAC *Define the number of users you want to allow with same user different IP and different MAC.* If you do not want to limit the users, select the check box '**No Limit**'. If you want to act as Same User Different IP flow, select the '**Act as SUDI Flow**' check box. If you want to assign the entered limit value to all members, select the checkbox '**Change Limit of Existing Users**'.
Limit of users for same user different IP different MAC	
Enable MAC Address for Access Request	Select whether you want to enable MAC ID of the user on access request.

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	Select 'Yes' to enable MAC address and select 'No' to disable.
Set Expire date on First Login for New User	To set expiry date of the user account on first login request, select '**Yes**' to allow and '**No**'.
Send Alert Message to Remote User	To send alert messages to live users i.e. welcome messages, error messages etc. To enable select '**Yes**' and to disable select '**No**'
Allow PPPoE Guest Login (Login with limited privileges)	24online provides administrator options to allow/disallow guest users to connect to 24online server. Users can be given limited privileges. With help of limited privileges, a guest user can Top-Up/Renew his account, 24online PPPoE allows tunnel-establishment till 24online server. Though guest user is unable to surf internet, account can be renewed/Top-up.
Allow user to login in free-time after Cycle Usage	Cycle type is a form of restriction bind with the user package to control high usage. (*For detailed understanding please refer to **package management à cycle type***). In-case admin has offered free night usage, and user has already exhausted his total limits, then in such case should he be allowed to login. Select '**Yes/No'** as required**.**
Account-wise Bandwidth Sharing	Allow account-wise bandwidth sharing. Select **'Yes/No'**. This option allows same bandwidth policy applicable on account-id users. If **'No'** is selected then bandwidth will be shared amongst all total number of users logged-in the system. If '**Yes'** is selected then: **E.g.** Account-1 has two users user-A and user-B. Bandwidth policy 'B-1024' which has policy to provide 1024 Kbits is applicable on Account-1. When user-A logs-in, he receives 1024, when both user-A and user-B are logged-in at same-time, the bandwidth is shared amongst them i.e. they receive 512 Kbits each.
Allow password send in Access accept	When access-accept is received from RADIUS end, the password is send along-with all other details to NAS side for authentication purposes. Select **'Yes/No'** as requirement. (Applicable in-case of Multi-mode or NAS-RADIUS mode only)
Access Request On DHCP Lease	Define whether you want DHCP to generate access request on IP lease
Https Captive Portal Redirection	Define whether you want to redirect HTTPS traffic to captive portal or not
Allow User login when IP address exhausts for corresponding public pool	It provides a temporary IP to the user when IP addresses are exhausted from the pool.

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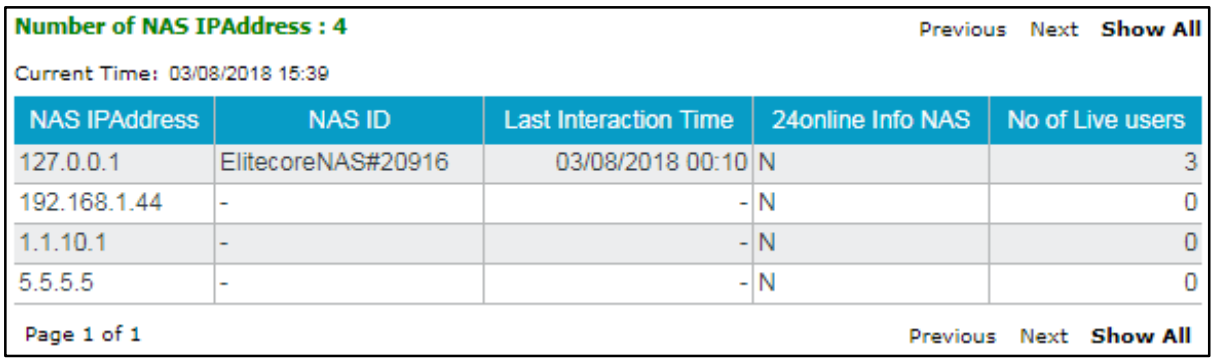
Guest Usernames for Multiple Login to allow(separated by comma)	In-order to connect unregistered PPPoE users to 24online; administrator can use the **'guest user'**. With the help of this option, any unregistered PPPoE user can register in 24online and select package(s) as suitable to his requirement. Multiple users can also login by using user's username and password as well as any user created in system can be converted into a guest profile. Guest user package information and login restrictions can be configured by using GUI
FAP Alert Message	Define the alert message to be shown on imposing the FAP policy on user account. (*For detailed understanding please refer to **package management à Fair Access Policy***) The message entered in the text box will be flashed on the user screen

Connectivity

With the help of this option you can understand the connectivity statistics of different network access servers in the network.

To view connectivity statistics, select **System > NAS Management > Connectivity** from GUI menu:



Number of NAS IPAddress : 4 Previous Next **Show All**

Current Time: 03/08/2018 15:39

NAS IPAddress	NAS ID	Last Interaction Time	24online Info NAS	No of Live users
127.0.0.1	ElitecoreNAS#20916	03/08/2018 00:10	N	3
192.168.1.44	-	-	N	0
1.1.10.1	-	-	N	0
5.5.5.5	-	-	N	0

Page 1 of 1 Previous Next **Show All**

Figure: NAS Connectivity Statistics

NAS Connectivity Status Fields	
NAS IP Address	IP address assigned to each NAS in the network
NAS ID	Unique NAS Identifier defined for each NAS
Last Interaction Time	date and time when the last request was served
24online Info NAS	Shows No/Yes (N/Y) if internal NAS is used
No. of Live Users	Score of users live in the network, against each NAS.

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Status Tracker

24online offers you an advance facility to add any device in the network connected to 24online. With the help of this feature, you can check the status of the device whether it is running active or not in single glance.

Add Device

To add any device, select **System > Status Tracker > Add Device** from GUI menu:

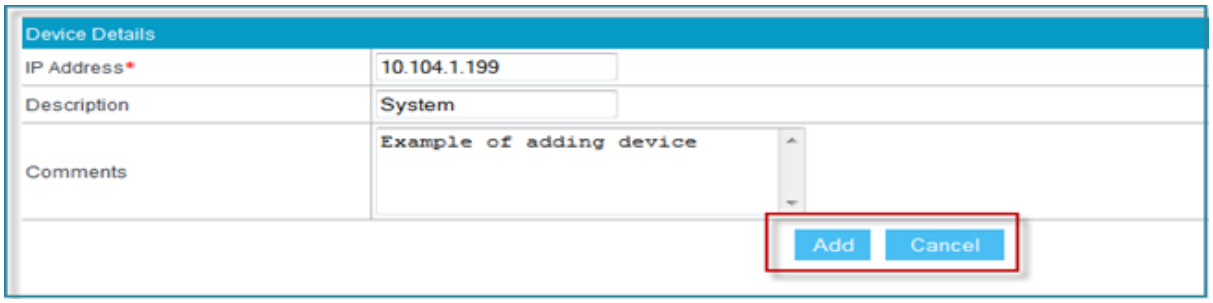

Figure: Add Device

Add Device	
IP Address	Define the IP address of the device you want to track status
Description	Define the name of the device, or specific information about the device that self describes it
Comments	Specify the details of the device in the comments box

Manage Devices

After creating one or multiple devices, you can view the complete list and status of each device from the manage page. The manage page not only offers you the status information but also offers the facility 'Delete' device from the list, that are unused. To manage device, select **System > Status Tracker > Manage Device** from GUI menu:

Figure: Manage Devices

Manage Device

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IP address	Shows list of IP assigned to each device added in the system
Description	Shows the name of the device or description of the device
Comments	Shows specific information about each device, specified while adding it
Status	Shows the status of each device: ○ If green sign, it means the device is active and running ○ If red sign, it means the device is de-active
Select	To add or remove devices from the list
Select All	To remove all devices in single click

Device Logs Details

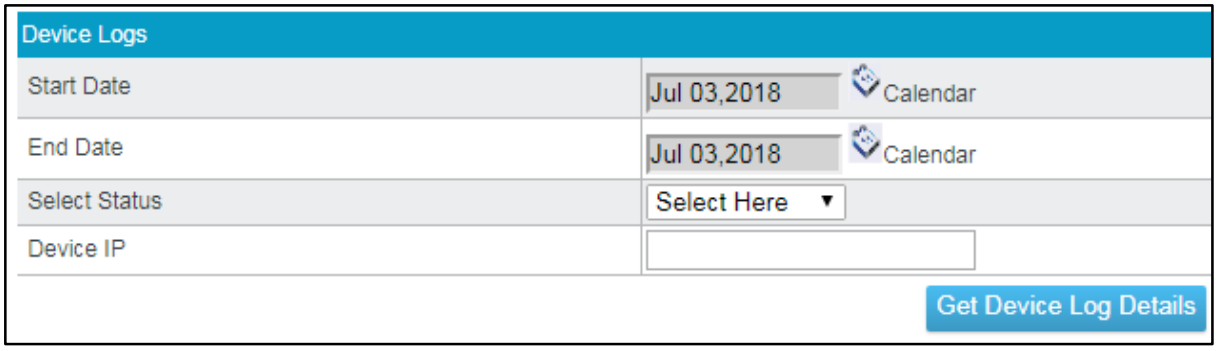

Figure: Device Logs Details

Device Logs	
Start Date	Select the start date for logs
End Date	Select the end date for logs
Select Status	Reachable: Shows the logs of system whose IP is reachable Non-reachable: Shows the logs of system whose IP is unreachable
Device IP	Shows the logs of specific IP address

System Settings

Current system settings page offers complete picture of the system in a single glance. Important information related to system configurations from different menu have been merged in single page to offer complete details in the same page. With the help of this information, one can easily understand the various configurations, CPU information or back-up status of the system.

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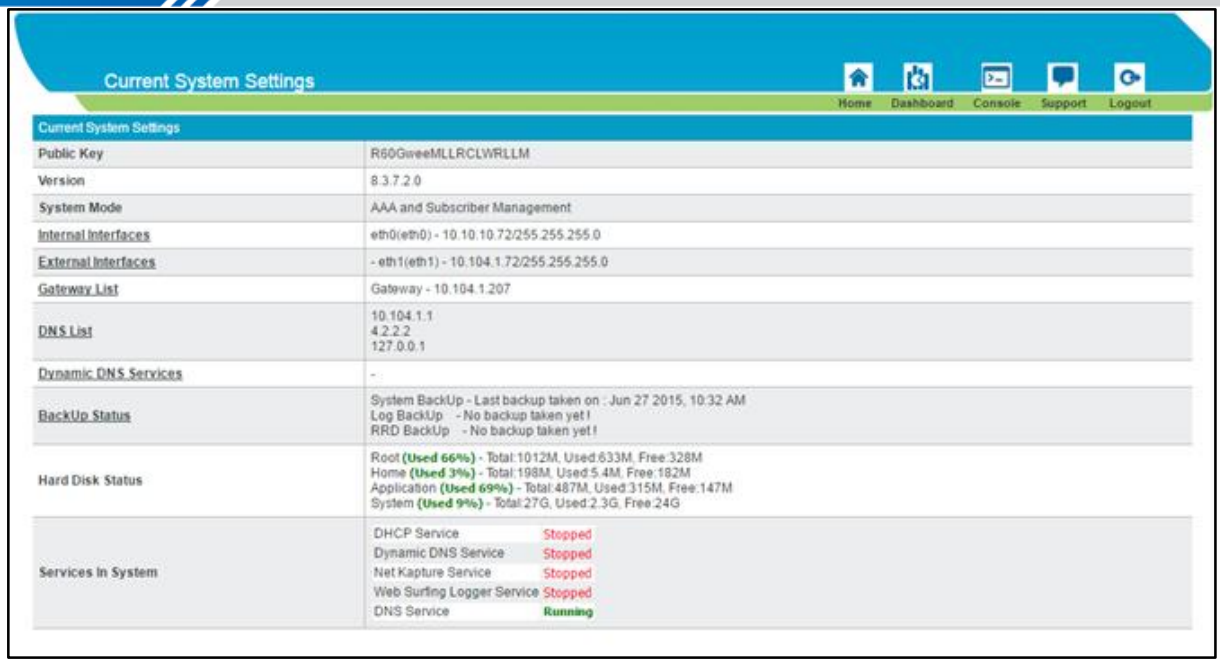

Figure: Current System Settings

Current System Settings	
Public Key	It's a unique identification number issued while production for each appliance
Version	It's the 24online software standard version offered
System Mode	24online is a flexible solution which can be configured into 3 different modes as per the requirement of the network, 1) AAA 2) Access Gateway 3) Single Box (AAA + Subscriber Management)
Internal Interfaces	This option displays the internal interface configured in the system. For updating the internal interfaces, you can click the '**Internal Interface**' and update the necessary information. For detailed information please refer to **System àNetworkàInterface (internal networks)**
External Interfaces	This option displays the external interface configured in the system. For updating the external interfaces, you can click on the '**External Interface**' and update the necessary information. For detailed information please refer **to System à NetworkàInterface (external networks)**

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Gateway List	This option displays the gateway of the network configured in the system. To update the gateway, you may click on the '**Gateway List**' and update the necessary information. For detailed information, please refer to **System àNetworkà Gateway**
DNS List	The option displays the DNS configured in the system. To update the DNS, click on the '**DNS List**' and update the necessary information. For detailed information, please refer to **System àNetworkà DNS**
Dynamic DNS Services	Displays the list of DNS added in the system. For detailed information, please refer to **System àDynamic DNS Service**
Backup Status	There are three types of backup that can be taken from the system like **System Backup**, **User Session Backup** and **RRD Backup**. Displays history of following backup taken from the system. For detailed information, please refer to **System à Manage data à Backup**
Hard Disk Status	Displays hard disk consumption details of the 24online system
Services in the system	Displays different services (servers) running in the system: ○ **Stopped** means the server has is in stopped mode ○ **Running** means the server is active and working in the system

Dashboard Config

Dashboard is a real time control panel, where admin can include widgets as per the requirement. There are maximum of five dashboards each with the facility of including System, Subscriber and Logger Widgets. To rename the dashboards select **System > Dashboard Conf**

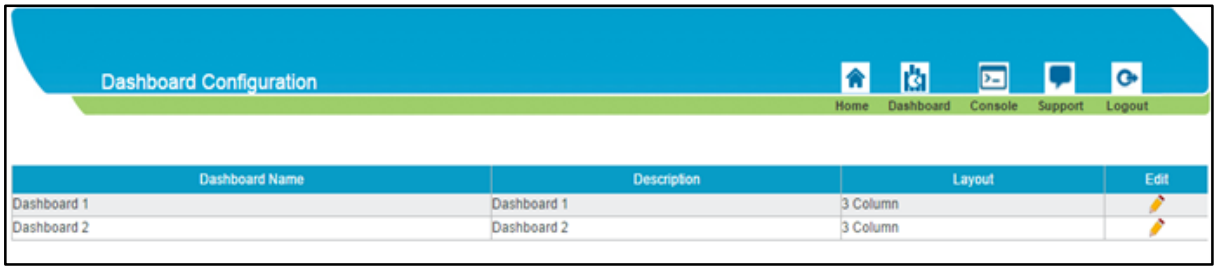

Figure: (a) Dashboard Configuration

Click on Edit to edit the dashboard configurations, as shown below:

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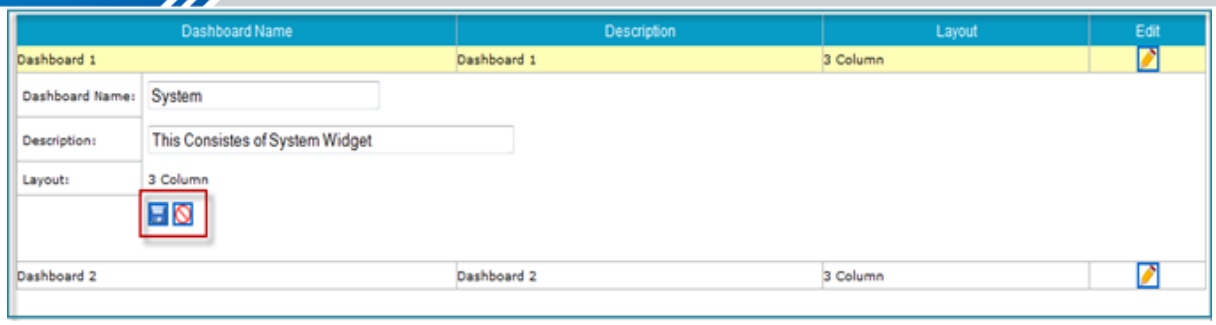

Figure: (b) Dashboard Configuration

Dashboard Configuration	
Dashboard Name	Displays the name of the Dashboard.
Description	Displays the description with respect to each dashboard.
Layout	Displays the predefined layout (i.e. 3 Column), Widgets will be divided in 3 columns in dashboard.

System Tools

System tools includes "**Packet Capture tool**", this tool analyses the packets that pass through the network.

Package Capture

To enter the details of packet go to **System > System Tools > Packet Capture** from 24online GUI. Admin can enter the Source and Destination host, Port, Mac, Network and packet size. Packets captured can be availed from "**Captured Packet Information**", which can be used for examining the network traffic.

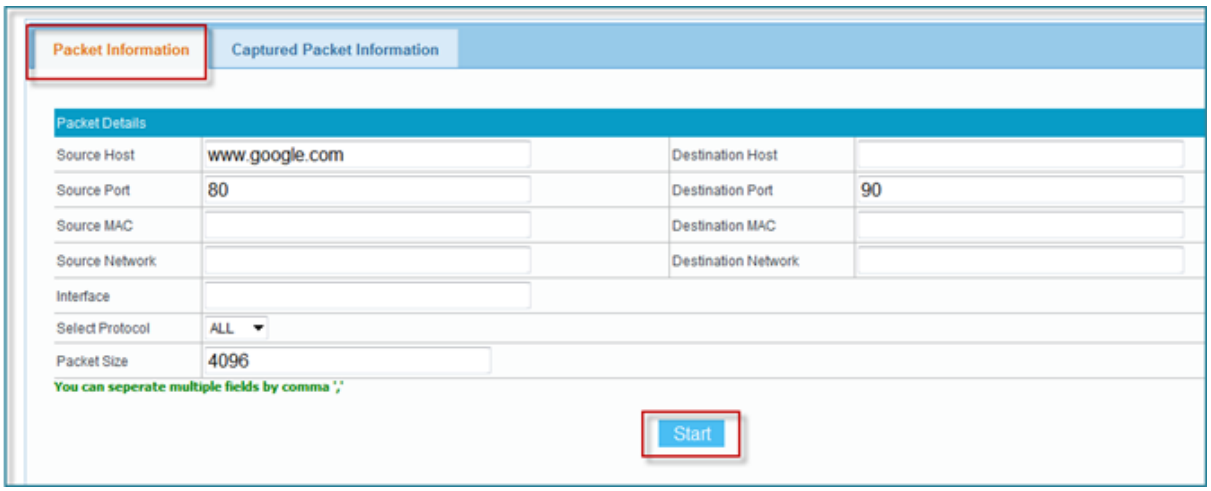

Figure: (a) Packet Information

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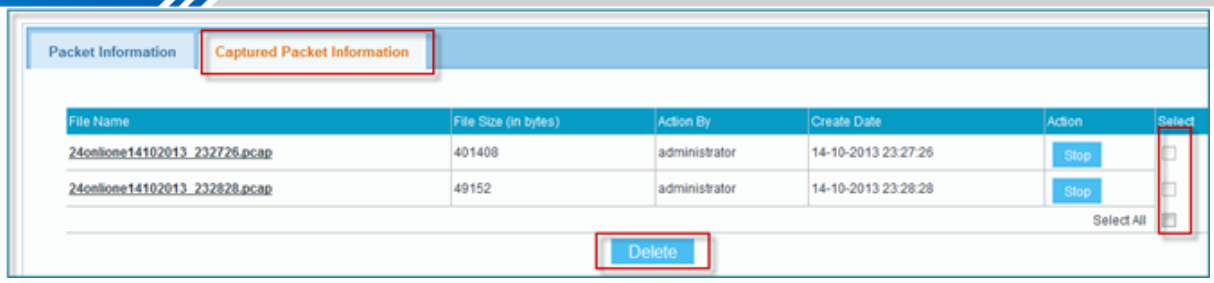

Figure: (b) Packet Information

Packet Capture	
Packet Information	
Source Host	Mention the source Host
Source Port	Mention the source Port
Source MAC	Mention the source MAC
Source Network	Mention the source Network
Interface	Mention the Interface
Select Protocol	Select the protocol from the drop down
Packet size	Mention the packet size
Destination Host	Mention the destination host
Destination Port	Mention the destination port
Destination MAC	Mention the destination MAC
Destination Network	Mention the destination Network
Start	Once entered details click on “start” button to capture the packets
Captured Packet Information	
File Name	Displays the list of captured Packets with extension .pcap (**Note*-** .PCAP file can be analyzed using packet analyzers application like wire shark, TCP dump etc.)
File Size	Display the size of captured file

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Action By	Displays the name of performer of the action
Created Date	Displays the timestamp of creation date against each captured packet
Select	Select against the mentioned check box to perform deletion actions

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Policy

Introduction

Policy management eases administrator's task to control bandwidth consumption of a user with the help of varied policies defined. Each policy(s) defined can have their own specifications. Different policies can be created from the range of facilities provided by 24online GUI e.g. surfing quota, access time, bandwidth, data transfer, schedule and fair access policy. Admin can mix and match the available policies and cater user demands. Varied policy creation and management is assisted. There are six different policy types in 24online:

- Surfing Quota Policy
- Access Time Policy
- Bandwidth Policy
- Data Transfer Policy
- Schedule Policy
- Fair Access Policy (FAP)

We shall first understand the configuration and management of each policy and combine them into a package.

Note:

- **Fair Access Policy (FAP) and Data Transfer Policy are add-on modules**
- **For add-on modules refer to add-on guides**

Surfing Quota Policy

Surfing quota is a set amount of web-browsing period defined for a user that he may generate in a day/week/month. It allows you to define time based policy where you can define duration of surfing days and time.

User is automatically disconnected by system when defined day and time limit exhausts. System also facilitates to define cycle types. With the help of this facility you can define per day/week/month limit in the policy. With per day/week/month cycle, user will be limited to access internet for specific time limit per day/week/month. Different types of time based policies and different cycle types can be created in the system as well as multiple users can share single policy.

For Example:

- 50 Hours, 30 days – Gives access for 50 hours to be used within 30 days
- 100 Hours, Unlimited days – Gives access for 100 hours for unlimited days
- Unlimited time for 30 days – Gives unlimited access for 30 days
- Unlimited Policy – Gives access for unlimited time & days

Note:

- **Pop wise policies can be created. You can avail this facility by engaging Pop Management module. Pop management is an add-on module.**
- **Kindly register with 24online**

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Create (Time-Based/Surfing Quota Policy)

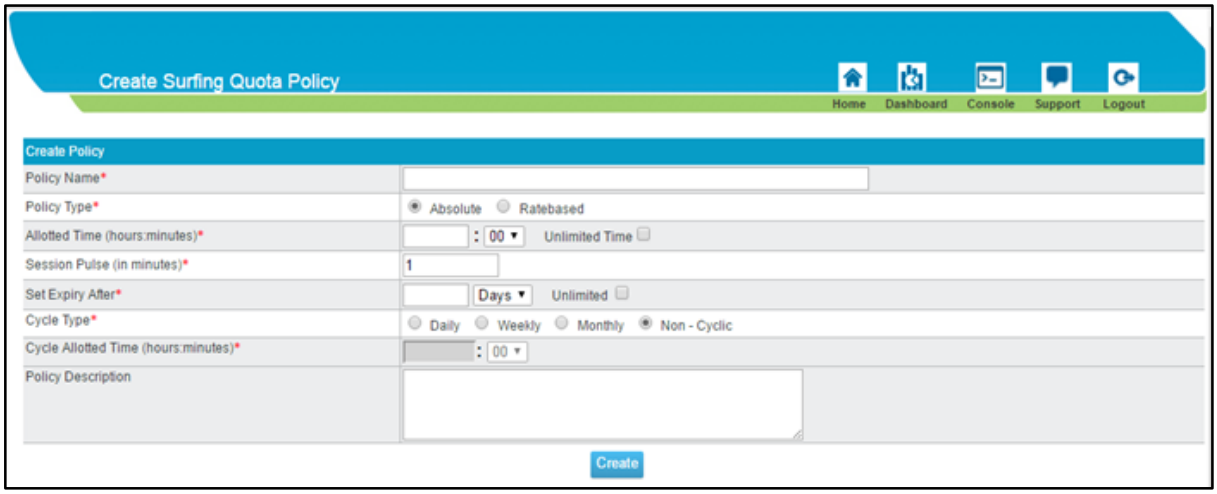

Figure: Create Time Based Policy

Create Time Based Policy	
Policy Name	Name of policy you want to create in the system
Policy Type	**Absolute Policy** is a pre-paid policy which has allotted time and days for expiry **Rate Based Policy** is a post-paid policy in which the user is charged on basis of pulse defined
Allotted Time	Restricts surfing hours of the user. Specify hours and min. 24online accepts inclusion upto 4 digits for allotted time.
Session Pulse	Pulse is the unit by which the usage of a user is measured e.g. If pulse rate is defined as 2 minutes per session and price per session pulse is Rs. 1.20 then user will be charged Rs. 36 per hour
Set Expiry After	Define expiry day or time limits here which will be considered by the system at the time of disconnected user. If user is not to be restricted by number of days or time limit, select **'Unlimited'.** They will be disconnected only on exhaustion of surfing hours
Cycle type	**Daily'** restricts daily internet usage of a user by specifying allotted number of hours **'Weekly'** restricts weekly internet usage by specifying allotted number of hours **'Monthly'** restricts monthly internet usage by specifying allotted number of hours **'Non-Cyclic'** avoids any type of restriction on the usage of a user
Cycle Allotted Time	Can be used in combination with selected Cycle Type (This box will appear only on selecting any of the cycle type option like daily/weekly/monthly)
POP Name	Select POP Name from the drop down menu

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Description	Provide description if required

Manage (Time Based/Surfing Quota Policy)

Use 'Manage Time based policy' to view complete list of policies created in the system. It's a user-friendly page that allows you to update any information in the existing policies. For simple changes or modifications, you need not re-create another policy in the system. It not only offers you the facility to modify existing policies but also with the help of 'Delete' option, you can remove unused or erroneous policies from the system.

To manage, select **Policy > Surfing Quota > Manage** from GUI menu:

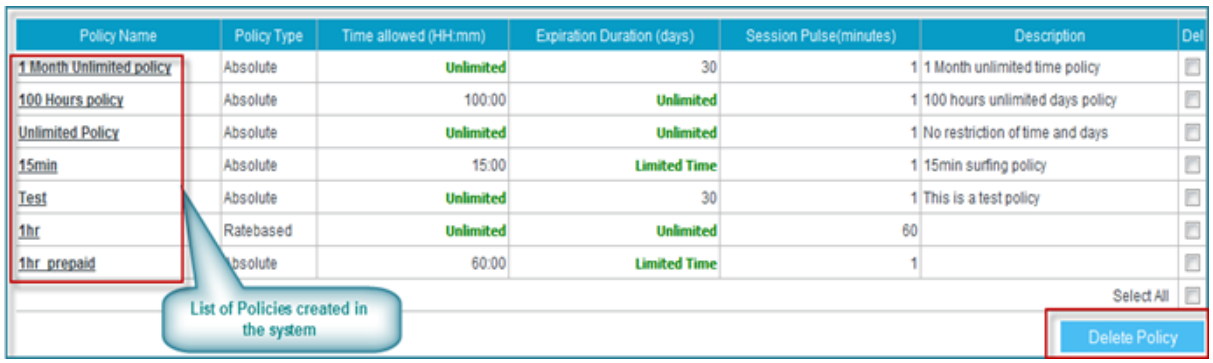

Figure: (a) Manage Surfing Quota Policy

Manage Surfing Quota Policy	
Policy Name	Displays the names of policies created in the system
Policy Type	Shows the type assigned to each policy while creation
Time allowed	Shows the actual surfing hours allowed in each policy
Expiration duration	Shows the number of days allowed in each policy i.e. after the defined number of days; the policy automatically considers that user account has expired and disconnects the user
Session pulse	Shows the unit of pulse defined against each policy name
Description	Shows the information provided while creating the policy
Select	To delete any policy from the system

Note: The policies which are attached with any package cannot be deleted from the system. You can only delete a policy when it is removed from that package.

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- To modify, click on the policy name from the Manage page
- System will open the information in separate page, where you can view the complete details, as show in the above screen

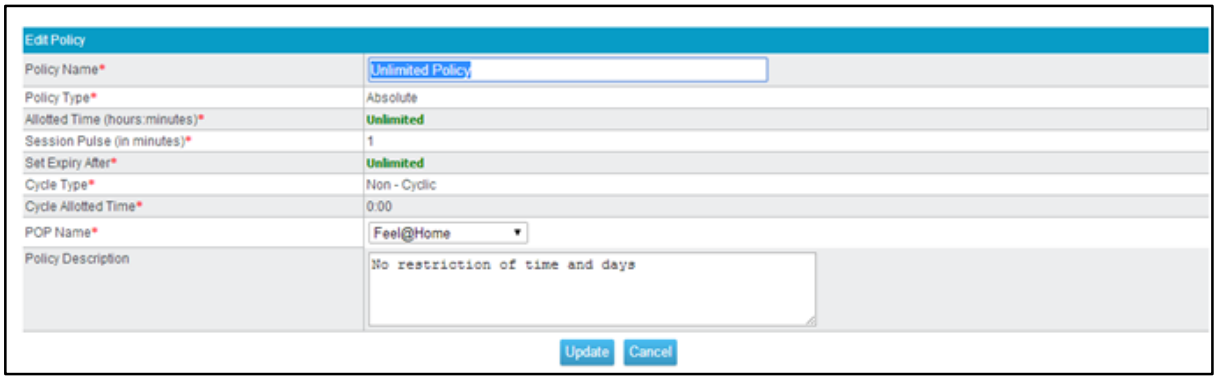

Figure: (b) Manage Surfing Quota Policy

Surfing Quota Policy details	
Policy Name	Displays policy name, modify if required. Specify the name you wish to select for the policy that best describes it
Policy Type	Displays the type of policy selected while creating. Policy type cannot be modified once selected
Allotted Time	Displays the surfing time defined for the user in hours and minutes
Session Pulse	Displays defined number of pulse
Set Expiry After	Displays expiry limit of the user
Cycle Type	Displays the cycle type defined while creating the policy
POP Name	Shows POP Name defined while creating the policy
Policy Description	Include description, if required

Note: Any of the above mentioned policy information can be modified or updated only when the policy is NOT attached with any package.

Access Time

Access time policy is where admin can govern different time bands along-with different pricing factor. The pricing factor is calculated on percentile value i.e. from morning 6:00 AM to evening 6:00 PM you can define 'X' % pricing factor and from 6:59 PM to morning 5:59 AM 'Y' % pricing factor. Access time policy also allows adding discounts and charges on specific time bands.

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User will be charged as per the pricing factor defined for different time bands. 24online system automatically changes its billing cycle as per the time defined in the policy. Different types of policies with different time bands can be created in the system and number of users can share the policy.

For Example:

• **Night Hours Access Only** – Surf only during the night hours from 21:00 PM to 9:00 AM at 50 % pricing factor. Suppose user has created a session of 1 hour, the surfing time calculated by the system would be shown as 30 minutes (considering the 50% pricing factor). Automatically in other time bands, the system will calculate default pricing factor as configured.

• **Day Hours Access Only** – Surfing only during the day hours from 9:00 AM to 21:00 PM at 150 % pricing factor. Suppose user has created a session of 1 hour, the surfing time calculated by the system would be shown as 1 hour 30 minutes (considering the 150 % pricing factor). Automatically in other time bands, the system will calculate default pricing factor as configured.

Similarly, you can define different policies considering the peak hours, weekends, festivals etc.

Create

Select **Policy > Access Time > Create** from GUI menu:

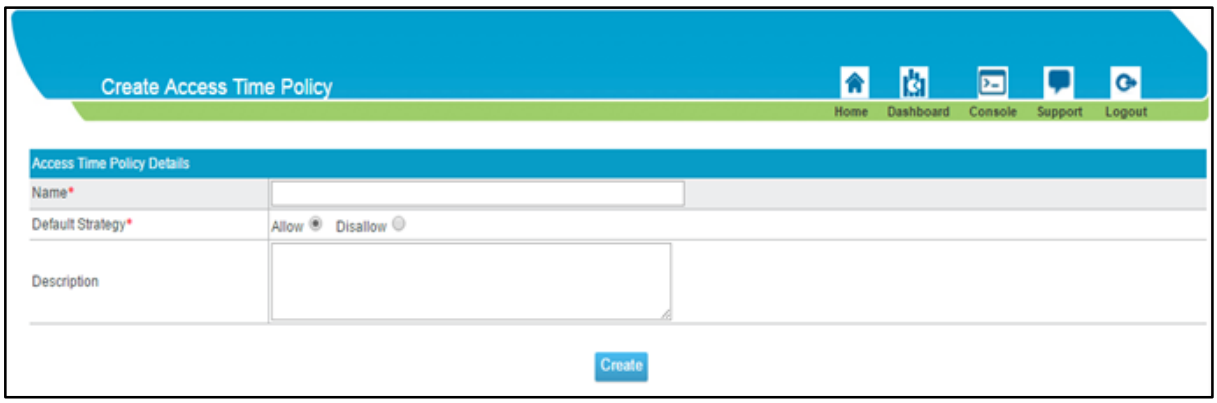

Figure: (a) Create Access Time Policy

Create Access Time Policy	
Name	Name of the policy
Default Strategy	**Allow Strategy** – As per the allow strategy, the system will by default allow access to user for the specified time band **Disallow Strategy** – As per the disallow strategy; system will by default disallow access to user for the specified time band
Description	Include description, if required

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On clicking the '**Create**' button, it will change into '**Update**' button and the system will automatically provide you an option to define the access time entry. With the help of this option, you can define one or multiple entries in the same policy. Click the '**Manage Access Time Entry**' button.

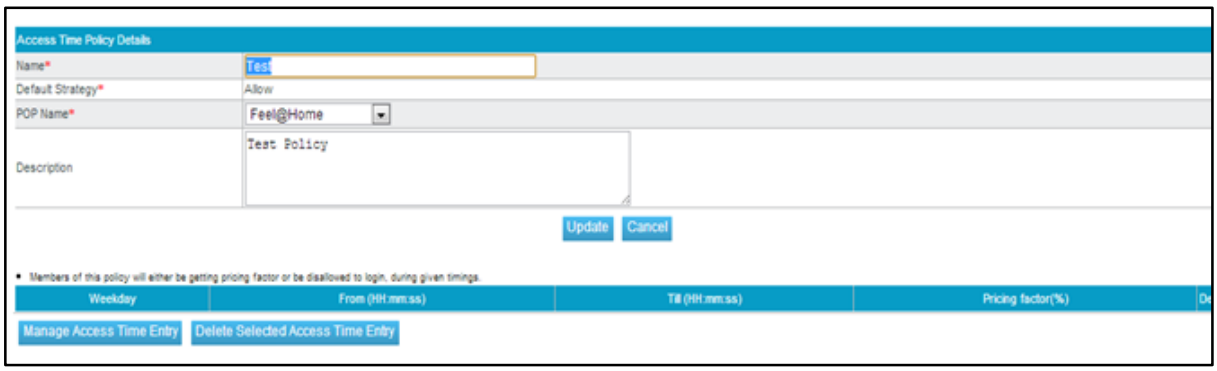

Figure: (b) Create Access Time Entry - Manage Access Time Entry

The system will navigate to the **access time entry** details page. With the help of options given in this page, you can define different strategies for each day of the week, or same strategy for every day of the week or different strategy for specific hours of a day in a week.

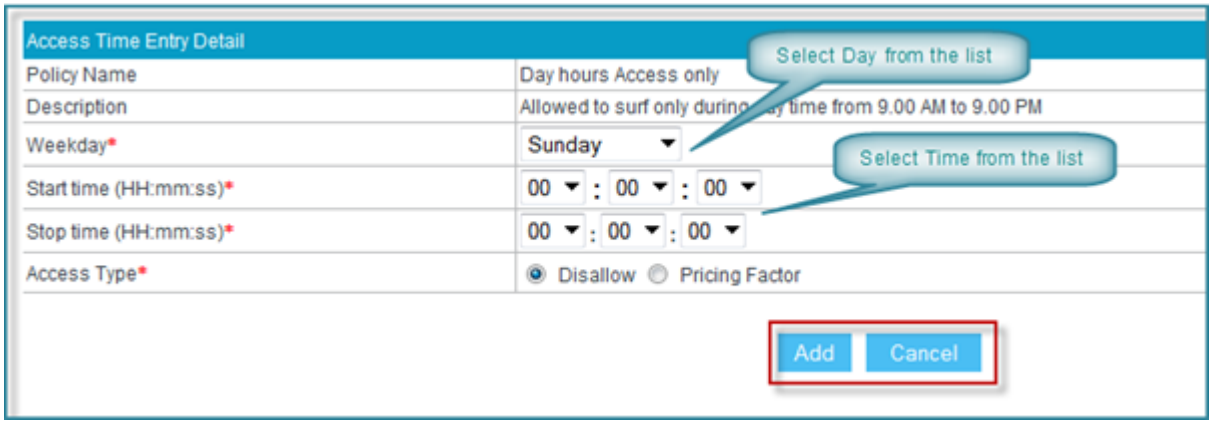

Figure: (c) Create Access Time Entry - Manage Access Time Entry

Add Access Time Entry	
Policy name	Displays name of Access Time Policy. Name can be modified only during creation
Description	Details of Policy
Weekday	Select day for which strategy is to be applied
Start Time	Select starting range
Stop Time	Select stop range. Start and stop range cannot be same

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Access Type	Pricing factor is used to define rate for the specified time band. User is accounted as per the specified time in the package. If pricing factor is specified in the package, the user will be charged accordingly as per the pricing factor during the specified time. Pricing factor is mentioned in percentage. The pricing factor can be used as a discount offering strategy as well. (Refer Example 1 in Access Time introduction)

Note:

System ends the day calculation at 00:00 hours. In such case, to define allow disallow strategy; you need to define two different strategies e.g. 1. {21:00 PM – 00:00} 2. {00:01 AM – 9:00 AM}

After entering the details in each parameter, click the '**Add**' button. The system will save the information and add the entry in the policy (i.e. Test_Policy). After adding the entry, if you wish to remove the entry for any reason, then click the checkbox against the name of the entry and use the '**Delete Selected Access Time Entry**' button.

Manage (Access Time Policy)

Use '**Manage Access Time policy**' to view complete list of policies created in the system. It's a user-friendly page that allows you to update any information in the existing policies. For simple changes or modifications, you need not re-create another policy in the system. The manage page not only offers you the facility to modify existing policies but also with the help of 'Delete' option, you can remove unused or erroneous policies from the system.

To manage, select **Policy > Access Time > Manage** from GUI menu:

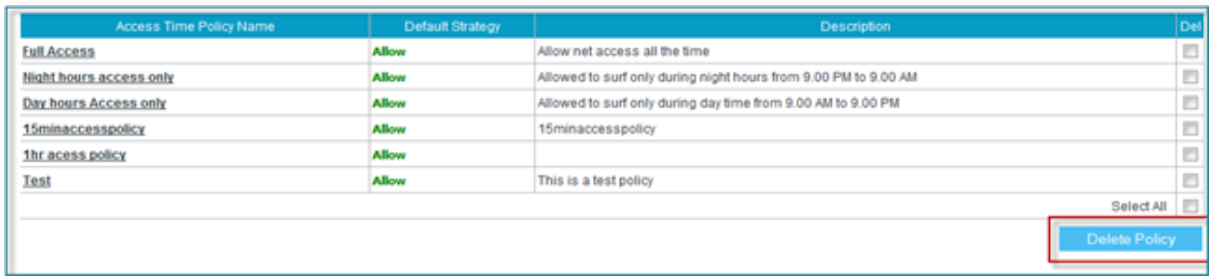

Figure: (a) Manage Access Time Policy

Manage Access Time Policy	
Access Time Policy name	Shows the list of access time policies created in the system
Default Strategy	Shows default strategy configured for each access time policy
Description	Shows specific details of each access time policy

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Delete	To delete any policy from the system. Select checkbox and click the '**Delete Policy**' button

To manage any of the policy from the list, click on the name of the policy and update the required information. The system will directly take you to the policy page, displaying complete details of the policy, as shown in the screen below:

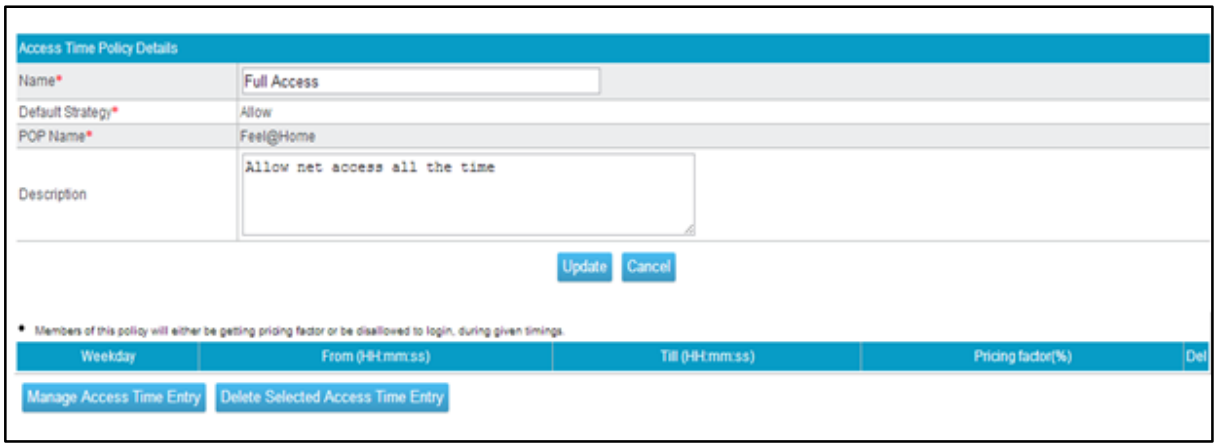

Figure: (b) Edit Access Time Policy

Edit Access Time Policy	
Name	Shows name of the policy, modify if required
Default strategy	It remains same as initial configuration and cannot be modified later
POP Name	Shows POP Name defined while creating the policy
Description	Shows specific details about policy provided while policy creation
Manage Access Time Entry	To add entries in policy
Delete Access Time Entry	To delete entries from the policy

Note: Any of the above mentioned policy can be updated, deleted only if not attached with any package.

Bandwidth Policy

Bandwidth is the amount of data passing through a media over a period of time and is measured in terms of kilobytes per second (kbps), or kilobits per second (Kbits).

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Bandwidth is limited and major essential resource in current internet world, so its consumption should be managed efficiently. With the help of 24online bandwidth policy, you can allocate 'X' amount of bandwidth to a user by which the user will not be allowed to exceed the speed and surf in the same speed as defined, thus high usage of bandwidth or misuse of bandwidth is restricted.

Admin can allocate bandwidth based on certain parameters and user attributes. Bandwidth policy also helps in reducing and controlling the network traffic.

There are different parameters using which different types of bandwidth policies with different bandwidth amount can be created in the system and number of users can share the policy.

Create (Bandwidth Policy)

There are two types of bandwidth policies that can be created in the system:

- Pool Based Bandwidth Policy
- User Based Bandwidth Policy

Pool Based Bandwidth Policy

Pool based policy restricts bandwidth for the specified pool i.e. all the users defined in the pool will be sharing the allocated bandwidth.

E.g. If there are 10 users in a pool and bandwidth allocated is 512 kbps, then all 10 users can draw bandwidth up to 512 kbps, not more than that.

To create, select **Policy > Bandwidth > Create** from GUI menu.

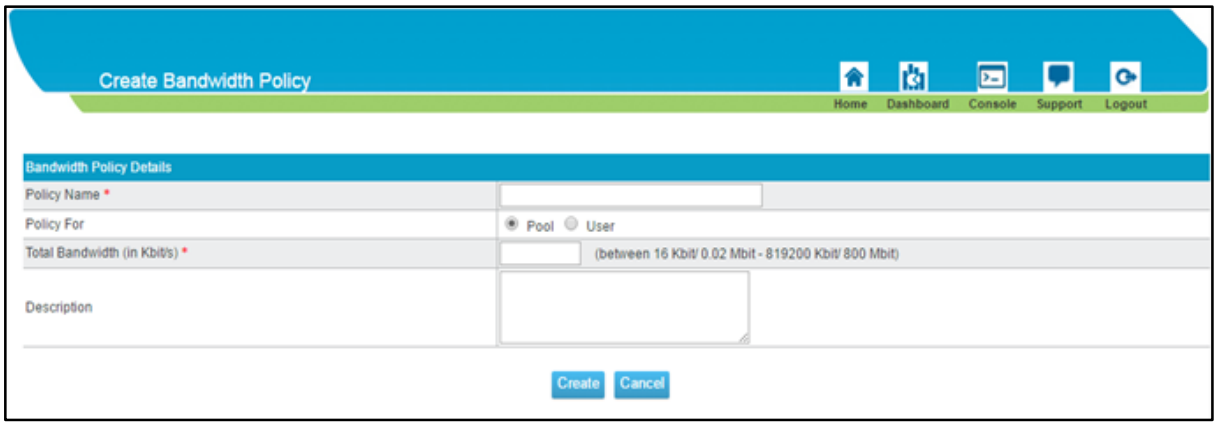

Figure: (a) Create Bandwidth Policy - Pool Based

Create Bandwidth Policy- Pool Based	
Policy Name	Name of policy can be mentioned
Policy For	Select **'Pool'** to create policy based on Pool
Total Bandwidth (in KB)	Specify the total bandwidth complete pool users can use Minimum bandwidth is 2 kbps and maximum bandwidth is 4096 kbps

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	The amount of bandwidth for pool based should be defined in '**KB**' (1 KB = 8 bytes) e.g. 512 kbps = 512/8 = 64 KB
POP Name	Select POP Name from the drop down menu [POP Management is a add-on module]
Description	Include description, if required

User Based Bandwidth Policy

Select **Policy > Bandwidth > Create** from GUI menu. User based bandwidth policy helps in restricting bandwidth for a particular user

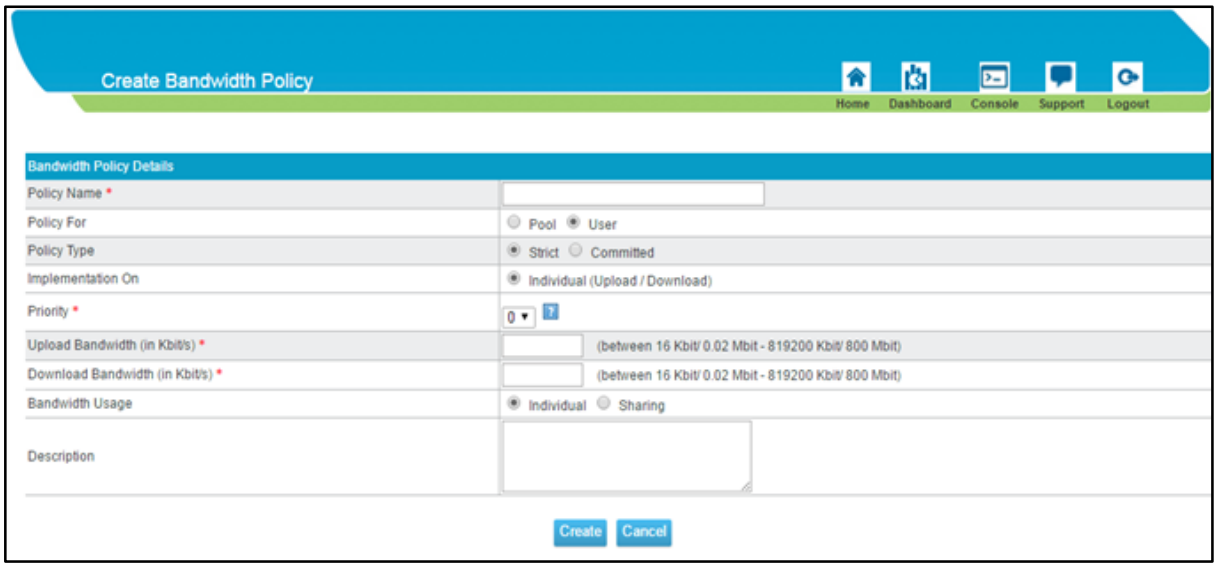

Figure: (b) Create Bandwidth Policy - User Based

Create Bandwidth Policy	
User Based	
Policy Name	Name of policy can be mentioned
Policy For	Select **'User'** to create policy based on pool

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Policy Type	**Strict:** User cannot exceed the defined limit. Strict policy can be implemented in below way: • **Individual Upload and Individual Download** – E.g. If a user is allotted individual bandwidth of 256 Kbits then the user will avail 256 Kbits for Upload and 256 Kbits for Download. **Committed:** User is allocated the guaranteed amount of bandwidth and user can draw bandwidth up to the defined burstable limit, if available. • **Individual Upload and Individual Download** – Users here are allotted individual guaranteed and burstable limit E.g. If a user is allotted individual guaranteed and burstable limit of 256 – 512 for upload of 128-256 Kbits and download of 128-256 Kbits then the user will avail guaranteed 128 Kbits for Upload up to 256 Kbits and 128 Kbits for Download up to 256 Kbits.
Upload/Download Bandwidth (in KBits)	Specify the upload and download bandwidth complete pool users can use Minimum bandwidth is 2 kbps and maximum bandwidth is 4096 Kbits The amount of bandwidth for pool based should be defined in '**KB**' (1 KB = 8 bytes) e.g. 512 Kbits = 512/8 = 64 KB
Priority	While creating bandwidth policy, value for priority field can be selected from 0 to 7 where '0' means highest priority and '7' means lowest priority. In case of selecting '0' for priority, user will receive bandwidth till it reaches to maximum limit.
Bandwidth Usage	**Individual** – User is allotted individual strict limit i.e. separate for Upload and Download **Sharing** (This option appears only on selecting Strict policy type) - Users attached with the same policy will share the bandwidth
Contention Ratio	On selecting 'Sharing' option under Bandwidth Usage section, a new section 'Contention Ratio' will be shown. This feature is introduced in this version, allowing to configure bandwidth sharing amongst group of users.
POP Name	Select POP Name from the drop down menu
Description	Include description, if required

Manage

Use '**Manage**' to view complete list of policies created in the system. It's a user-friendly page that allows you to update any information in the existing policies. For simple changes or modifications, you need not re-create another policy in the system. The manage page not only offers you the facility to modify existing policies but also with the help of 'Delete' option, you can remove unused or erroneous policies from the system.

To manage, select **Policy > Bandwidth > Manage** from GUI menu:

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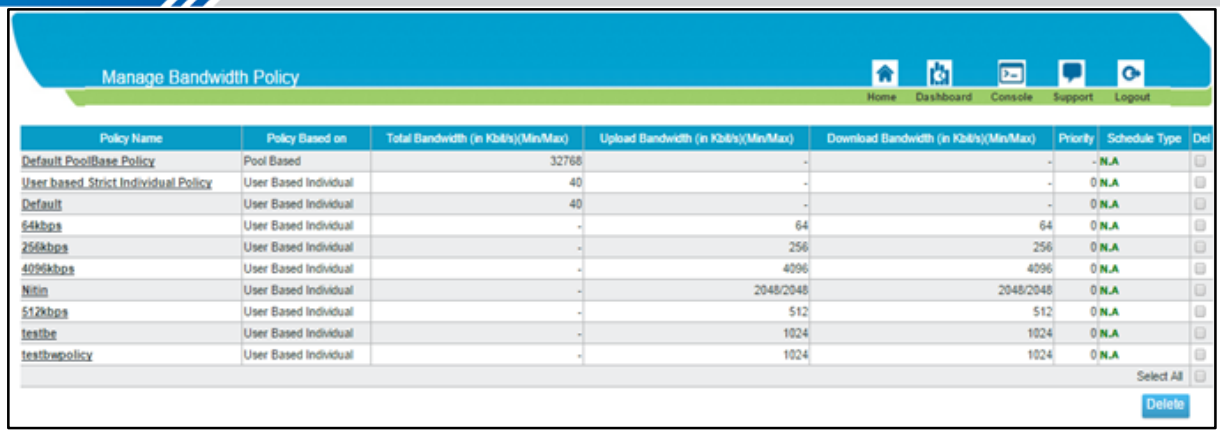

Figure: (a) Manage Bandwidth Policy

Manage Bandwidth Policy	
User Based	
Policy Name	Displays name of policy
Policy Based on	Shows the type of policy against each policy name
Total Bandwidth (in KB)	Shows the bandwidth amount defined against the name of the policy The individual bandwidth limit is shown in the same column bifurcated by '/', i.e. 24/40
Upload Bandwidth (in KB)	Shows the limit of upload defined against each policy name
Download Bandwidth (in KB)	Shows the limit of download defined against each policy name
Schedule Type	Schedule different bandwidth policy and define the time based schedule with policy(refer Schedule for further details)
Del	You can delete any specific policy or multiple policies using the **'Select All'** option. Select the checkbox against the policy name you wish to delete from the system and click the **'Delete'** button

To manage any of the policy in the list, click on the policy name. The system will directly take you to the policy details page where you can update the required information.

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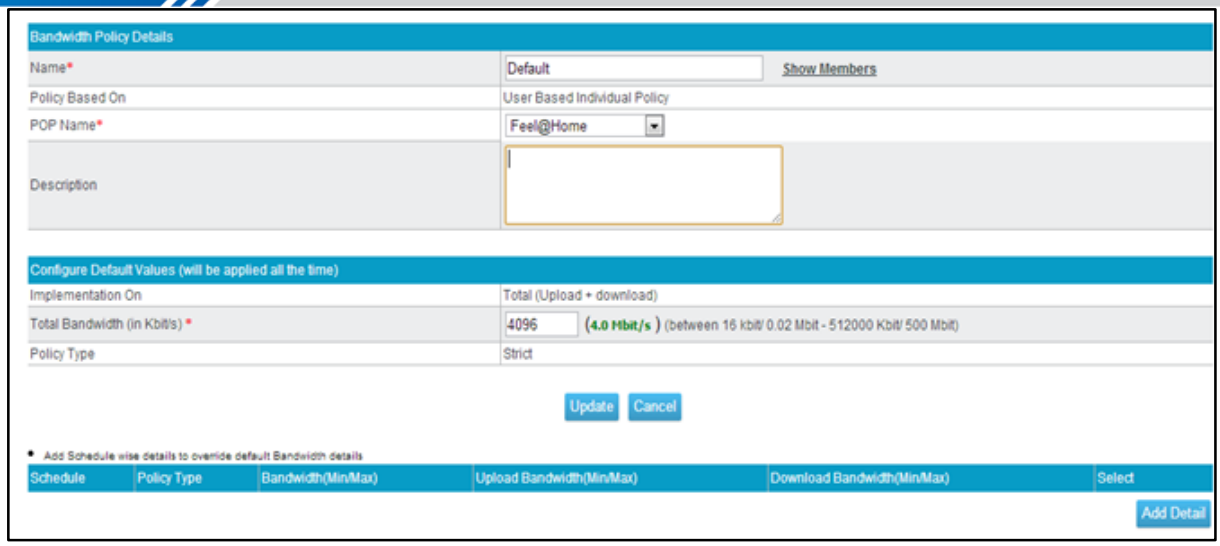

Figure: (b) Manage Bandwidth Policy

Edit Bandwidth Policy- Bandwidth Policy Details	
Policy Name	Policy name displayed can be modified, if required
Show Members	View the details of schedule attached to the policy and number of users using this policy
Policy Based on	Shows the type of policy against policy name. Policy type cannot be modified once selected
POP Name	Select POP Name from the drop down menu
Description	Shows specific information about the policy, specified while creating it, modify if required
Configure Default Values	
Implementation On	Shows the type of implementation (Individual Upload/Download) defined for the policy. The implementation cannot be modified once selected
Total Bandwidth	Shows total bandwidth limit defined that is guaranteed [Download and Upload Bandwidth will be shown differently in case of different defined limits]
Policy type	It cannot be modified once selected

Note:

- **Any of the above mentioned policy can be updated, deleted if not attached with any package.**

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- **The schedule process will be covered in schedule section of the document. Please refer to create schedule to bandwidth policy**

Button - Add Details

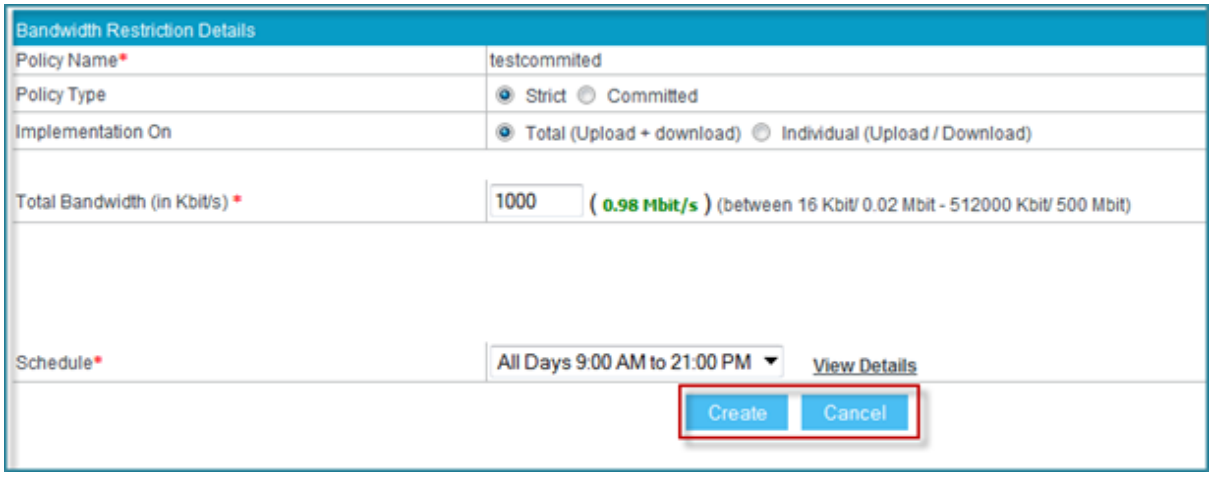

Figure: (c) Add Bandwidth Policy Detail

Schedule

Schedule is a functionality using which you can define a schedule of different time bands or days in the system. Scheduling helps you apply different bandwidth policy at peak – off peak hours or days. After creating schedule it is attached with the bandwidth policy, which results into offering different bandwidth at different time bands.

Create Schedule

To create, select Policy > Bandwidth > Schedule from GUI menu:

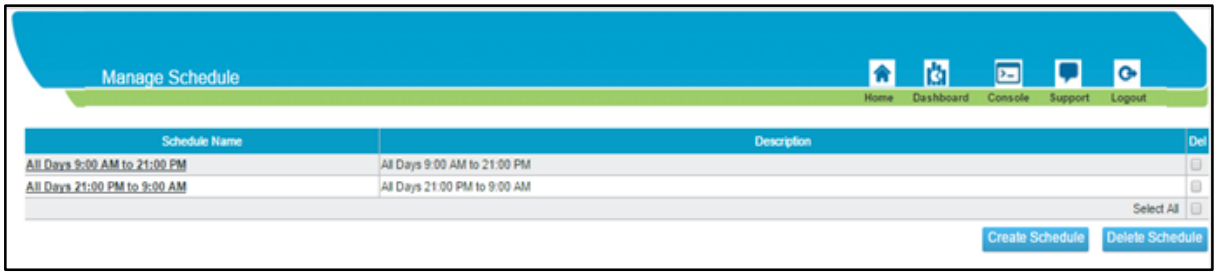

Figure: (a) Schedule Policy Page

On clicking "**Create Schedule**" button from the above page -

Figure: Create Schedule

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Create Schedule	
Name	Enter name of the schedule
Description	Describe schedule with specific information, if required

After adding the information, you need to specify the time bands or days on which the schedule has to be applied.

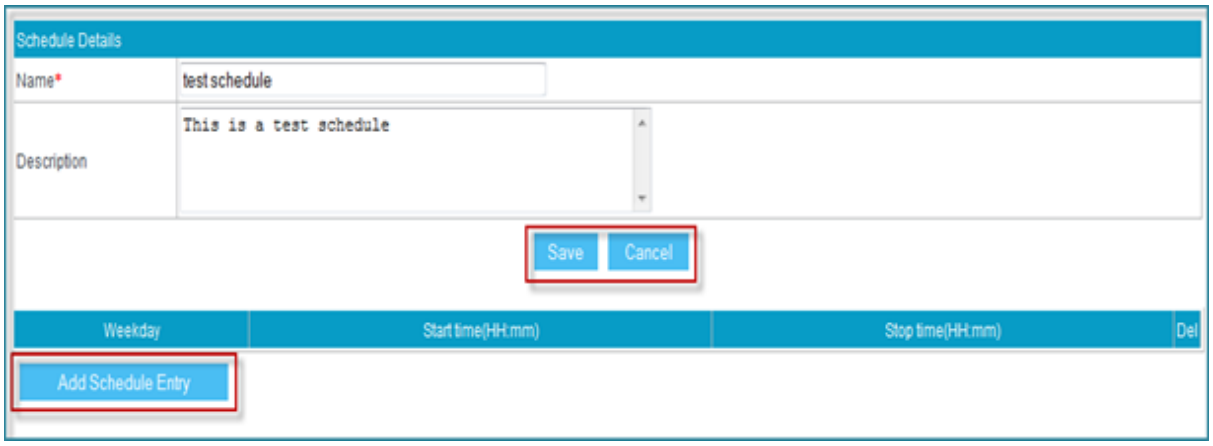

Figure: (b) Edit Schedule

Edit Schedule	
Name	Displays the name of the schedule defined
Description	Shows specific information about the schedule, defined while adding the schedule
Delete Schedule Entry	After adding entry, if you want to delete the entry from the schedule, then click the checkbox against the entry

Click the '**Add Schedule Entry**' button to add the schedule details. The system will navigate to the next page where you need to specify the details of time bands or days. The below shown screen explains about Add Schedule Entry page.

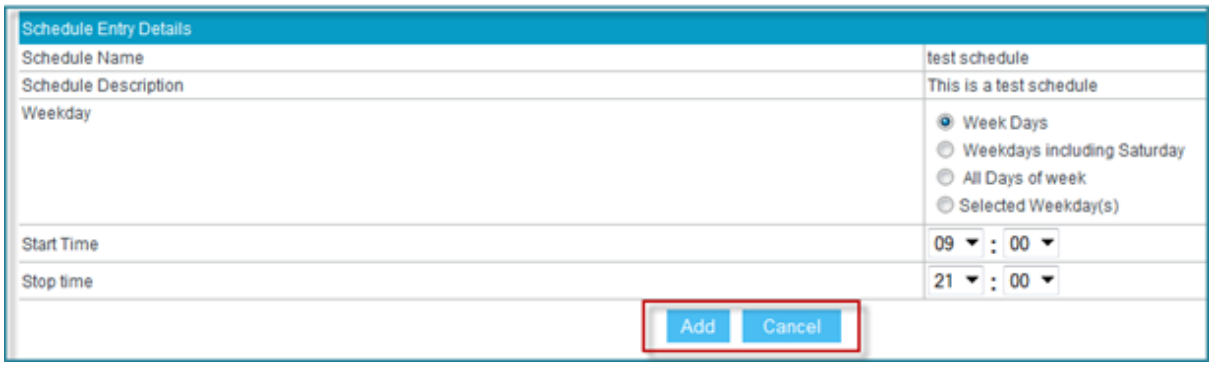

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Figure: (c) Add Schedule Entry

Add Schedule Entry	
Schedule Name	Displays the name of the schedule defined
Schedule Description	Shows specific information about the schedule, defined while adding the schedule
Weekday	Different options of defining the schedule in this parameter: • **Week Days** – Policy will be scheduled on weekdays i.e. Monday to Friday • **Weekdays including Saturdays** – Schedule will be applied on weekdays including Saturdays, excluding Sunday. • **All days of week** – Schedule will be applied for all days in a week. • **Selected Weekday(s)** – Policy will be scheduled on specific day of the week. (On selecting this option, a selection box appears in which all days of the week will be listed. You need to select the specific days on which you want to apply the schedule.)
Start Time	Define the start-time according to which the schedule will be applied. Start-time and stop time cannot be same. Start time cannot be greater than the stop time
Stop Time	Define the stop-time according to which the schedule will be applied

Once schedule is added, the schedule will be displayed on the Edit Schedule page as shown below. To add more schedule entries, select '**Add**' button , in-case you wish to delete the schedule , select the schedule-entry from the '**Del**' column and then select '**Delete Schedule entry**'.

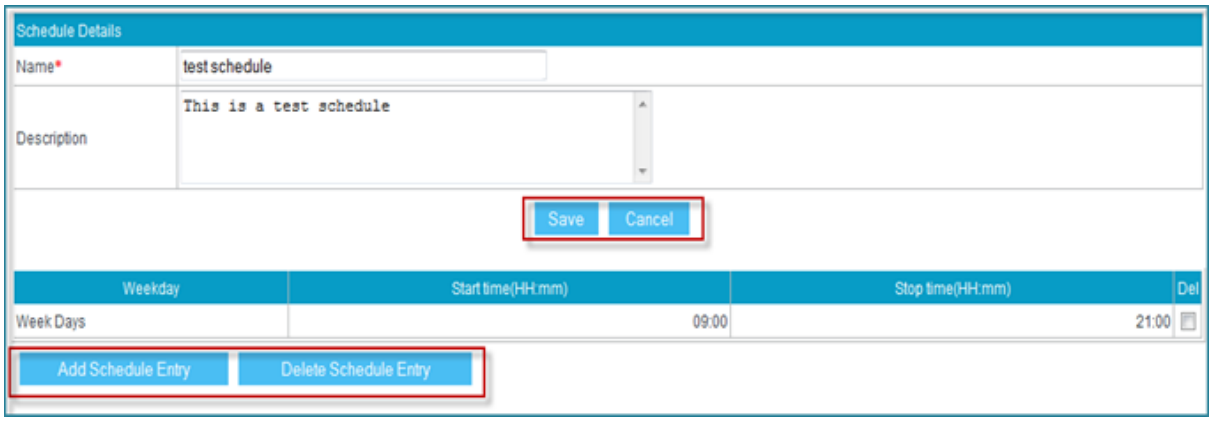

Figure: (d) Add Schedule Entry

To modify any of the schedules in the list, click on the name of the schedule. The system will take you to the schedule details page, as shown in the above screen. Update the required information like schedule name or description and click the 'Save' button. Use the '**Add Schedule Entry**' button to add more entries. And to delete the entry from the schedule, select the checkbox and click the '**Delete Schedule Entry**' button.

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Package

Introduction

After understanding policy creation, we move a step-further with Package Management. Policy(s) created in system is bind with a package for a final effect. Package is synonymous to plans/subscriptions i.e. a combination of set of policies with a pricing scheme. Major benefits by optimum utilization of Package Management are a varied-combination of different set of policies and billing plans. Now serve efficiently to every-requirement, every-age, and every-sector be it youth, corporate, residential, small offices to large chains etc.

Variety of policies created in the system are combined and wrapped in form of a package. Variety of packages can be created, using different policies and multiple users can be served with the same. Primary objective while creating a package is to consider the customer requirement and restrict high consumption as well as misuse of bandwidth.

There are different parameters in this section using which we shall create and manage a package. These packages can also be attached with prepaid pins (refer pin management) and offered to users. Let's understand how to create a package and its various usages:

Note: Pin management is an addon module. Refer to pin management for further details.

Create Package

Create packages of pre-paid and post-paid types from this GUI. Drop-down menu option will help you in further allocation of policies and prices. To create, select **Package > Package > Create** from GUI menu:

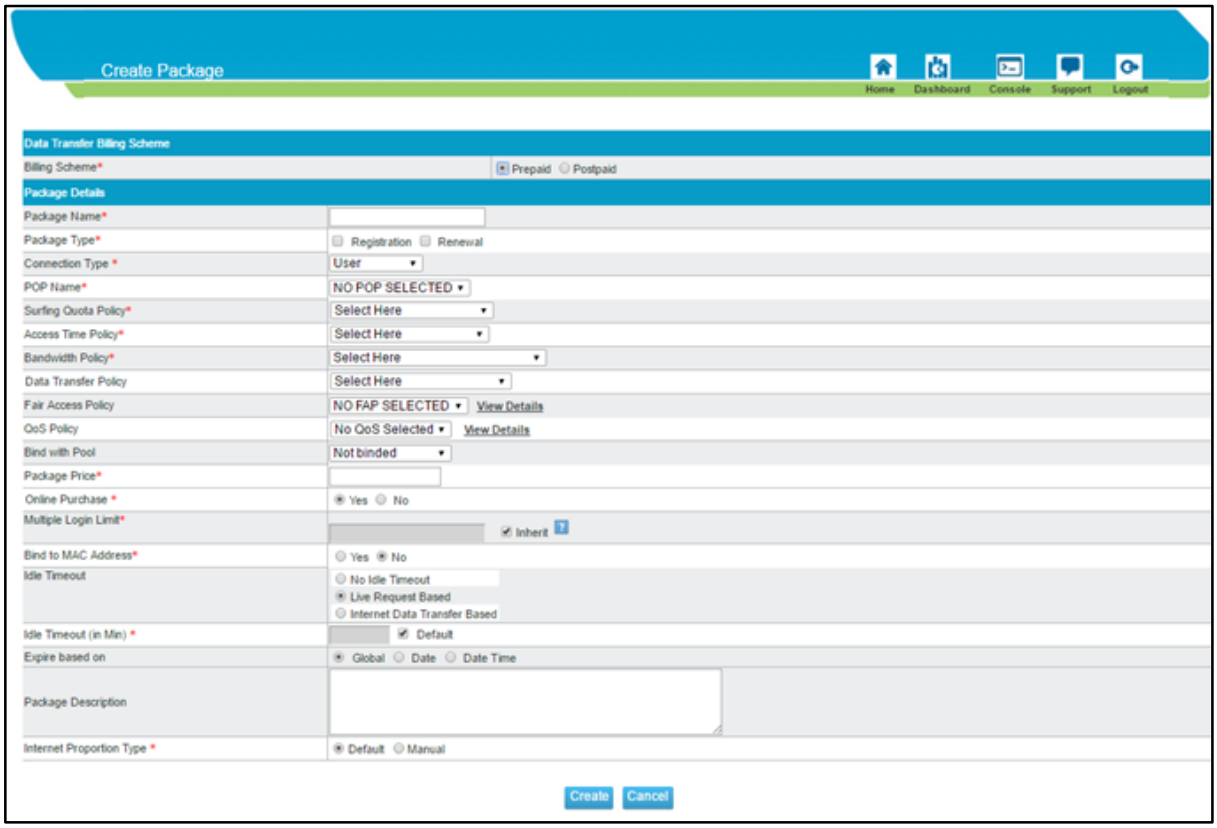

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Figure: (a) Create Package

Create Package	
Data Transfer Billing Scheme	
Billing Scheme	Two types of billing scheme (package types) are available in the system: ● Prepaid: Created for prepaid users who are charged before availing the service. ● Post-paid: Created for post-paid users who are charged after availing the service. An invoice is generated at the end of the defined cycle, and the users are charged according to their usage for that period
Package Details	
Package Name	Specify name for package
Package Type	The package can be created for different purpose: ● Registration (Only): Used to register a user in the system. You need to select only the registration check-box to create a registration package. ● Renewal (Only): Used for renewing a user's existing package. You need to select only the renewal check-box to create a renewal package. ● Registration & Renewal (both): Used for registration or renewal of a user. You need to select both the registration & renewal check-boxes to create a registration & renewal package
Connection Type	There are two different types of users in the system: ● Users are normal users who need authentication for login. ● Leased line users are authenticated users who are always live and need no authentication. Leased line users are normally corporate users who need continues access without any login process.
Surfing quota policy	Click drop-down box, select policy to be assigned in the package
Access time policy	Click drop-down box, select policy to be assigned in the package
Bandwidth policy	Click drop-down box, select policy to be assigned in the package
Package Price	Define actual price of package. Package price box accepts hundreds and thousands value without any decimals
Discount Amount	Define discounted amount to be allowed on the package price.
Online Purchase	Click 'Yes' or 'No' for allowing or disallowing online purchase of package.

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Multiple Login Limit	Define multiple login limit here, if not to inherit the default value. On selecting 'Inherit' checkbox, the limit of System will be assigned for the package.
Bind to MAC Address	MAC binding configuration can be managed at the time of creating a package by selecting '**Yes**' option. If this option is enabled for a package, then it will be automatically applicable for all the users profile registered with that package in a system.
Idle Time Out	Define the Idle Time. Whenever the communication between the customer machine and server is experiencing any technical error then 24online will automatically disconnect the user after idle time period defined in this box. With the help of this feature, user account is not depleted due to continuous login.
Idle Time Out (in min)	Define the idle-timeout in minutes or select the check-box to apply default idle time
Grace Days	Define grace days for the package here. To inherit the system's grace day's value, select on '**Grace Days**' checkbox.
Package Description	Specify the description of the package that you have created now. The description will help you in future reference to understand the value and the credits of configurations that are made in this plan, without going through each parameter.
Bind Pool(s) with this Package	By clicking on this link, admin can bind pool(s) with this package by selecting from the list of pools. **Note**:* This link will be available only on enabling 'Package Pool Binding' parameter from **System > Client Services > Parameters > Configure Package Pool Binding** section.

Note:

- **Access Time Policy is not assigned to leased line user type, as there is no access restriction for such user in system.**
- **Online purchase of package can be done only when Payment Gateway module is ON. Please refer to Payment Gateway module for further details. It's an addon module.**

After selecting the create package option, 24online system will save the configuration details provided in package parameters and prompt you to define few other parameters which needs to be configured for adding renewal rules of the package and tax(s) on package.

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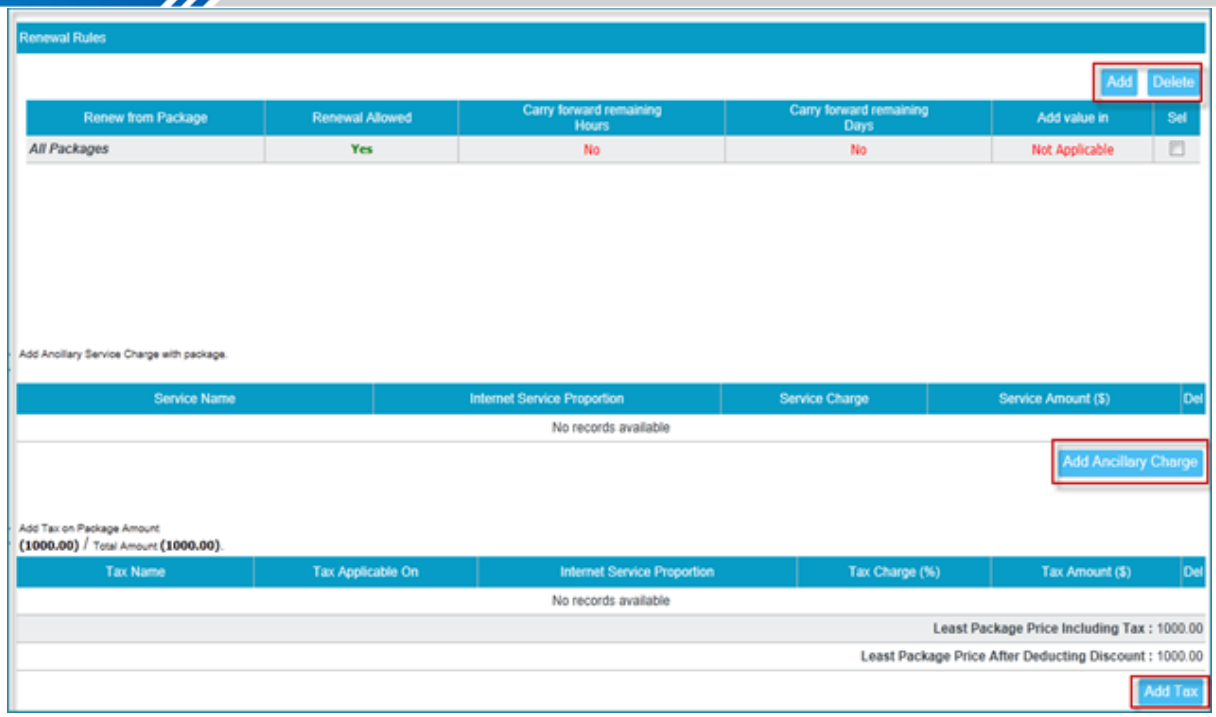

Figure: (b) Create Package - Add Renewal Rules & Add Tax in Package

Edit Package	
Update	After adding the package, you are free to update any of the information in the package details
Deactivate Package	To directly deactivate the package. Such packages cannot be further used for registration or renewal
Cancel	Select to cancel the update
Add	To add renewal rules on the package
Add Tax	To add tax on the package

We shall first understand, how to add renewal rule and add tax on a package.

Renewal Rules

Renewal rules are defined only for Renewal or Register/Renewal type packages and can be defined as and when required after creating the package. If renewal is allowed, then specify whether user should be renewed with the same package, or, any other additional package created in the system, or, the remaining value of the exhausted package should be carry-forwarded in the form of, remaining hours, remaining days, or, data transfer.

In the same page, of package creation, you can see the renewal rule section, which shows an add rule option. Click the add button. The system will show you a small window in which, on the left hand side you can see list of packages that are created in the system and on right hand side you can see different renewal rules.

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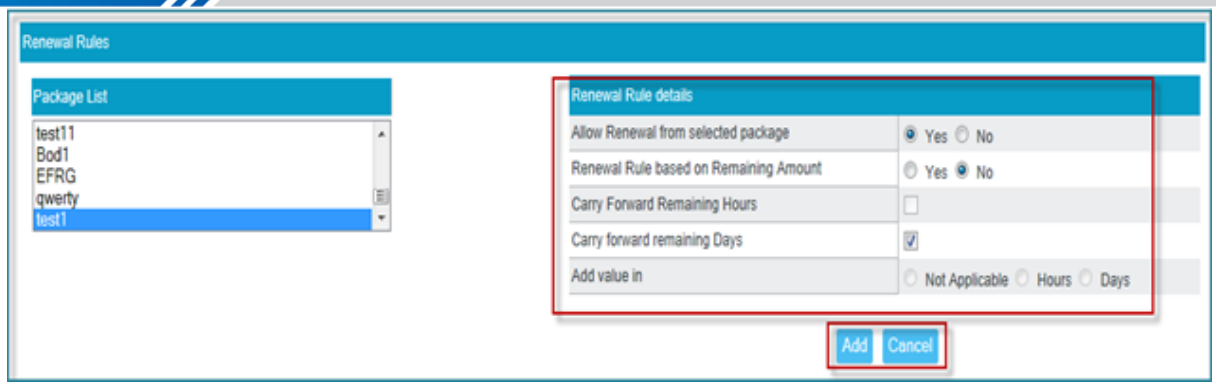

Figure: (c) Create Package - Renewal Rules

Create Package	
Renewal Rules- Package List	
Package List	Select the additional package that you want the user to be renewed from current package E.g. If the user has been assigned Test_Package, then the user has the facility to renew the same package or select the additional package from the list to which he should be renewed on exhausting the current package (i.e. Test_Package). You can select one or multiple packages from the list.
Renewal Rules Details	
Allow renewal from selected package	On selecting yes, the user will have additional package options to renew, than the default package
Renewal rule based on remaining amount	Select to renew package according to remaining value of exhausted package. i.e. If a user is assigned a package of 100 hours for 100 rupees, and the user has consumed 50 hours then decides to renew a package with 100 MB data transfer, in such case the user account has to be credited with '**X**' amount of data transfer. '**Yes**', then define the form in which the remaining amount of the package should be carry-forwarded as following: **Hours** - User's package value will be carried forward with 'X' number of hours as per remaining hours. **Days** - User's package value will be credited with 'X' number of day(s) as per remaining days. **Data Transfer** - User's package value will be credited with 'X' amount of data transfer as per remaining data transfer. **Not Applicable** – Select this option to avoid any carry forward
Add Value in:	'**No**' then define following: Remaining amount in user's account can be converted into either **Hours** - Carryforwards remaining amount in Hours only **Days** - Carryforwards remaining amount in Days only **Data** - Carryforwards remaining amount in Data only You can select any of the above check-box

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Note: 24online system automatically calculates the conversion of remaining package and value and amount of value to be assigned in the new package of the user

Click '**Add**' button after all specifications have been made. The system will add the renewal entry in the package. Whenever the user renews the package, values defined in the renewal rule will be carried forward in the new package. After adding the renewal rule, if you wish to delete the entry from the list, then select the checkbox against the renewal rule and click the '**Delete**' button.

Figure: (d) Delete Renewal Rule History

Ancillary Charges

Ancillary charges are additional charges other than the basic charges levied on the package. To add ancillary charges click on '**Add Ancillary Charges**' as shown below.

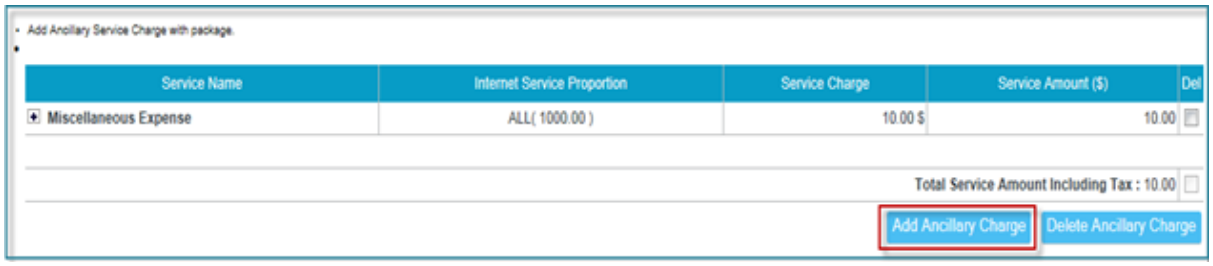

Figure: (e) Add Ancillary Charges

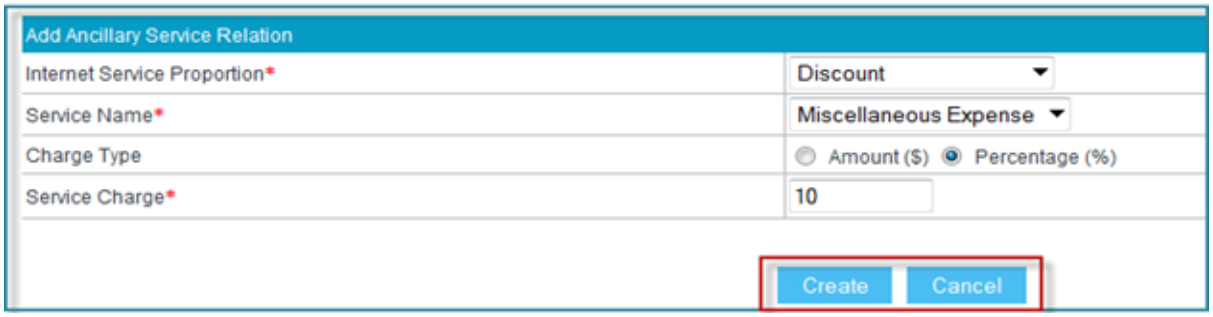

Figure: (f) Add Ancillary Charge

Click on '**create**' to create the ancillary charge. Created charges will be visible in '**Ancillary section**'. It is also possible to delete '**Ancillary Charges**' through '**Delete Ancillary Charges**'.

Add Ancillary Charges

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Internet-service proportion	Shows the actual package price and its proportion. If the service proportion is divided in more than one provider, then the package amount will be divided as per the proportion defined.
Service Name	Shows the list of charges defined
Charge Type	Two types available: • **Amount:** ancillary charges will be directly added on total amount • **Percentage:** ancillary charges will be calculated based on percentage.
Service charge	Enter the service charges

Add Tax on Package

Several taxes are defined by the government which has to be charged on the package while offering the service i.e. service tax etc. With the help of different options given in this page, you can define the amount and type of tax to be charged from the User.

Select the '**Add**' button given on the edit package page:

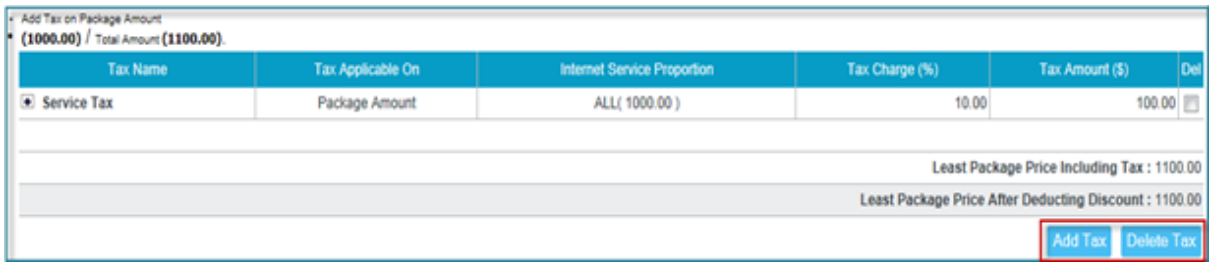

Figure: (g) Add Tax on Package

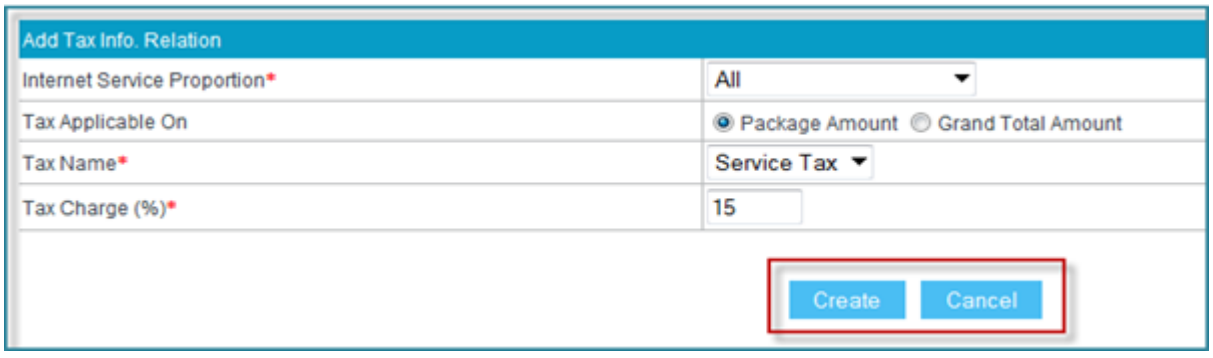

Figure: (h) Add Tax on Package

Create Package	
Add Tax on Package	
Tax applicable on	Two types available: • **Package Amount:** It's the amount you have defined while creating the

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	package • **Grand Total Amount:** It includes package amount and ancillary charges
Type of tax	By default 24online offers Service Tax. Click the drop-down box and select the tax from the list
Tax Charge	Define the tax to be charged from the User. The tax value has to be defined in percentile. The value defined will be calculated on the package amount/gross total amount.
Create	Select after all specifications are completed. This tax will be levied on the defined value (package amount/gross amount) and whenever a user is offered the package. Accordingly, the package price amount will be actual package price + tax on package i.e. if the package price is Rs.1000 then tax on package is 100 (10%), so the least package price will be Rs.1100. And this amount will be charged from the User.

Similarly, you can also add tax on tax, by which you can add necessary taxes defined by the government bodies (e.g. CESS, Education Tax etc)

Add Tax on Tax

To add tax-on-tax select 'Add Tax on Tax' button from the GUI.

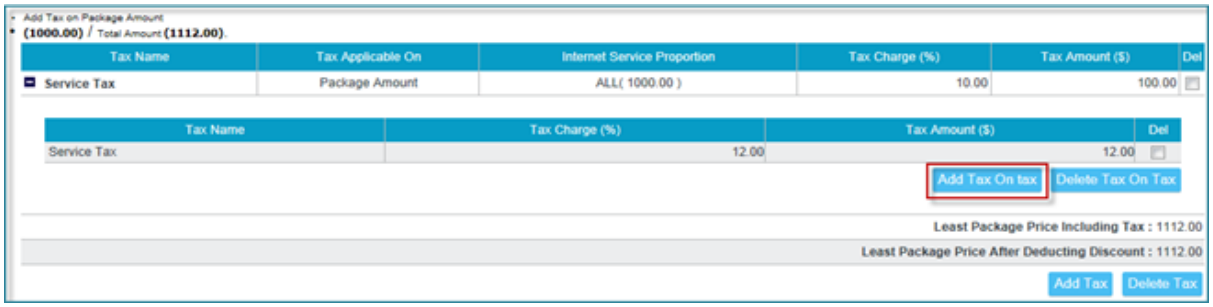

Figure: (i) Add Tax on Tax

Add Tax on Tax	
Tax Name	Shows the actual tax added in the package
Tax applicable on	Shows the actual tax will be applied on package amount or gross total amount
Internet-service proportion	Shows the actual package price and its proportion. If the service proportion is divided in more than one provider, then the package amount will be divided as per the proportion defined.
Tax charge	Shows the amount of tax (percentile) defined for package price
Tax amount	Shows the amount of tax levied on the package amount

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Add Tax on Tax	To add additional tax
Add Tax	To add another mandatory tax on package
Delete	To delete the tax entry from the package. To delete the entry, select the checkbox against the entry you want to delete and click the **'Delete'** button.

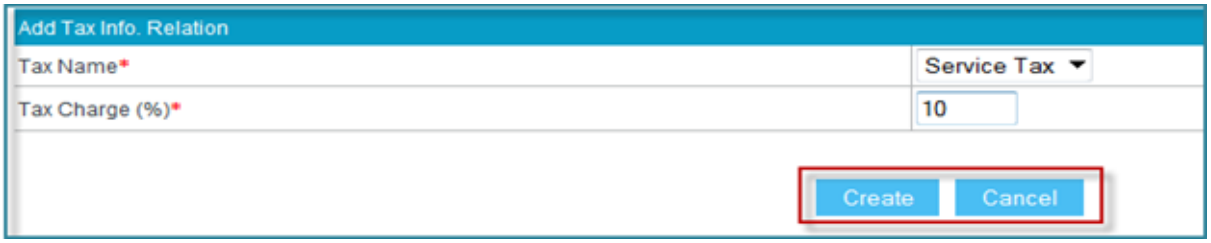

Figure: (j) Add Tax on Tax

Add Tax	
Tax Name	Select the tax name from the list
Tax charge	Define the additional tax to be charged. The tax value has to be defined in percentile

After entering the details, click the '**Create**' button. With the end of this process, the system will add tax on tax, as shown below:

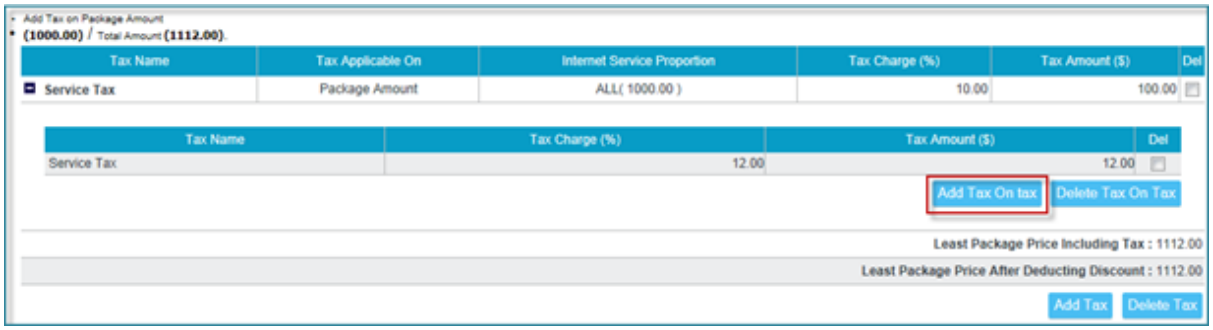

Figure: (k) Add Tax on Tax

To add more taxes on the same package use '**Add Tax on Tax**' button.

To delete the tax on tax, select the checkbox against the tax and click the 'Delete Tax on Tax' button. The amount of tax defined in tax on tax will be calculated on the actual tax and added in the package price/gross amount.

Manage

Use '**Manage**' to view complete list of packages created in the system. It's a user-friendly page that allows you to update any information in the existing packages. This page not only offers you the

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facility to modify existing packages but also helps you with 'Delete' option, by which you can remove unused or erroneous packages from the system.

To manage, select **Package > Package > Manage** from GUI menu:

Figure: Manage Package

Manage Package	
Package name	Shows names of the packages created in the system
Package type	Shows type of package against the name of the package
Surfing quota policy	Shows name of surfing policy defined in each package
Access time policy	Shows type of access time policy defined in each package
Bandwidth policy	Shows type of bandwidth policy defined in each package
Allotted time	Shows number of hours allotted to user for surfing in each package
Bind with pool	Provides the pool information of each package, it is bind with
Package days/duration	Shows the number of days allotted to user for surfing in each package
Price	Shows the amount of package defined for each of it
Count remaining amount	Shows the renewal strategy against each package
Online purchase	Shows whether the package is configured to avail online or not. **Yes** means it is configured to avail online **No** means it is not an online purchase package
Delete	Removes any package(s) from the list. Select the checkbox against the package you want to remove

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Select Column	There are multiple columns offered by 24online for more details, you may select the required columns from the list given
Billing Duration	For post-paid, the bill will be generated for this period
Billing Date	For post-paid, name of weekday for weekly cycle and date for monthly cycle
Cycle Amount Based on	Billing should be done for full amount or for actual no. of days used
Data Transfer Policy	Data transfer policy associated with the package
Device Login Limit	No. of devices allowed for each user login
Ideal Timeout (in Minute)	Logout time for inactive session
Idle Timeout Type	No Idle Timeout/Live Request Based/Internet Data Transfer Based
Online Purchase	Yes/No
QoS Policy	QoS policy associated with package
Surfing Quota Policy	Surfing quota policy associated with package

To update any of the packages in the list, click on the package name. The system will directly take you to the package details page. Update the required information and click '**Update**' button. You can also deactivate the package using '**Deactivate**' button.

Invoice

With hundreds of users being created daily and the count increasing in multi-folds every hour, it's manually impossible for admin to create invoice individually for each user. 24online Invoice facilitates automatic creation of thousands of invoices every month. In such case, if admin wants to review any specific user's specific month's invoice then manual searching for such information becomes a hectic task. So, in-order simplify such task, 24online offers invoice purge and report option using which you can easily search out invoice for specified time and purge the unused invoices from the system.

Purge Invoice

With the help of this facility, you can delete or purge un-necessary invoices stored in the system. These un-necessary invoices not only consume the system memory but also results into slow system activity. In such case, purging all the un-necessary or old invoices from the system, in regular interval is suggested. This options acts similar to the disk cleanup facility in our systems.

To purge invoice, select **Package > Invoice > Purge Invoice** from the GUI menu:

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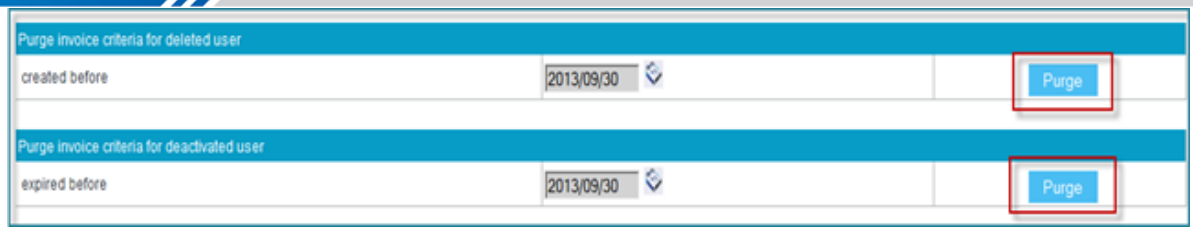

Figure: Purge Invoices

Purge Invoice	
Purge-invoice criteria for delete users	Use the calendar option to specify date, such that all the invoices created before the specified date for deleted users should be removed. After selecting the date, click the '**Purge**' button.
Purge-invoice criteria for deactivated user	Use the calendar option to specify date, such that all the invoices created before the specified date for deactivated users should be removed. After selecting the date, click the '**Purge**' button

The system will automatically remove all the unnecessary invoices from the system and display '**Invoice Purged successfully**' message.

Invoice Reports

Invoice reports is one of the important features in 24online, which are highly required by admin to understand or provide specific information about the user's query related to billing or usage charges etc. With the help of this option, one can list invoices generated in specified time period, search invoice of any specific user, and print the selected invoices.

To generate invoice report, select **Package > Invoice > Invoice Reports** from the GUI menu:

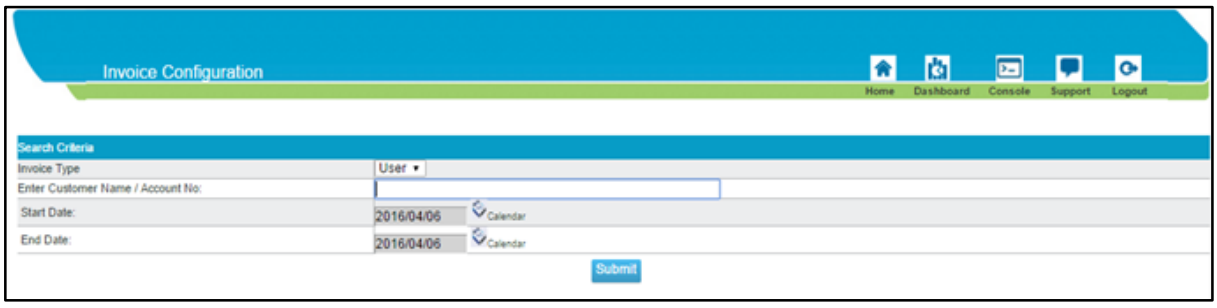

Figure: (a) Invoice Reports

Invoice Reports	
Enter Customer Name/Account No.	Enter the name of the customer of whom you want to search the invoice or the account number of the customer.

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Start Date	Select the starting range of the date
End Date	Select the ending range of the date

After specifying the information, click the '**Submit**' button. The system will run a search as per the details entered in the search criteria. The invoice reports as shown in the below screen:

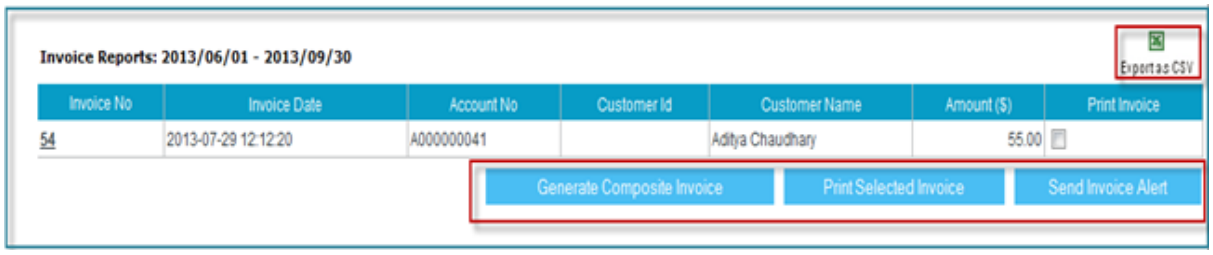

Figure: (b) Invoice Reports

Invoice Reports	
Invoice reports	Shows dates specified in the search criteria
Invoice number	Number assigned to each invoice in a sequence
Invoice date	Shows date and time when the Invoice was generated
Account No	Shows Account no of the customer
Customer ID	Shows number defined for each customer
Customer name	Shows all customer's name for whom invoices have been generated in the specified time period
Amount	Shows total invoice amount against each invoice number
Generate Composite invoice	Select checkbox against the invoices you want to generate composite invoice
Print Selected Invoice	Select checkbox against the invoice number you want to print
Send Invoice Alert	Select checkbox against the invoice number you want to send the invoice alert

To view invoice in printable format, click on the invoice number. The system will display the invoice in printable format with an option of print icon on the right hand side corner of the page.

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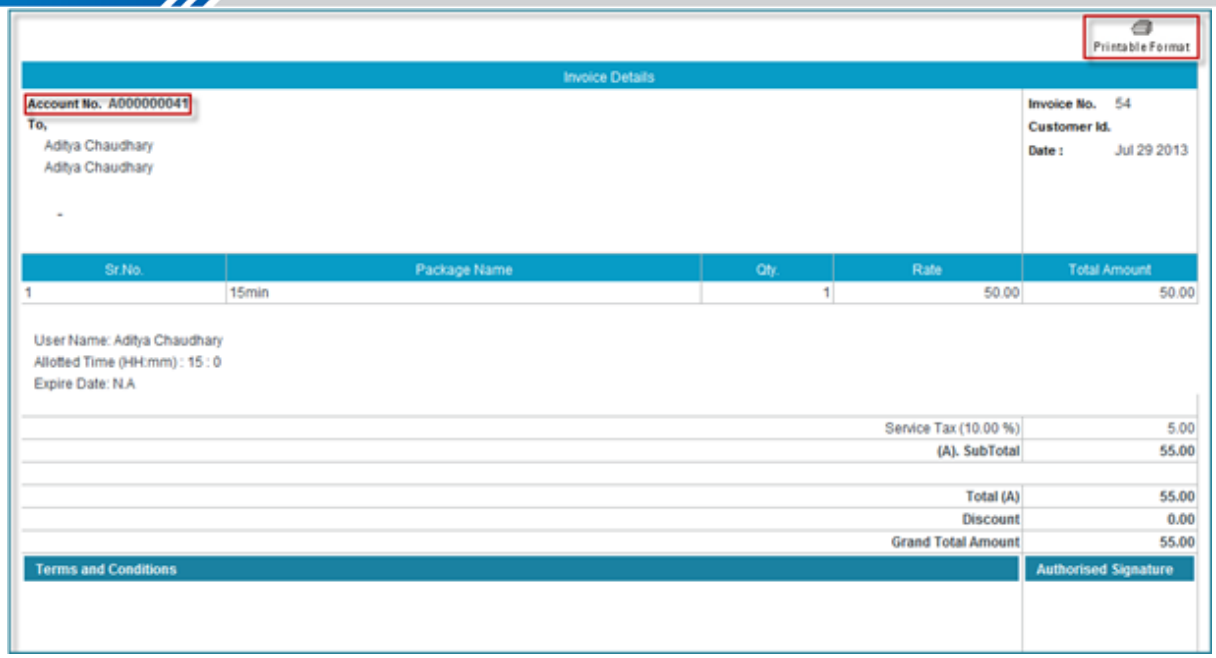

Figure: (c) Print Invoice

Create Invoice

'**Create Invoice**' feature is introduced in this version by which invoices can be generated with ease for users whenever required by entering necessary details.

This helps to create various invoices for users whenever varied services are provided like modem purchase, etc. The details of invoices generated can be obtained from 'Invoice Reports' section easily.

To generate invoice, select **Package > Invoice > Create Invoice** from the GUI menu:

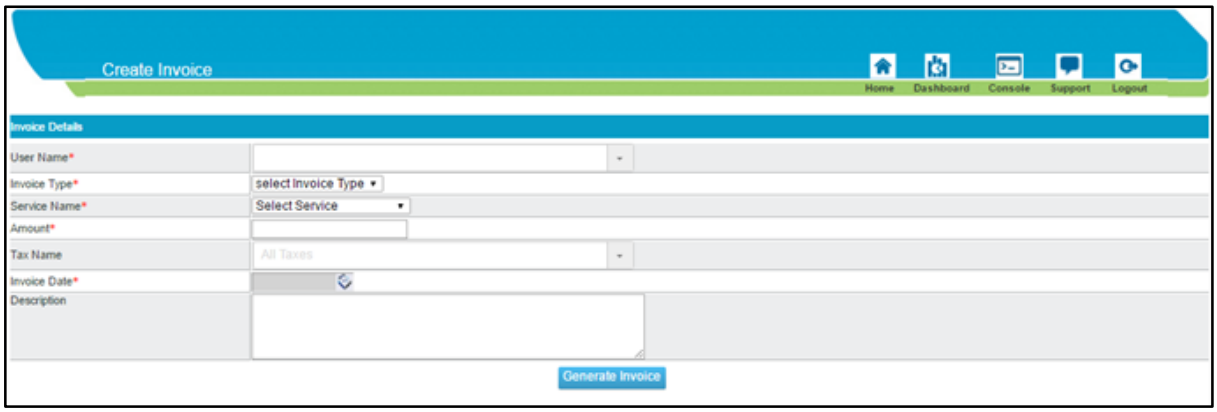

Figure: Create Invoice

Create Invoice	
User Name	Select username from the list available for creating invoice.

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Invoice Type	Select invoice type from the drop down list, like user invoice, etc.
Service Name	Select service name from the list which can be misc expenses, maintenance charges, etc
Amount	Insert invoice amount here.
Tax Name	To add taxes on the invoice, select relevant tax name from the drop down list.
Invoice Date	Select invoice date from the calendar
Description	Enter description about the invoice here for future reference.

Invoice Configuration

Invoice configuration includes all the necessary parameters, based on which all invoices in the system will be created. 24online offers currency conversion option for clients in different region/currency in their accounts. You can define the currency symbol and conversion factor, by which all invoice generated from the system can be created as per your requirements i.e. as per the defined currency rate.

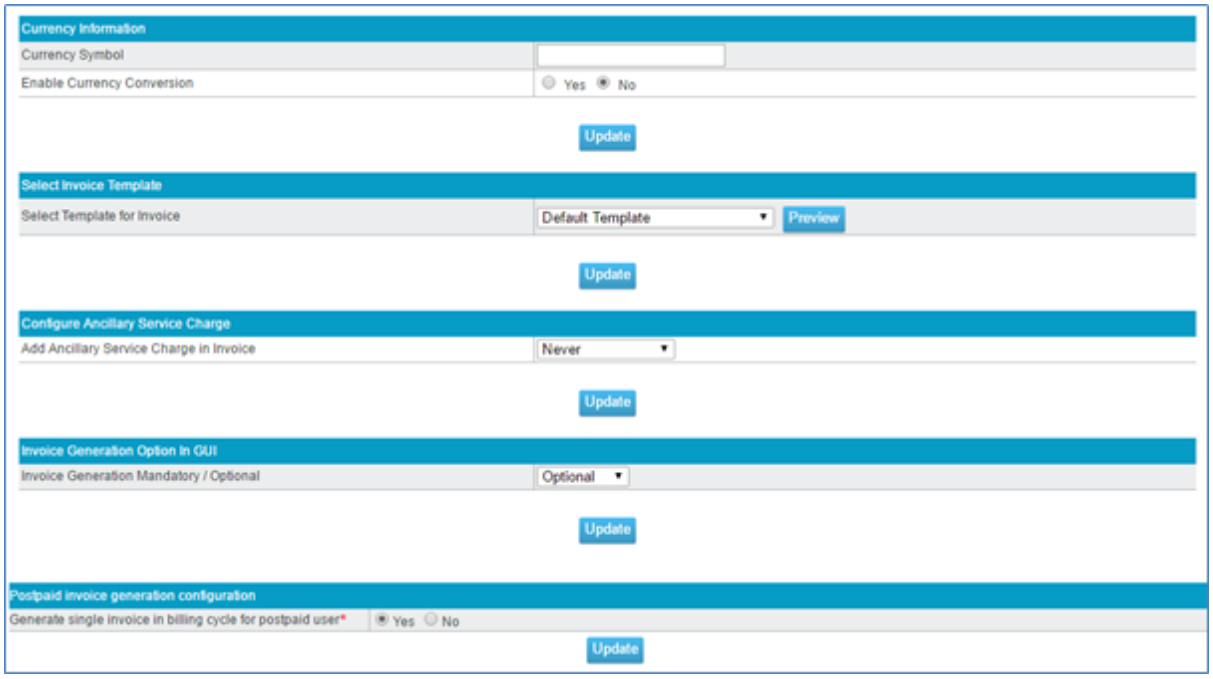

Figure: Invoice Preferences

Invoice Preferences

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Currency Symbol	The base currency is your local currency, which can be converted into any other currency, if required
Enable currency conversion	Select the required option
Conversion Factor	Enter the conversion factor of your currency in the text box, as shown in the screen. i.e. 1 $ = 68 Rupees
Converted Currency symbol	Define the converted currency symbol in the text box. This will be displayed in invoice generated from the system. Click 'Update' on completion.
Select template for invoice	Select the template to be used while generating the invoice. To preview the template design and values appearing in each box, click on the 'Preview'. After verifying the template, click the 'Update' button to confirm it.
Add Ancillary Service charge in Invoice	Select whether you wish to add ancillary charges to invoice or not. **Never**- does not add ancillary charges ever to invoice **Registration Time**- adds charges to invoice at registration time **Every time**- adds charges every-time invoice is generated **Optional** – add charges as per your requirement manually
Invoice Generation Mandatory/Optional	Select **'Optional'**, if you don't want system to generate invoice for all users Select **'Mandatory'**, if you want to compulsorily generate invoice for all users created in the system
Generate Single Invoice in billing cycle for post-paid users	Select 'Yes' to enable it. The invoice will also consider the package changes in the middle of cycle.

Invoice Templates

Basically, invoice is a formal request for payment. A written record of a transaction submitted to customer or client when requesting payment for services delivered, including taxes and ancillary charges as applicable. Invoice templates include the details of their package price, usage charges, and ancillary or tax charges in a systematic and professional manner.

Few default templates are provided by 24online which are ready to use for you. These templates are developed using dynamic values which facilitates you to modify them as per your requirement.

There are options using which you can generate invoice reports to review the invoice details daily/weekly/monthly in single glance. So, let's first understand how to create invoice templates in the system.

Create

To create invoice template, select **Package > Invoice Template > Create** from GUI menu:

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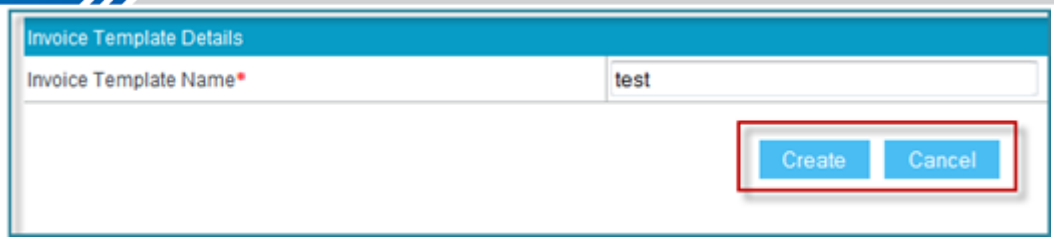

Figure: (a) Create Invoice Template

Define the name of invoice template, and click the '**Create**' button. The system will display you the complete template design, which can be modified as per your requirement.

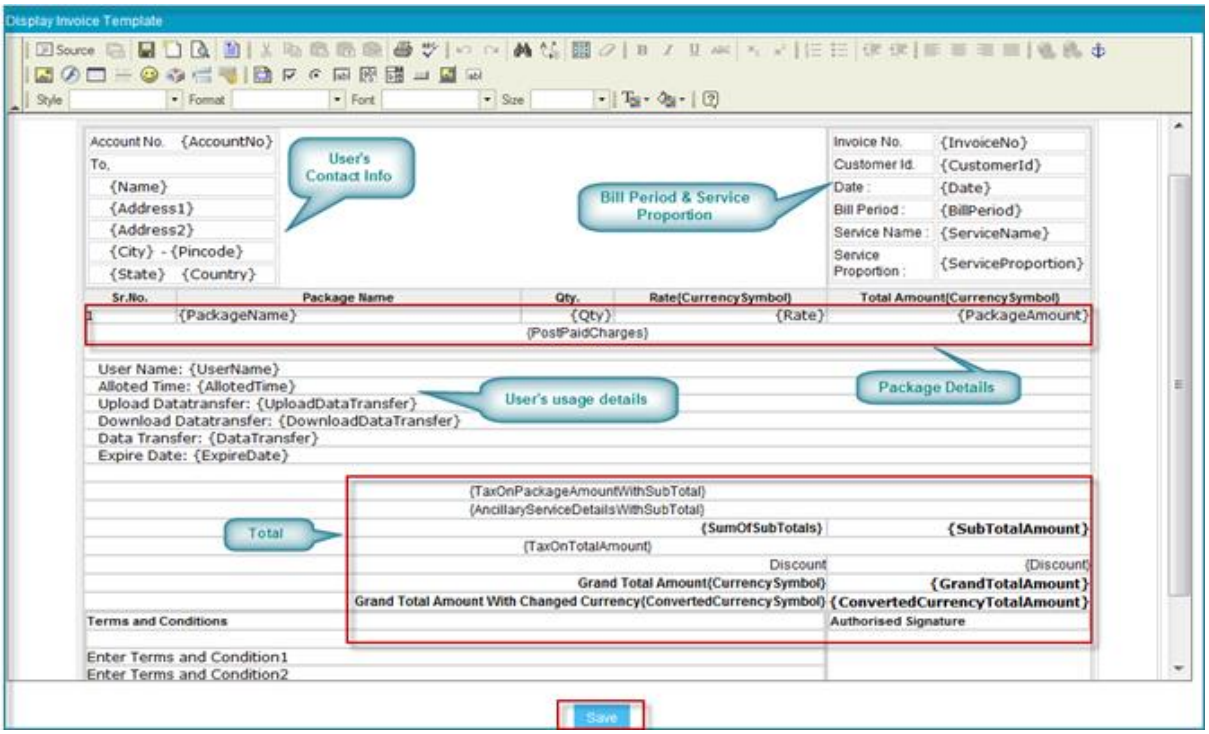

Figure: (b) Create Invoice Template

Primary objective while creating a template that should be ensured is that creating a template for each user is impossible. In such cases the template created should be generic which can be used for some or all users. There are several dynamic values in the template which can be changed with the actual values as per the requirement. Details of each value are explained below:

Dynamic Field values	
{Name}	Will change with Customer Name of the user
{Address1}	Will change with Address1 of the user
{Address2}	Will change with Address2 of the user
{City}	Will change with the name of the city of the user
{Pincode}	Will change with the pin code details of the user

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{State}	Will change with the name of the state of the user
{Country}	Will change with the country name of the user
{InvoiceNo}	Will change with the Invoice no. of the user
{CustomerId}	Will change with the Customer ID of the user
{Date}	Will change with the invoice date of the user
{Bill Period}	Will change with the billing period of the user
{ServiceName}	Will change with the service name of the user (This option will display only if 'Multiple Services invoice' module is registered)
{ServiceProportion}	Will change as per the service proportion of the user (This option will display only if 'Multiple Services invoice' module is registered)
{InvoiceDetail}	Will change with (Sr. No, Package Name, Qty., Rate, Total Rate, User Name, Allotted Time to User, Upload data transfer, download data transfer, Expire Date) as per the details of the user
{TaxOnPackageAmountWithSubtotal}	Will change with the taxes that act on package amount and subtotal
{AncillaryServiceDetailsWithSubTotal}	Will change with the taxes that act on package amount and subtotal
{TaxOnTotalAmount}	Will change with the taxes that act on the total price
{CurrencySymbol}	Will change with the currency symbol defined
{SumOfSubTotals}	Will change with the sum of all Sub Totals in the invoice
{SubTotalAmount}	Will change with the Sum of sub total amount in the invoice
{GrandTotalAmount}	Will change with the sum of total invoice amount in the invoice
{ConvertedCurrencySymbol}	Will be as per the converted currency symbol defined
{ConvertedCurrenyTotalAmount}	Will change with the converted currency grand total amount as per the invoice

From the above list, you can add or subtract any of the information, as per your requirement. After making necessary modifications, click the '**Save**' button. The system will update the provided information and create the template in the system.

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Manage

Use '**Manage**' to view complete list of templates created in the system. It's a user-friendly page that allows you to update any information in the existing templates. For simple changes or modifications, you need not re-create another template in the system. This page not only offers you facility to modify existing templates but also with the help of 'Delete' option, you can remove unused or erroneous templates from the system.

To manage, select **Package > Invoice Template > Manage** from GUI menu:

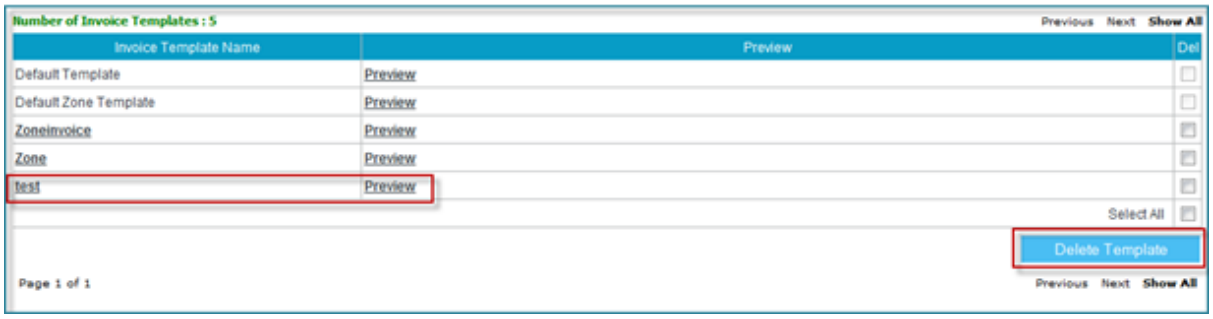

Figure: (a) Manage Template

Manage Template	
Invoice Template name	Shows list of templates created in the system
Preview	To view each template
Del	Removes any template from the system. Select the checkbox against the invoice template which you want to remove and click the '**Delete**' button

To update any template, click on the name of the template. The system will directly take you to the template details page, where you can update the required information. After updating the necessary information, click the 'Update' button.

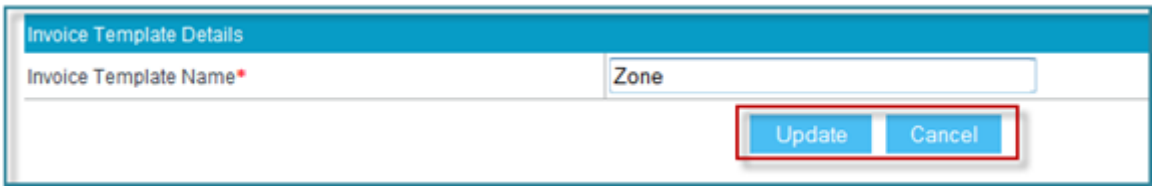

Figure: (b) Manage Template

Ancillary Services

Ancillary is additional service provided to the customer for which, the user is charged a nominal amount. Charges for ancillary services are added in the invoice, with details of the same.

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Ancillary services like modems or cable connection charges etc are added along with the basic charges.

Create Ancillary Service

To add ancillary service, please select **Package > Ancillary Service > Add Service**

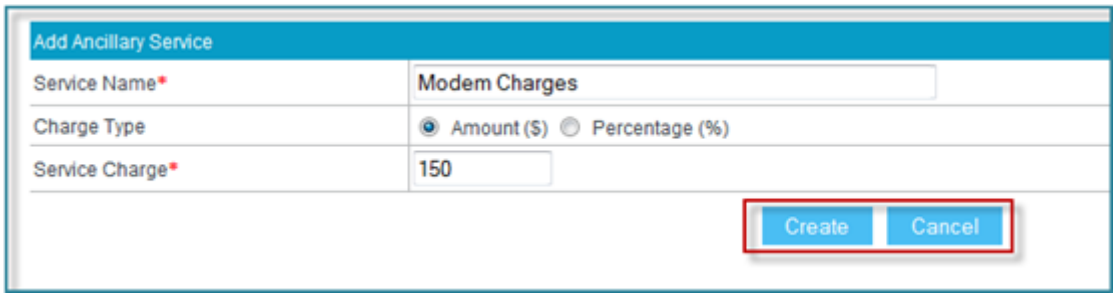

Figure: (a) Create Ancillary Service

Create Ancillary Services	
Service Name	Enter the name of ancillary service to be added in the system
Charge Type	Two types of charge types available: • **Amount** – Specific amount would be charged to user. • **Percentile**– Specify the percentile value, calculated on the package amount chargeable to the user
Service Charge	Specify the amount/percentage value to be charged on amount for the service
Create	To add the ancillary charges to the package

Manage Services

Use 'Manage Services' to view complete list of policies created in the system. To manage ancillary services, select **Package > Ancillary Service > Manage Service** from GUI:

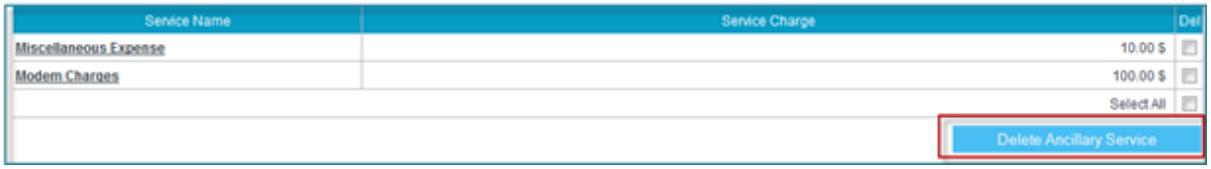

Figure: (a) Manage Ancillary Services

Manage Ancillary Services	
Service name	Shows list of ancillary services added in the system

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Service charge	Shows amount of percentage or amount defined to be charged
Del	Removes any ancillary service from the system. Select the check-box against the name of ancillary service and click the '**Delete Ancillary Service**' button.

To update any template, click on the name of the ancillary service. The system will directly take you to the ancillary service details page, where you can update the required information. After updating the necessary information, click the 'Update' button.

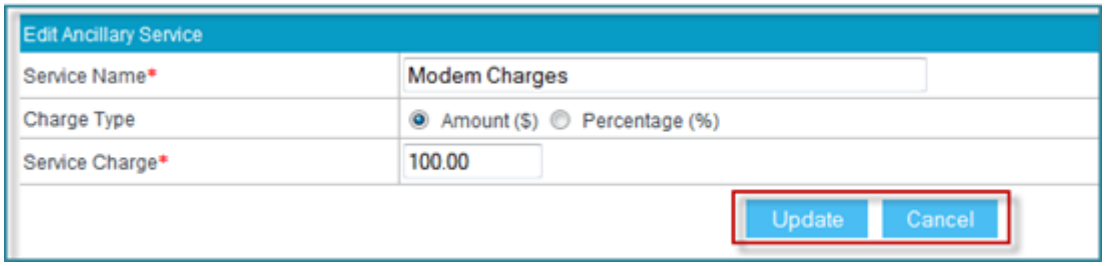

Figure: (b) Manage Ancillary Services

Note: The ancillary service attached with any package cannot be deleted from the system. You can only delete it when the policy is removed from the package.

Default Service

All the mandatory charges which are to be included 'by-default' in each invoice can be managed with Default ancillary services. One can select mandatory services required to be added in each invoice for all users.

There are also some services which are optional, which can be added to specific users and not all. In such case administrator has the facility to first create all types of ancillary charges to be created in the system and then define the mandatory once.

Note: To add any optional service charge to specific user(s), you can use the 'Add ancillary charges' option while creating any package

Configure Default Ancillary Service

To add default ancillary service, select **Package > Ancillary Service > Default Service** from GUI:

Figure: (a) Configure Default Ancillary Service

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Click the '**Add Ancillary Charge**' button to add the service from the list.

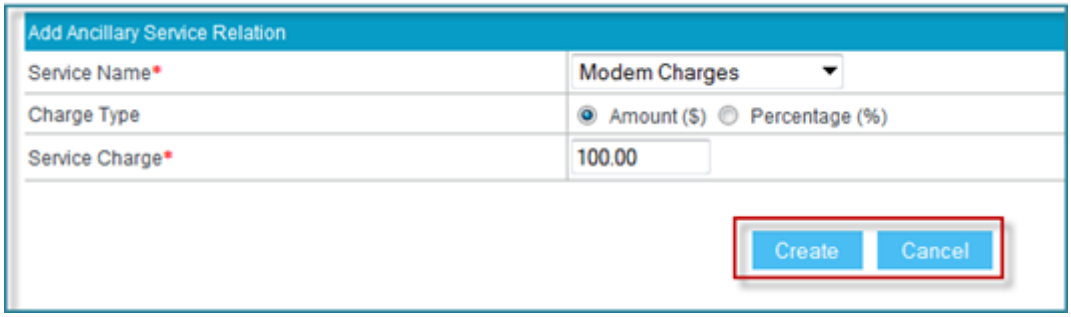

Figure: (b) Configure Default Ancillary Service

Configure Default Ancillary Service	
Service name	Select service name from the list
Charge Type	Update if required
Service Charge	Update the amount of service charge to be applied, if required
Create	Select after modifications are completed

Add Tax on Default Ancillary

After adding the ancillary services in the system, you can also add required taxes on the ancillary services. You can define the tax slab directly on each ancillary service added in the system. To add tax on default ancillary, please follow the instructions given below:

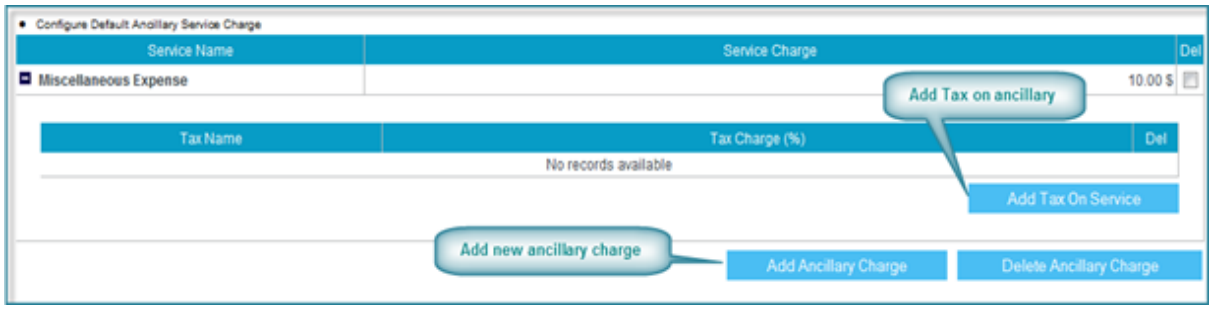

Figure: Add Tax on Default Ancillary

To add tax on ancillary charges, use the '**Add Tax on Service**' button.

Add Tax on Default Ancillary	
Tax Name	Select service type to be applied on the ancillary service
Tax Charge	Enter the percentile value of tax to be applied

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Create	Select after modifications are completed

Tax details will be attached with the ancillary service as shown below where you can add multiple taxes on single ancillary service.

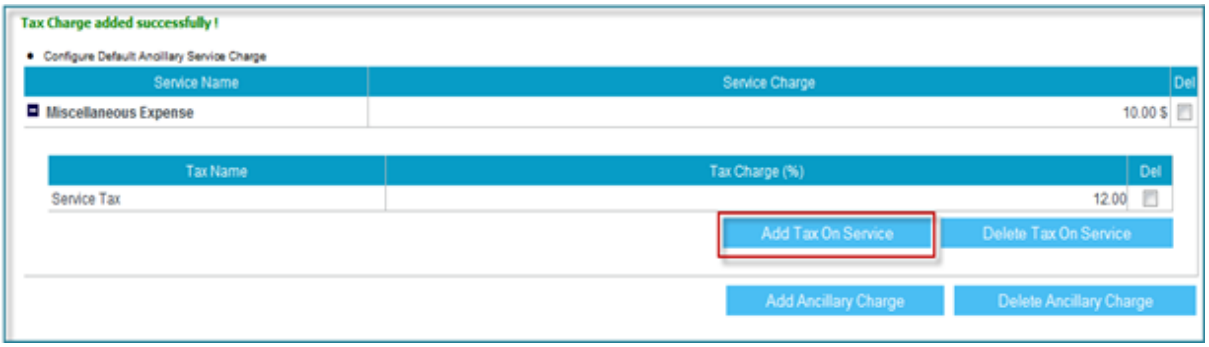

Figure: (e) Add Tax on Default Ancillary

Tax Information

Tax is an integral part of the invoice which has to be followed and levied on the subscriber's usage as per the policies defined by the government bodies. But, to instruct the system to add tax while creating any invoice, you need to define/create different types of tax slabs in the system.

With the help of different options given in this menu, you can create, manage and delete required tax slabs and attach with the packages. You also have the facility to define default taxes and additional taxes.

Add Tax

To create tax in the system, select **Package > Tax Information > Add** from GUI:

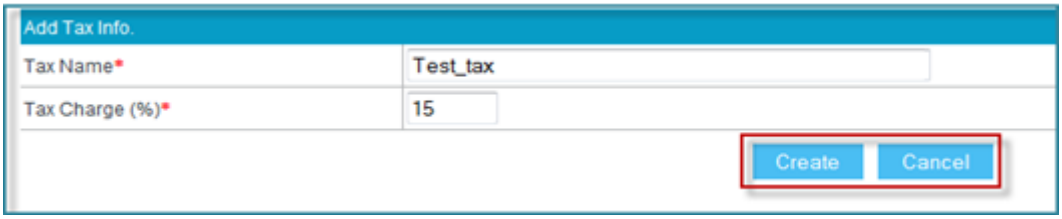

Figure: Create Tax Information

Create Tax Information	
Tax Name	Select service type to be applied on the ancillary service
Tax Charge	Enter the percentile value of tax to be applied
Create	Select after modifications are completed

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Similarly, you can create multiple tax slabs in the system following the above steps.

Manage (Tax)

To view all the created policies, 24online facilitates with Manage Tax Information page in GUI. This page is user-friendly which makes it easier for you to update any information in the ancillary service created. For simple changes or modifications, you need not re-create another template in the system. This page not only offers you the facility to modify existing templates but also with the help of 'Delete' option, you can remove unused or erroneous templates from the system.

To manage tax information, select **Package > Tax > Manage** from GUI:

Figure: (a) Manage Tax Information

Manage Tax Information	
Tax Name	Shows list of taxes in the system
Tax Charge	Shows the amount of percentage or amount defined to be charged.
Del	Removes any tax information from the system. Select check-box against the name of tax information and click the 'Delete Tax' button

To update any tax information, click on the name of the tax name. The system will directly take you to the tax details page, where you can update the required information. After updating the necessary information, click the '**Update**' button.

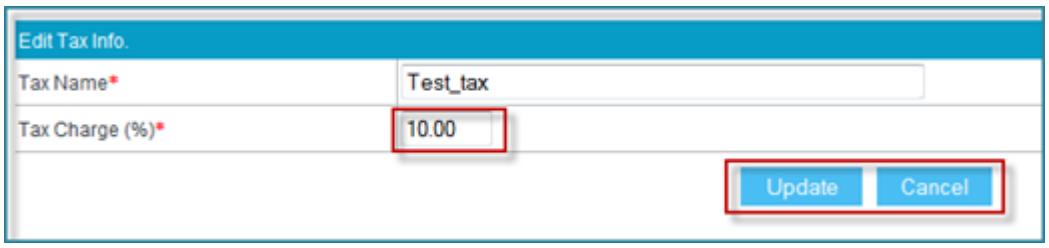

Figure: (b) Manage Tax Information

Note: The tax information attached with any package cannot be deleted from the system. You can only delete it when the policy is removed from that package.

Delete Tax

All the mandatory charges which are to be included 'by-default' in each invoice can be managed with Default tax information.

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There are also some additional taxes which are optional, which can be added to specific users and not all. In such case administrator has the facility to first create all types of taxes in the system and then define the mandatory once.

Note: To add any optional service charge to specific user(s), you can use add ancillary charges option while creating any package.

To create default tax, select **Package > Tax > Default Tax** from GUI menu:

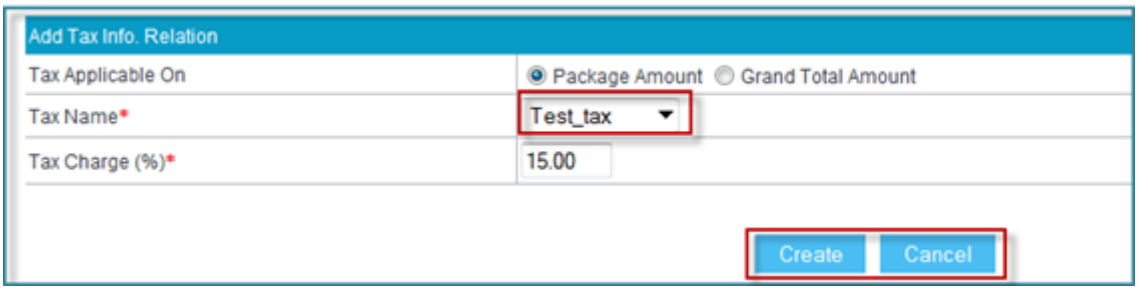

Figure: (a) Add Default Tax Information

Add Default Tax Information	
Tax Applicable on	Offers **two** options: • **Package Amount**: It's the amount you have defined while creating the package. • **Grand Total Amount**: It includes package amount and ancillary charges.
Tax Name	Select the tax name from the drop-down list
Tax Charge	System automatically displays percentile value defined for the select tax. Modify if required

Add Tax on Default Tax Information

After adding the default tax information, you can also add required additional taxes on the default tax. You can define the tax slab directly on each default tax added in the system. To add tax on default tax, follow the instructions given below:

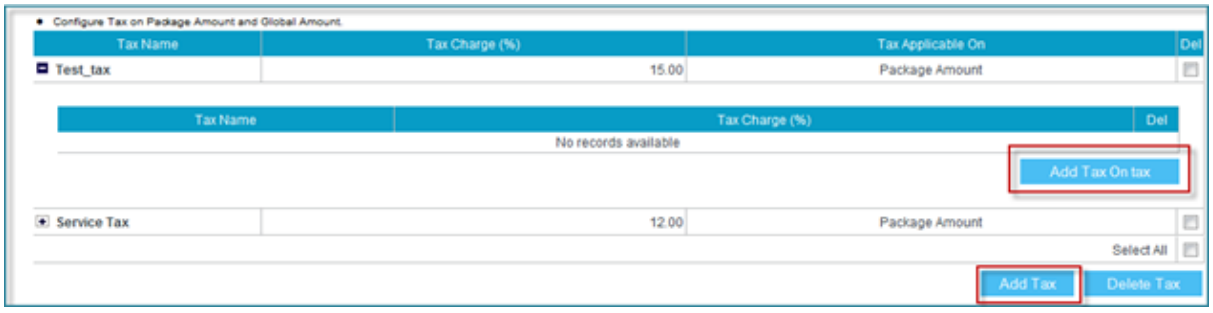

Figure: (b) Add Tax on Default Tax

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To add tax on default tax, use '**Add Tax on Tax**' button.

Figure: (c) Add Tax on Default Tax

Add Tax on default tax	
Tax Name	Select service type to be applied on the ancillary service
Tax Charge	Enter the percentile value of tax to be applied

Tax details will be attached with the ancillary service as shown below you can add multiple taxes on single ancillary service.

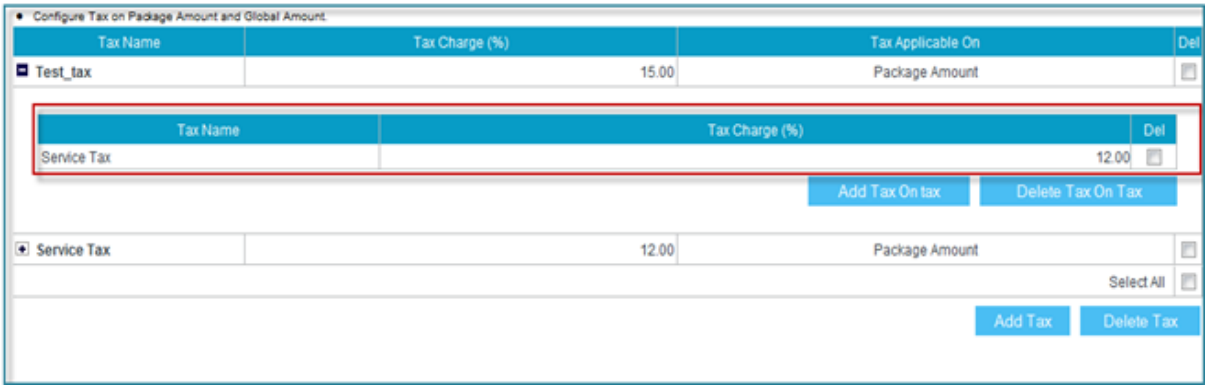

Figure: (d) Add Tax on Default Tax

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User

Introduction

24online User Management is analogous to Subscriber Management. It facilitates service providers to manage unlimited number of users in a dynamic network all user functions, migration facilities and user authentication process. It assists to maintain all subscriber relevant information, responsible for keeping track of payment, credit limits, plan subscription and expiry, invoice and payments, as well as the generation of reports and statistical information.

User Management provides complete details of user login, log-out, data transfer, bandwidth usage, package details and renewal details of packages. Managing users for separate pool and zone becomes very easy task with the User Management.

With the help of user management, you can define the pools and zones created in your network. User Management in this document is explained as per the software use of the menu, keeping the requisite option first, starting with Pool Management.

Note:

- **Some necessary configurations should be done before adding user in the system.**
- **A user is always assigned an IP and an IP is a part of the pool.**
- **There can be multiple pools in the network which is combined in a zone.**
- **For zone related queries, refer to Zone Management Module. Zone Management is an add-on module.**
- **For POP related queries, refer to POP Management Module. POP Management is an add-on module.**

Pool Management

Pool is a collection of bundle of IP addresses. Pool Management comprises of creation and management of IP addresses based on predefined criteria, set by admin. The general criterion is geographical grouping of IP addresses. Each user added in the system is attached with IP address of the pool. IP address can be dynamic or static as required. But, an IP address must be a member of a pool, and a user should be attached with an IP address in the pool.

Networks can also be increased in system with the help of pool management menu. Whenever a pool is created, updated or deleted from the system, the resource manager which is an internal component of 24online needs to be restarted from the text based 24online console.

Note:

- **For SNAT related queries, refer to SNAT Management Module. SNAT Management is an add-on module.**
- **SNAT module should be registered to define pool as private or public**

There are several parameters, combining which a pool is formed. You need to specify appropriate information in each parameter for successful creation of the pool.

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Create Pool

To create IP Pool, select **User > Pool Management > Create Pool** from the GUI:

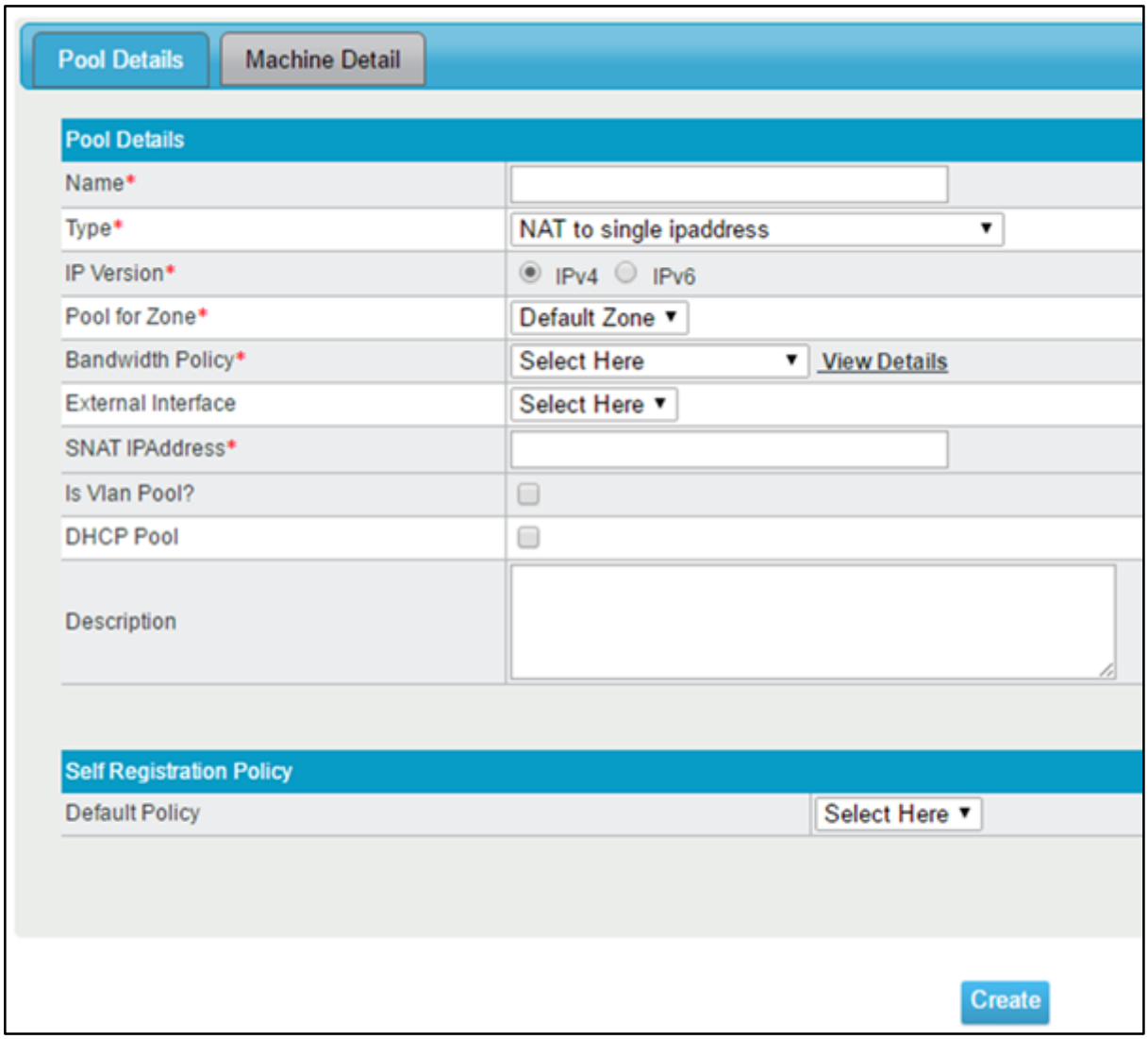

Figure: Create Pool

Name	**Define the name of the pool to be created. E.g. Conference Room Pool**
Type	• **NAT to single IP address** - translates to source IP address of guests belonging to the pool to the specific IP address defined in the text box. In such case, all the guests attached to the pool will share the same public IP address. • **NAT to public 'Pool' – One to One Pattern** - translates source IP of guests to public IP address by one to one basis. In this case, all guests attached with the pool will have unique IP address from public IP pool selected. (On selecting this option you will find a public pool drop down box appearing in the parameters. Click the drop down box and select the public pool from the list) • **NAT to public 'Pool' – Round Robin Pattern** - translates source IP of guests to public IP address in round robin fashion. This pattern

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	internally allocates the public IP(s) in cyclic manner and reuse the previously used public IP(s). (On selecting this option you will find a public pool drop down box appearing in the parameters. Click the drop down box and select the public pool from the list) • **Public**- Use to create public IP pool in the system
Pool for Zone	Select the zone from dropdown list
Bandwidth policy	Select required policy. Use **'View Details'** to see bandwidth policies attached with list. Can also be used to define bandwidth policies to pool.
External Interface	(**Available only for NAT to single IP address**) Select the external interface from dropdown list.
SNAT IP Address	(**Available only for NAT to single IP address**). Type the SNAT IP Address here.
Public	(**Available for NAT to public Pool**). Select the pool from dropdown list. This will create the current pool as the child of public pool.
DHCP Pool	(**Not Present for SNAT pool**) Select Yes to create pool as DHCP pool.
Description	Write the description about the pool. The description helps other people to get some extra information about the pool
Enable MAC based dynamic users	Select Yes, to allow MAC based login. When the option is enabled, 3 more settings appear
Default Policy	Select the default policy for MAC based user login
Is MAC Based default	Select 'Yes' to set MAC based login as default login
Enable Default Login	Select 'Yes' to login the users automatically. The user will not require to login every time to access the internet.
Default Policy (Self-Registration Policy)	Select the default policy for self-registration users.

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Machine Details
Select Yes to create a network pool.
Define starting range of IPs
Define ending range of IPs
Define the name of the machine **(Note*-Admin needs to define machine details if pool does not contain network)**

After defining the required information in each parameter, click the 'Create' button. The system will save the provided information and create the pool in the system. Pools created in the system will be shown on the '**Manage Pool**' page.

Manage Pool

Use '**Manage Pool**' to view complete list of pools created in the system. It's a user-friendly page that allows you to update any information in the existing pools. With the help of options given on this page, you can update required information as well as delete any unused pool from the system. From this page, you can also get an overview of the pool type and bandwidth policy attached to each pool.

To manage pool, select **User > Pool Management > Manage Pool** from GUI:

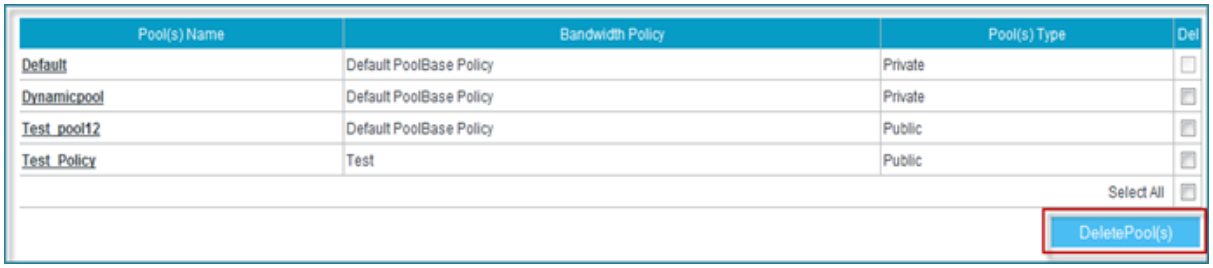

Figure: (a) Manage Pool

Manage Pool	
Pool Name	Displays the names of pools created in the system. ['D' mark will be available next to pool name in case of DHCP pool]
Bandwidth policy	Displays the type of bandwidth policy attached in each pool
Pool type	Displays the type of pool created against each pool name

To delete any pool from the system, click the checkbox against the pool name you wish to delete and click the 'Delete pool' button on the manage page. You can also select multiple checkboxes and delete multiple pools at the same time.

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Edit Pool

To update any information in any of the pool in the list, click the pool name from Manage Pool page.

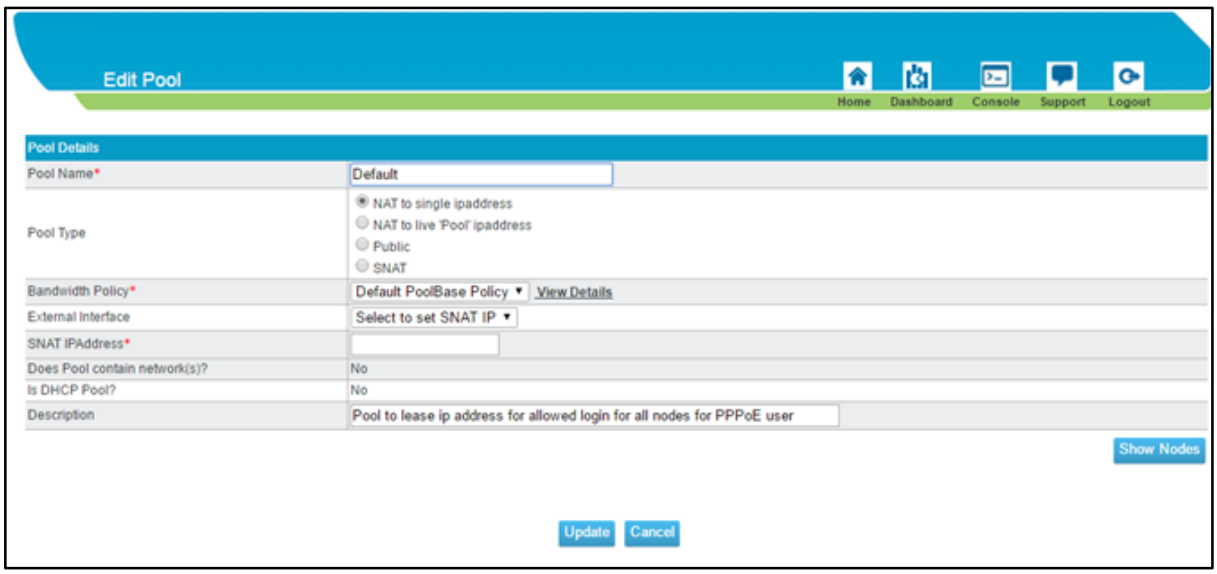

Figure: (b) Edit Pool

Note:

- **The system will not allow you to delete any pool from the system, if it is attached with any live user(s).**
- **Zone details will be available if zone module is registered.**

Search Node

It is a tiresome task to sit and manually search for a single IP address amongst a huge list! 24online eases the task by Search node page in GUI, which offers you instant solution to search the IP address. All you need to do is enter the IP address you are searching for or just enter the series i.e. 10.XX.XX.X or 192.XXX.XX.X series in the text box and click the 'Search' button.

To search node, select **User > Pool Management > Search Node** from GUI:

Figure: (a) Search Node

Search Node	
Enter IP Address	Enter the IP address that you wish to search for and select **'Search'** In-case you don't know the exact IP address and you wish to search by the series of IP address or random digits that you remember i.e. XX.XXX.10.X or XXX.192.XX.X series, just enter the digits of the IP in search box

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The system will show the search result as shown below. To view the details of the specific IP address click on the IP address.

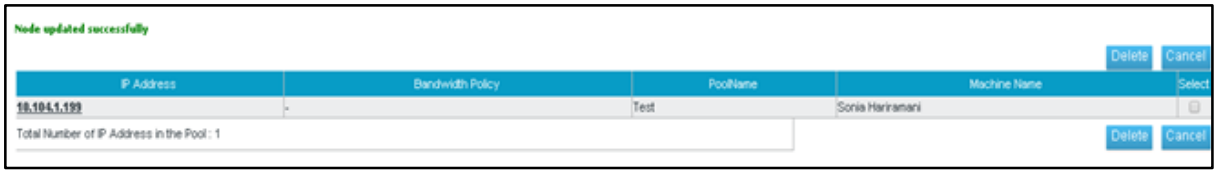

Figure: (b1) Search Node

Click on IP address for the details

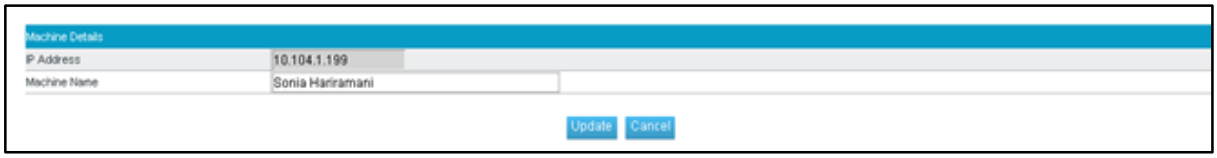

Figure: (b2) Search Node

Search Network

It is a tiresome task to sit and manually search for a single network address amongst a huge list! 24online eases the task by Search network page in GUI, which offers you instant solution to search network by entering the network ID. The complete details can be viewed in the search result. In other case, if you don't remember the network ID, and you just remember the random digits of the IP assigned to the network ID, then you can search by entering the specific digit also.

Figure: (a) Search Network

After entering the details in the text box, click the search button. The system will search the network IDs matching your search criteria.

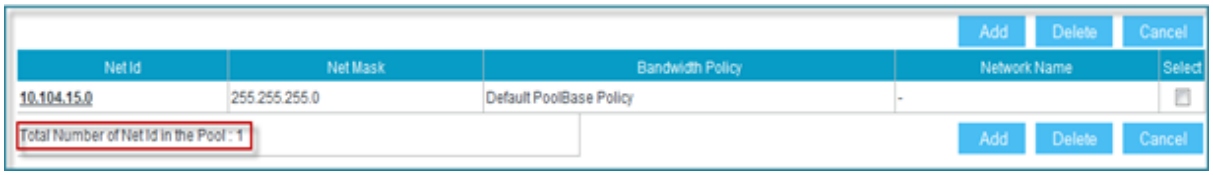

Figure: (b1) Search Network

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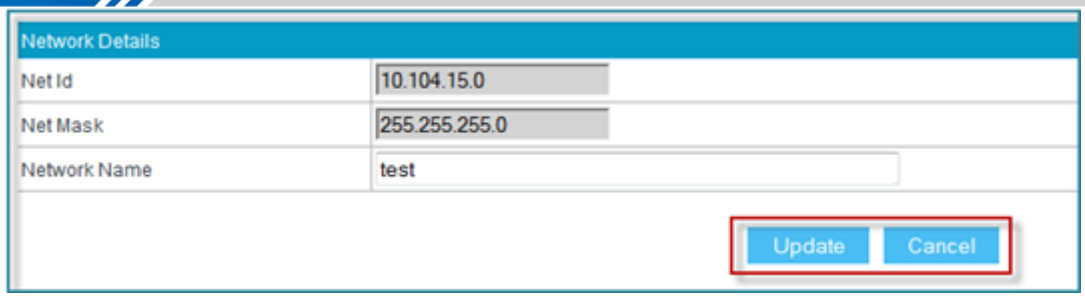

Figure: (b2) Search Network

Search Network	
Network ID	Displays the list of different network created in the system
Net mask	Displays Net Mask ID assigned to each network
Bandwidth policy	Displays pool based bandwidth policy assigned to each network
Network Name	Displays name defined for each network

To view the details of any network, click on the network IP address. The system will open a different window with details of the network ID, net mask ID and network. You are free to update the information, if required. After updating the information, click on the '**Update**' button.

Manage Users

Manage Users menu is specially designed to ease the user operations and obtain complete information from the system. With the help of this menu, you can add users, view active users, deactivate users or search users etc. With the help of this combination you can add, manage, edit user information and generate reports as and when required.

Add User

To add user, select **User Management > Manage Users > Add User** from GUI:

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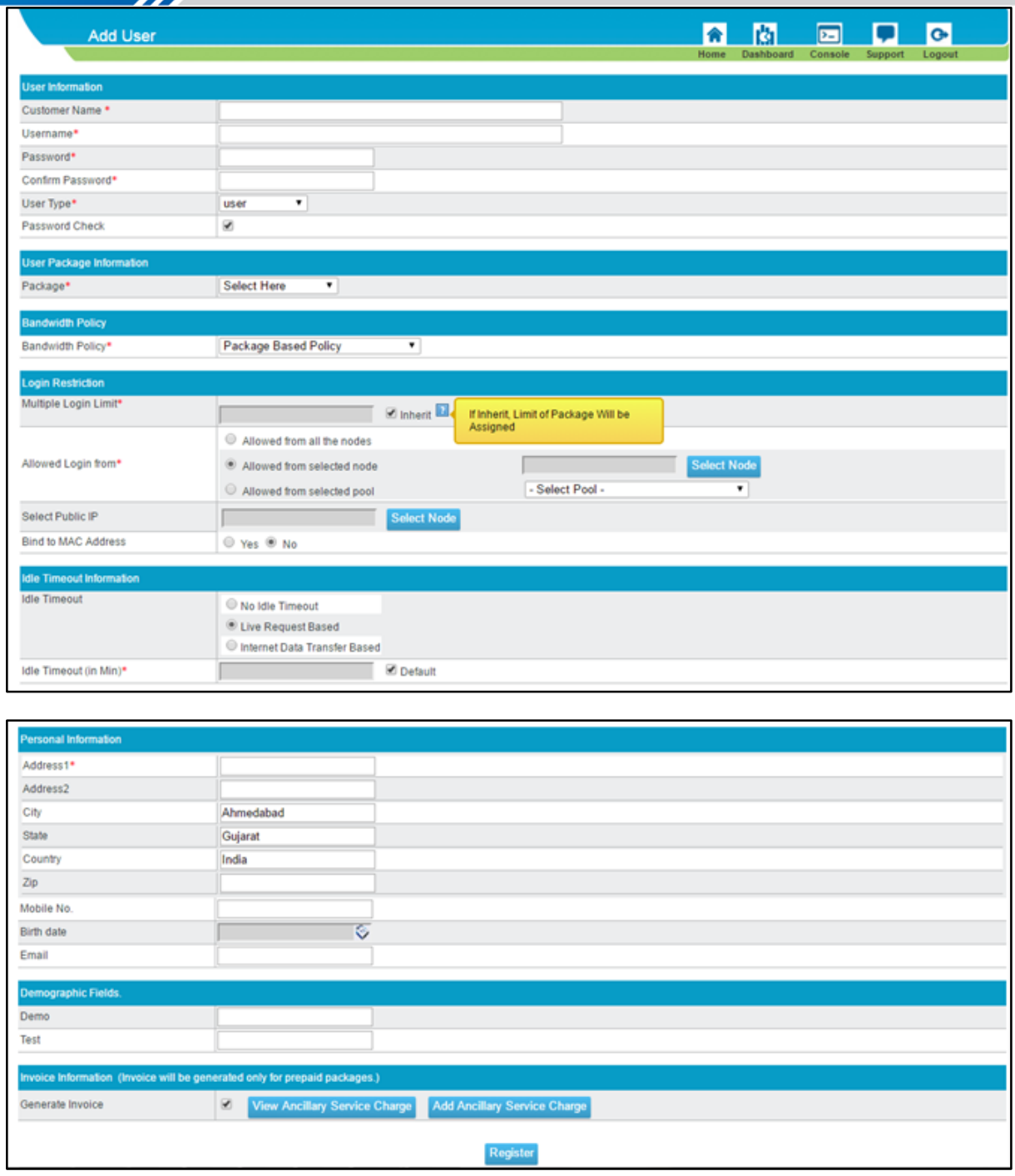

Figure: (a) Add User Page

Add User
User Information, User Package information, Bandwidth Policy

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Customer name	Facility provided to create customer account in the system, and allows multiple users to be added under the name of that customer E.g. if you want to add multiple users of the company named ABC. You can define the customer name as ABC, and, then add various users under the name of the ABC Company. So, enter the customer name in the text box.
User name	Enter username of user to be added in the system
Password	Define password which user will use to login into his/her account
Confirm Password	Re-enter password for confirmation
User type	24online has eight user-types • Administrator • Manager • User • Operator • Zone Manager • Zone Operator • Leased Line • Walk-in user On selecting 'Operator' or 'Manager' user type – a new check mark option will appear as **'Console User'.** On selecting this option, console access can be given to this particular user.
Package	Select package information from drop-down box
Grace Days	Enter grace days to be provided. Select "**Inherit**" checkbox to inherit Package's grace days.
Bandwidth Policy	System will automatically show bandwidth policy configured in the selected package. You can modify the bandwidth policy to be assigned using this parameter. Click the drop-down box and select the bandwidth policy to be assigned from the list
Add User- Login Restriction	
Multiple Login Limit	Define multiple login limits here if default limits value not to be assigned to this user. **Inherit -** On selecting inherit checkbox, the default limit value defined for the package assigned to the user will be applied.
Allowed login	**From all the nodes** - Allows user to login from all the nodes in the network. (This option appears only when the user type is 'User').
	From selected node - Allows user to login from the selected node. Select the 'Select Node' button to add the node. Select the pool name, and, define an IP node of that pool.

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	From selected pool - Allows user to login from the selected pool. Click the drop-down box and select the pool name from the list. (This option appears only when the user type is 'User'
Allowed from the selected network	Allows user to login from the selected network. Click the '**Select Network**' button and select the network from the drop-down box. (This option appears only when the user type is 'Leased-Line User')
Allowed from Selected range	Allows adding selected range of IP addresses for particular leased line user. (This option appears only when the user type is 'Leased-Line User')
Bind to MAC address	Specify whether the user should be bind to MAC ID or not
Add User- Personal Information	
Address 1/ Address 2/City/ State/Country/ Zip code/ Phone number/ email id	Enter the complete contact details of the user
Date Of Birth	Use the calendar option to select the date of birth of the user
Generate Invoice	Select the checkbox, whether you want to generate invoice or not for this user. If the checkbox is unselected, the system will not generate invoice for this user, on registration nor renewal transactions.
View Ancillary Service Charge	To view the details of ancillary charges that is added in the invoice.
Add Ancillary Service charge	Click **"Add Ancillary Service charge"** to add user specific ancillary charges in the invoice.
Register	Select after all specifications are completed. The system will save the provided information and create the user in the system with the attached package and pool/node assigned (if configured).

Note: If the user type is "Leased Line" a new comboBox "Valid in NAS", will be added in login restriction.

Search User

When there are hundreds and thousands of users in the system, searching a specific user becomes a difficult task. For such query, 24online offers easy search user option using which you can easily search a specific user or list of users with similar criteria from the system.

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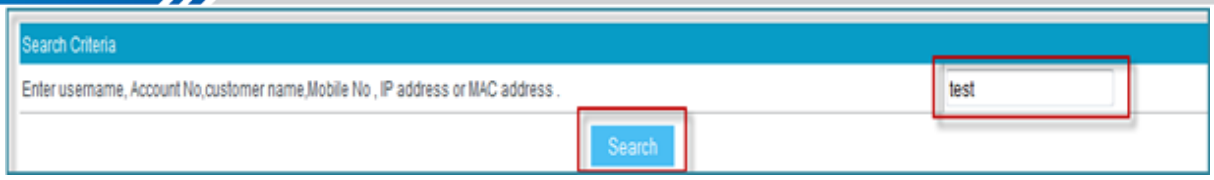

Figure: (a) Search User

You can search the user by entering any of the details as mentioned in the screen, like username, customer name, IP address or MAC address of the user. E.g. Test.

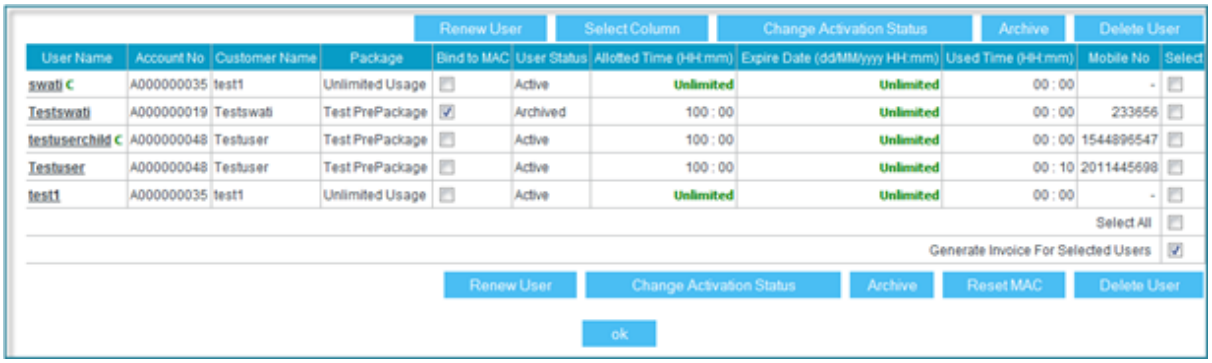

Figure: (b) Search User Results

Search User Results	
Username	Shows list of usernames that is matches your search criteria
Account No	Displays account number of customer
Customer name	Gives the information of the customer to which user is added
Package	Shows the package assigned to the user, against each username
Bind To MAC	Select checkbox in-case customer is to be bound with MAC
Is Active	Shows the current status of the user in the system
Allotted time	Shows the surfing time allotted for each user
Expire Date	Date and time of the user's package expiry is shown
Used time	Shows the total usage time used by the user
Mobile No	Displays mobile number of user

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Select column	To renew/change activation status/delete/archive user Select the checkbox against the username which you want to renew and click the '**Renew**' button Select the checkbox against the username which you want to change and click the '**Change Activation Status**' button Select the checkbox against the username which you want to remove and click the '**Archive**' button Select the checkbox against the username which you want to remove and click the '**Delete**' button
Ok	Click to go back to the search page

Advanced Search User

"Advance Search User" feature makes searching specific user more convenient and easy. With this feature, any user can be searched by using various fields' options available. Active users, De-active users, or Archived users can be looked for using these various fields' options with ease.

Account Filter

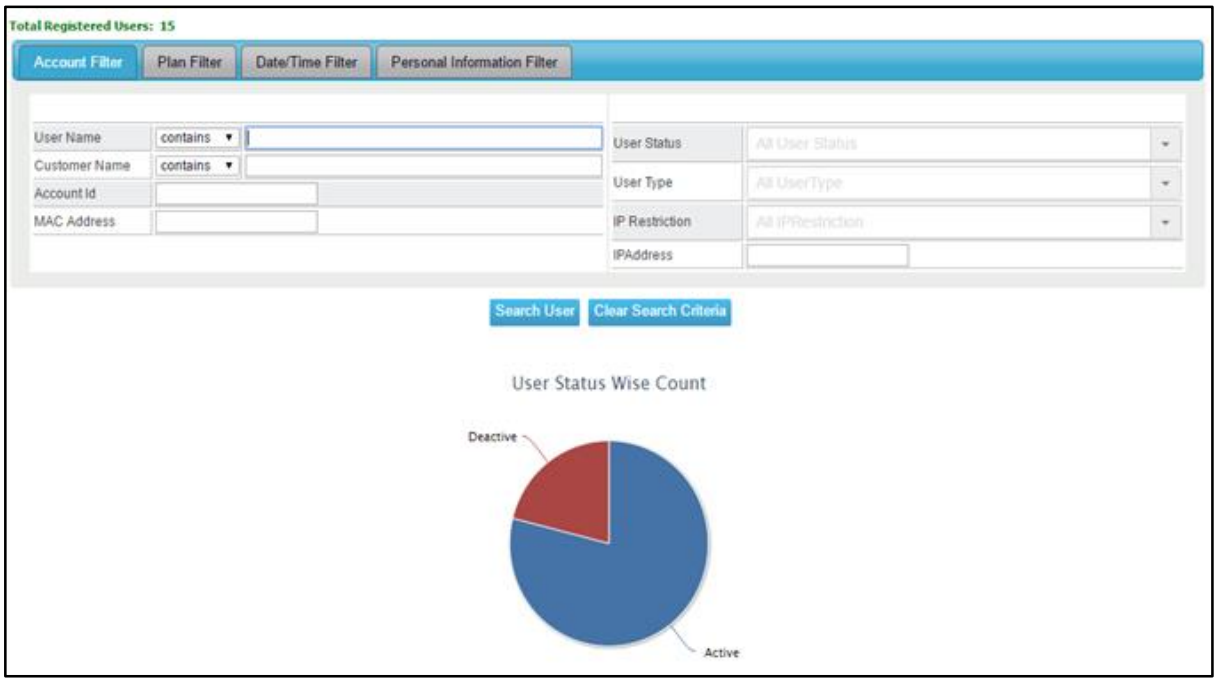

Figure: (a) Advanced search using account filter

You can search user by entering any of the details as mentioned in the screen, that is

Advance Search User	
Username	Username value can be entered according to the advanced options available – contains, equals, starts with, ends with

Customer Name	Customer Name value can be entered according to the advanced options available – contains, equals, starts with, ends with
Account Id	Account id can be entered to search particular user and get details
POP Name	User can be searched by entering POP Name
Zone Name	Enter Zone Name to search any user
User Status	It also allows to search user by their status
User Type	It is possible to search user by their type, which can be, POP Manager, Leased Line, Manager, Zone Manager, and so on.
IP Restriction	User can be searched by their IP Restriction category
IP Address	IP Address value can be used here to search any user
MAC Address	MAC Address value can be used here to search any user

Plan Filter

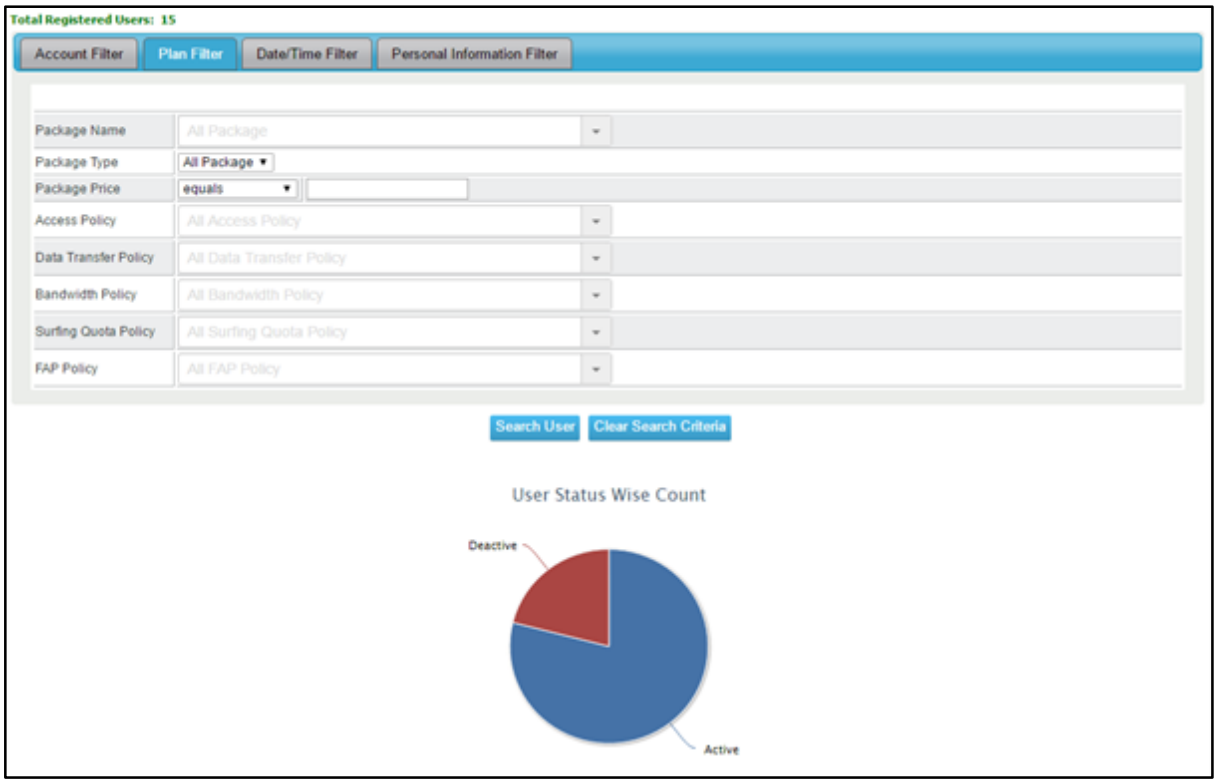

Figure: (b) Advanced search using plan filter

From this tab, user can be searched by their Plan details. The options available here

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Advance Search User	
Package Name	Search any user by entering Package Name
Package Type	Package Type value can be used to search user
Package Price	The price of package can be entered here according to advanced options available – equals, greater or equal, greater, less or equal, or less
Access Policy	Access policy can be selected from the drop down menu to search any user
Data Transfer Policy	Data Transfer policy can be selected from the drop down menu to search any user
Bandwidth Policy	Bandwidth policy can be selected from the drop down menu to search any user
Surfing Quota Policy	Surfing Quota policy can be selected from the drop down menu to search any user
FAP Policy	FAP policy can be selected from the drop down menu to search any user

Date/Time Filter

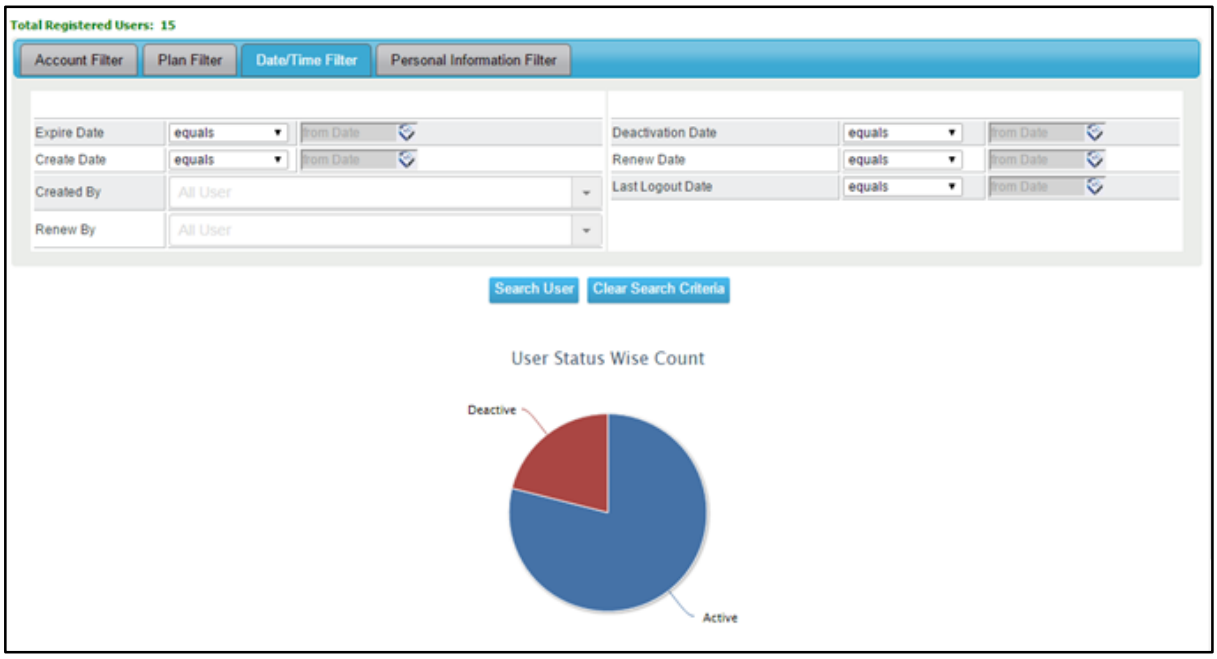

Figure: (c) Advanced search using date-time filter

From this tab, it gets easier to search any user based on their package date/time details

Advance Search User

Expire Date	Search any user by expire date of their package
Create Date	Search user by entering creation date of their package
Created By	Search by entering details of who created user
Deactivation Date	User can be searched by their deactivation date
Renew Date	Search any user by their renew date details
Renew By	Search any user by entering Renew By value
Last Logout Date	Search users by their last logout date.

Personal Information Filter

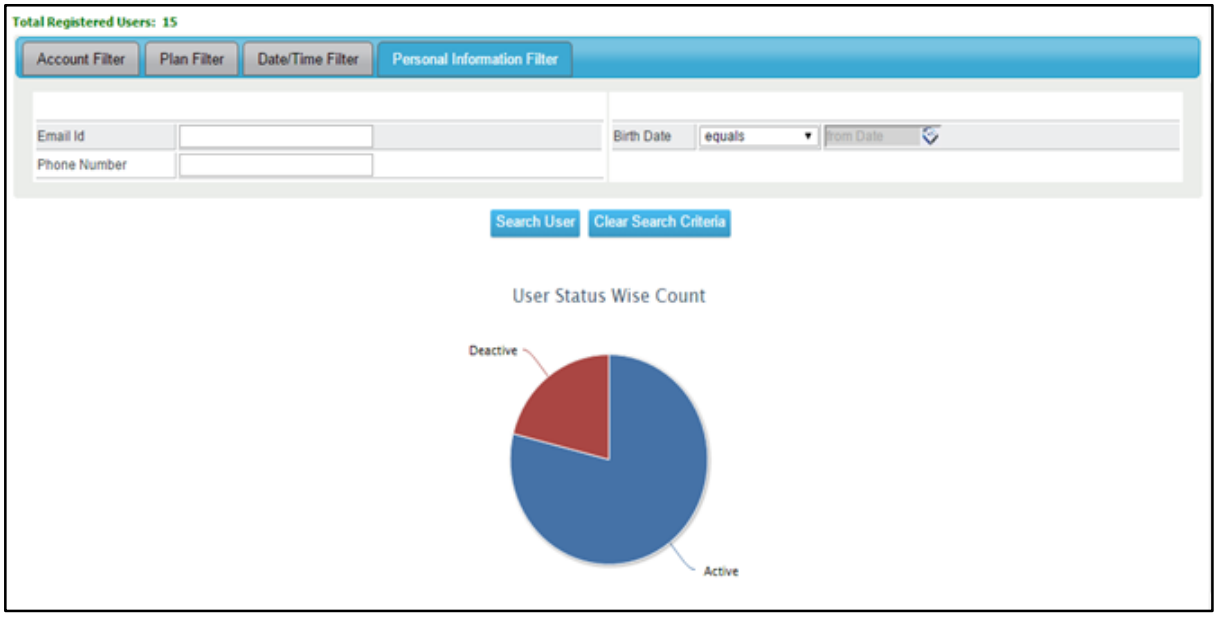

Figure: (d) Advanced search using personal information filter

Enter Personal Information details and search any user with ease under this tab

Advance Search User	
Email Id	Enter email id and search any user with ease
Phone Number	Phone number can be used to search for any particular user
Birth Date	Birth date of user can be used to search

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When a user is added in the system, he is known as registered user, and when the user starts surfing in the network, he is known as active user. It's not necessary that all registered user be active at the same time. There are several options and information that can be availed from the active user's page. Let's understand how to manage the active user's page.

To update any information of the Active Users, **click on the username** of the user of whom you want to modify. The system will directly take you to the user information page, from where you can update user information, renew user, check user my account, suspend user as well as personal details/password etc.

Screen elements on Manage Active Users	
Username	Displays list of user's name using which they login to access Internet.
Account No	Displays account number of the user
Customer Name	Shows different name of the customers, against each username to which the users are added
Package	Displays package assigned to each user, against each username
Bind to MAC	Helps you to bind the user to his/her MAC ID
Expire Date	User's account expiry date and time information
Mobile No.	User's registered mobile number information.
Select	For taking any action like renewal, bind to MAC, Reset MAC, Deactivating, or Deleting User. For specific users, select the required check-box. For selecting all users at the same time, use the **'Select All'** option.

Edit User

Click on the username to enter into detailed information screen of user. The screen provides all the options available for actions on end-user.

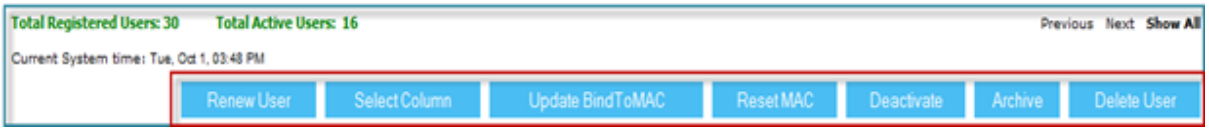

Figure: Available Actions

Message Displayed & Buttons On Manage Active Users	
Total registered	It's the number of users added in the system and out of them currently

User **Total active User**	actively surfing in the network.
Renew User	Helps you to renew any User's account whose package is going to exhaust or already expired. In such case, all you need to do is select the checkbox against the user name whose account is going to exhaust, and click the '**Renew User**' button. The user account will be automatically renewed with a new package (Renewal package configurable – refer renewal rules)
***Select Column** **(screen shown after table)**	Each column in this page provides necessary information about the user and user's usage. There are default columns which are already added in the page. In addition, if you want to add any other column apart from the default columns provided, then use the 'Select Column' button. A pop-up window appears with details of selected columns, and available columns that can be added in the page.
Update Bind to MAC ID	Binds the user with his/her system MAC address. Whenever the user sends a login request, the user's MAC ID is stored by the system and the user will not be allowed to login from any other system except the one bind with 24online. On successful binding MAC ID, the system will display the message **'Bind to MAC updated successfully'**
Reset MAC	To reset the MAC ID binded with any user
Deactivate	Users account can be de-activated in the system, manually by the administrator or on exhausting their package. To deactivate any User, select the checkbox against the username which you want to deactivate and click the **'Deactivate'** button. The system will deactivate the User and show in the deactivated user's list. (To activate the deactivated User, you need to 'Renew' the user.)
Archive	Users can be archived with the help of Archive User. Archive users are those users whose data will be present in the system for reference only, they cannot login in the system, nor can they renew/change package. They can only be deleted from the system. New users with similar username cannot be created in the system unless the archived user is deleted.
Delete User	To remove any user(s) from the list, you need to select the checkbox(s) against the username which you want to delete and click the **'Delete'** button. The User's username will be deleted and the user created in the system will be removed.

Note: Once the user is deleted from the list, it cannot be retrieved. Fresh user account has to be added in the system for the same User.

We'll discuss each slab in the Edit User screen individually for a better understanding. Slabs are divided as:

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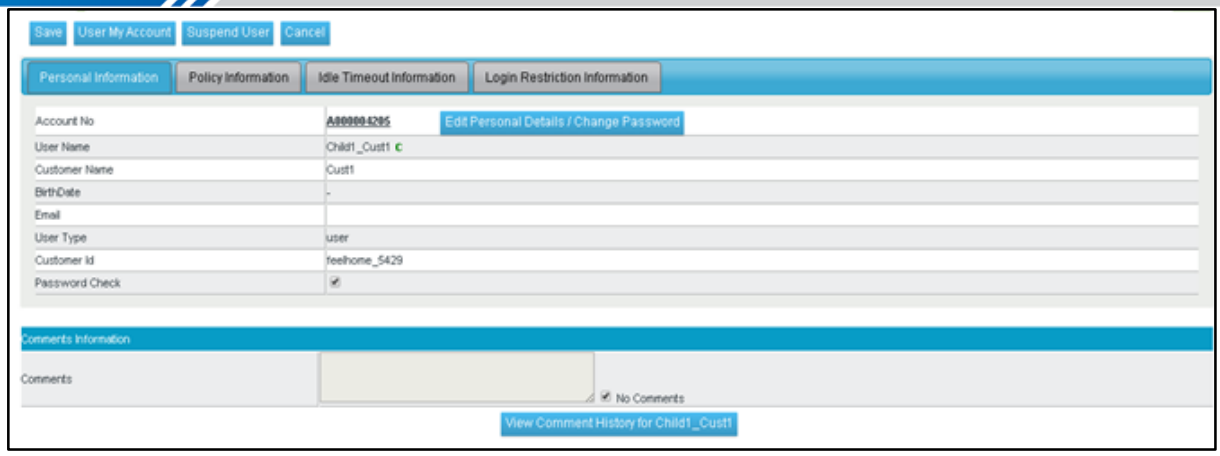

Figure: Options in Tabs of user account

- Personal Information
- Policy Information
- Idle Timeout
- Login Restriction
- View Comment History

A detailed explanation of all the buttons shown on the screen Renew User, User My Account is also given.

Personal Information

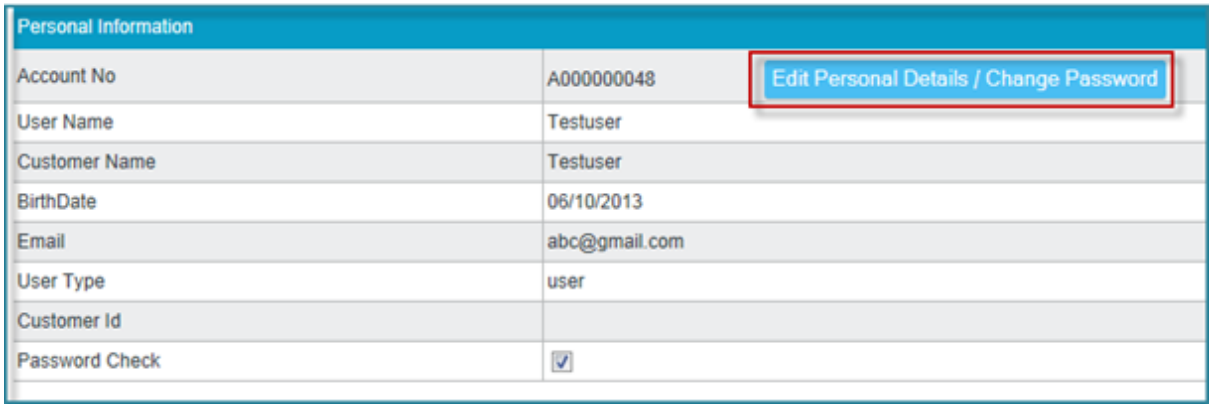

Figure: Manage Users - Personal Information Tab

Edit User	
Personal Information	
Account No	Displays account number of customer
Username	Displays username
Customer Name	Displays customer name
Birth date	Displays birth date of userall
Email	Displays e-mail Id of user

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User type	Displays user type
Customer ID	Displays Customer ID of user

If you want to see personal information or change the password of the user, click the '**Edit Personal Details/ Change Password**' button.

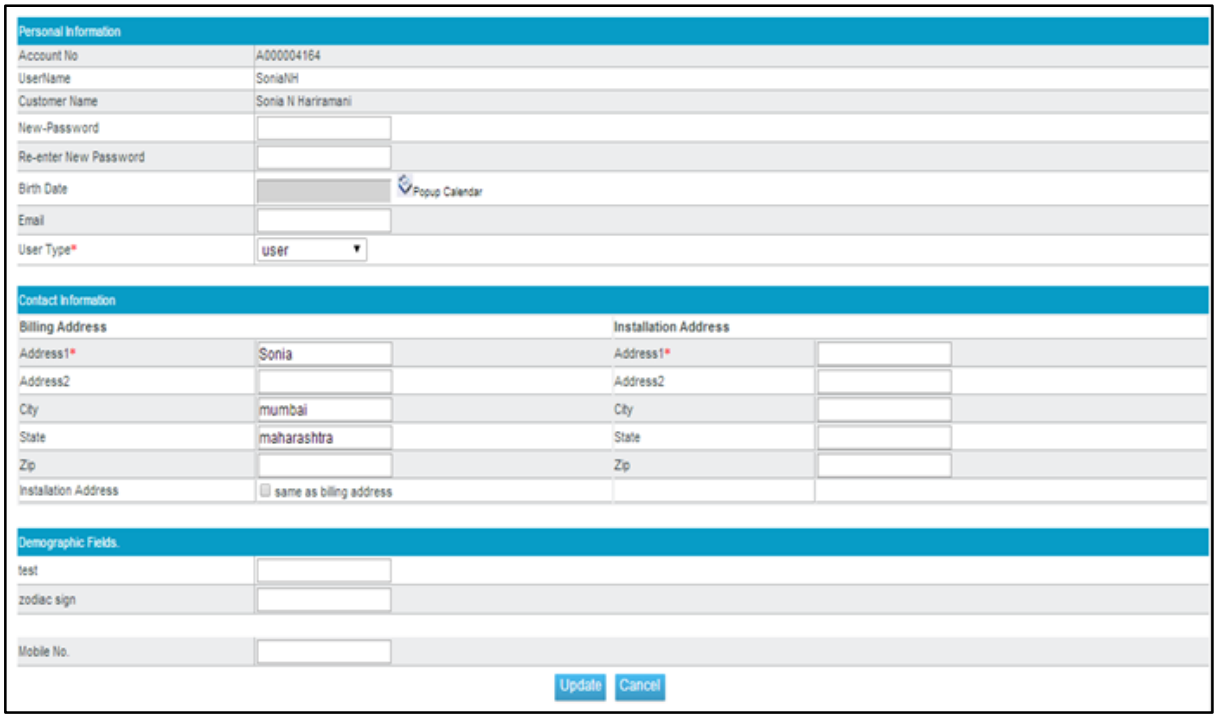

Figure: User Personal Details/Change Password

Change Personal Information	
Account No	Displays account number of the customer
Username	Displays username
Customer Name	Displays customer name
New Password	Use to change password, enter the new password in text-box
Re-enter New Password	Re-enter same password for confirmation
Birth date	Update birth date of user using calendar
Email	Update email Id of user
User type	Change user type if required
Contact Information	Enter address/city/state/zip/mobile number
Installation address	Enter the installation address, if the billing and installation address is same check the check box.

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Note: Any of the above mentioned user information can be modified or updated, only when the user is NOT live.

Policy Information

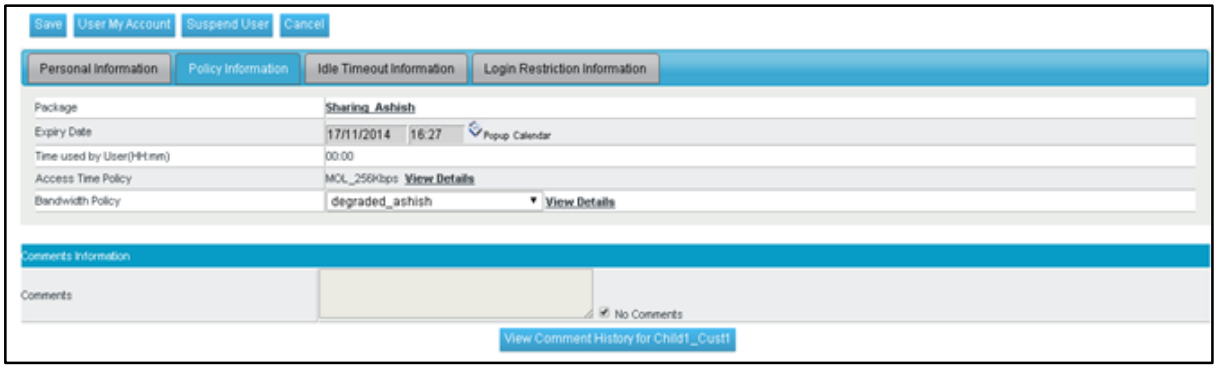

Figure: Edit User - Policy Information Tab

Edit User	
Policy Information	
Package	Displays package name
Grace Days	Displays grace days allotted to user
Time Allotted to User (HH:mm)	Displays usage time allotted to user
Expiry Date	Displays package expiry date
Time Used by User (HH:mm)	Displays amount of time utilized by user
Access Time Policy	Displays access time details of user
Bandwidth Policy	Displays name of policy defined in user's package. To update the policy, click the drop-down box and select the access time policy from the list. To view details of the current policy assigned to user, click the **'View Details'** option

Idle Timeout

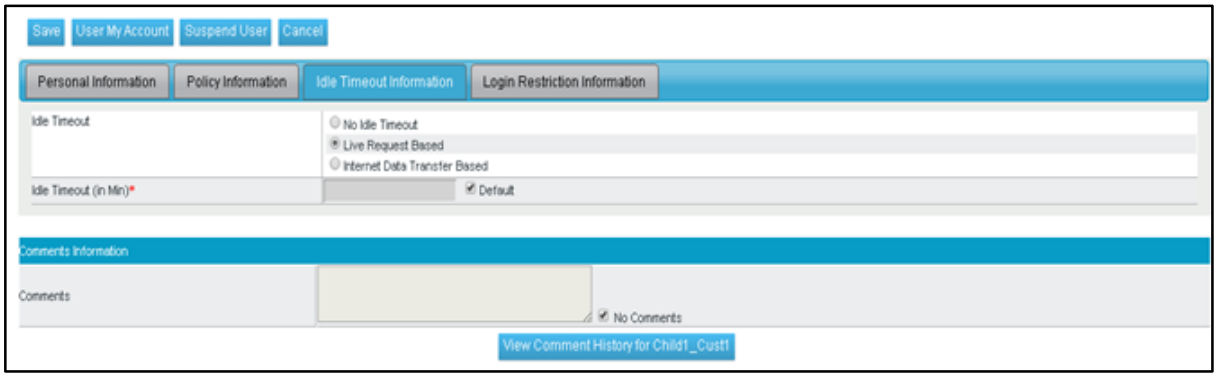

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Figure: Edit User - Idle Timeout Tab

Edit User	
Idle Timeout	
Idle Timeout	Select the required radio-button **No idle Timeout**- will have no timeout value required **Live Request Based**- idle timeout will occur as per specified time-duration, when captive portal is off **Internet Data Transfer Based**- idle timeout will occur as per specified data-transfer duration
Idle Timeout(min)	Enter the idle-timeout value in minutes. Default idle timeout is 15 minutes

Login Restriction

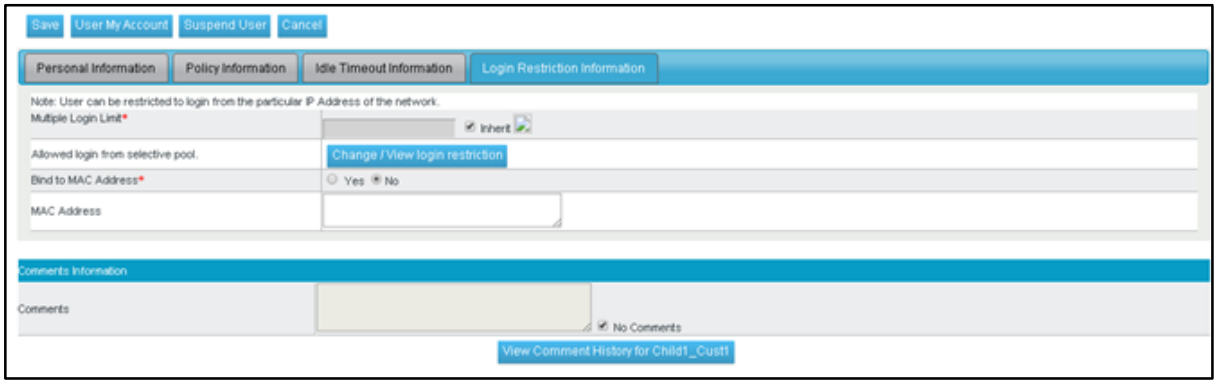

Figure: Edit User - Login Restriction Tab

Edit User	
Login Restriction	
Multiple Login Limit	Displays multiple login limit defined for the user. Inherit checkbox means the default value for multiple limits is being applied for the user.
Allowed login from selective pool	Displays login restrictions defined while adding user. To view/update click **'Change/View Login Restriction'** button.
Bind to MAC address	Select the appropriate radio-button to Bind user to MAC
MAC address	Enter the MAC address of the user in the box

Change/View Login Restriction Button

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Change Login Restriction

To update the login restriction, select the appropriate login restriction option and click 'Save' button.

Buttons on Edit User Screen

We'll now discuss buttons on the Edit User screen i.e. Save, Renew User, User My account and Cancel.

Figure: Edit User - Buttons on Screen

Save

'Save' to confirm any the modifications done in this page. The system will save the modified information.

User My Account

'User My Account' displays the details of the user; it helps user to view complete details of his account.

It has been categorized into following Section:

- Personal
- Account Status
- Renewal/Top Up
- Invoice
- Bandwidth Management
- Usage Detail

The buttons and screen elements on the screen are as explained below.

Personal

To change User's password, select **Personal > Change Password**. Following screen will be displayed for change password facility.

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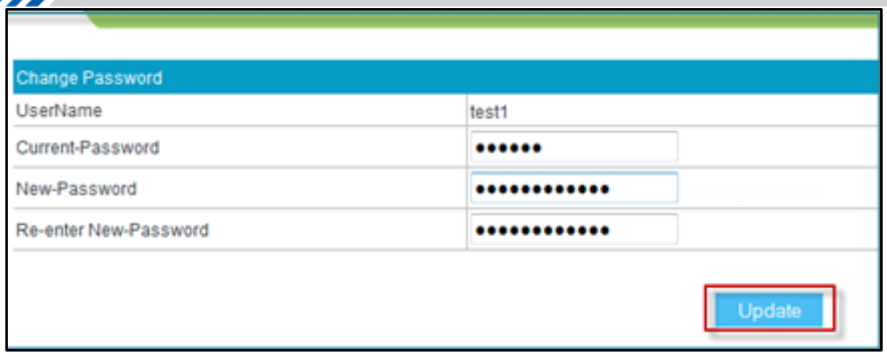

Figure: User My Account - Change Password

Change Password	
Username	Displays username
Current Password	Enter current password
New - Password	Enter new password
Re-enter New Password	Re-enter new password
Update	Update and save the operation

To edit users personal details select **Personal > Personal Details**

Users can update their birth date from this page. System does not allow users to change their **username, customer name, identification code, email id and mobile number** due to security reasons.

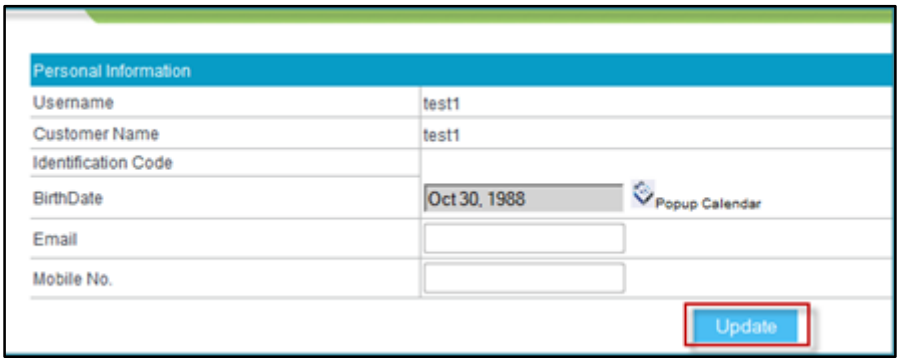

Figure: User My Account - Personal Details

Edit Personal Details	
Username	Displays username
Customer name	Displays customer name
Birth Date	Edit Birth date of the user
Email	Edit email id of the user

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Mobile No	Edit mobile no of the user
Update	Update and save the operation

Account Status

"**Account Status**" will display Policy details as well as surfing details of the user, Parent user and child user can view their individual usage as well as account-wise usage from their respective "My Account" page.

For user's usage details select **Account Status > Status**. System will display policy and internet usage details as shown below:

Parent User My Account Page

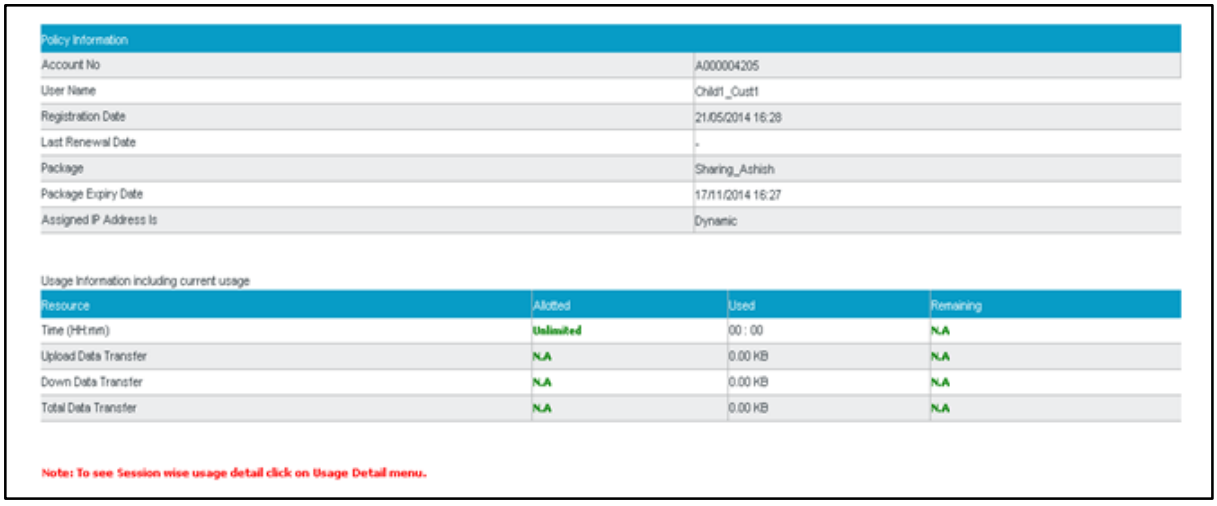

Figure: My Account - Internet Usage (child view)

Parent account can differentiate internet usage details within child users. Parent and child user's "**My Account**" page will display the individual usage details and total account usage details.

Internet Usage Status **Policy Information**	
Account No	Displays the account number of the customer
Username	Displays username used by the user to login and access
Registration Date	Date and time of user's registration
Last Renewal Date	Date and time when the user was last renewed
Package	Package that is assigned to the user
Package Expiry Date	Date and time when user's package will expire
Assigned IP address is	Displays IP address of the machine connected

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Usage Information	
Resource column	Shows different types of usage like Time / Upload / Download and Total Data Transfer
Allotted column	Shows the actual amount of time and data transfer defined to the user for usage
Used column	Shows the amount of time and data transfer used by the user from the actual allotted value (i.e. time and data transfer)
Account Wise	Displays the total data usage account-wise
Remaining column	Shows the amount of time and data transfer remaining in the user's account

Internet Usage Information	
Time	Shows the actual usage time in each login
Download data	Shows the amount of data transferred in each session
Upload data	Shows the amount of data transferred in each session
Total data transfer	Shows the amount total (upload + download) data transferred in each session

Payment Status

To view **Payment status** of the user, select Payment Status option from Account Status menu bar. It displays complete payment details of a user along with invoice date, invoice number. It shows the debit and credit details of the user which helps users to know their pending payments and about the payments previously made.

Moreover, it allows making payment for pending invoices by easily clicking '**Click to Pay Invoice Amount**' button.

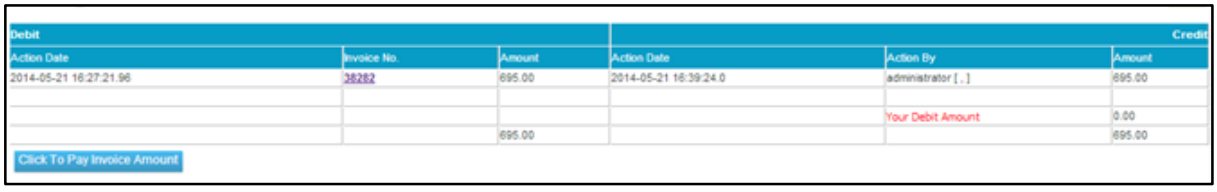

Figure: Payment Status

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Payment Status	
Action Date	Displays action date of the invoice.
Invoice Number	Displays invoice number details
Amount	The amount to be debited or credited is displayed here.

Renewal/Topup

To view the renewal history of the user, select **Renewal/Top UP > Renewal history** from the users "**My Account**" page. Renewal history displays the renewal details of the packages purchased, usage allotment and its expiry date. To download renewal history details click on "**Export as CSV**" from My Account page.

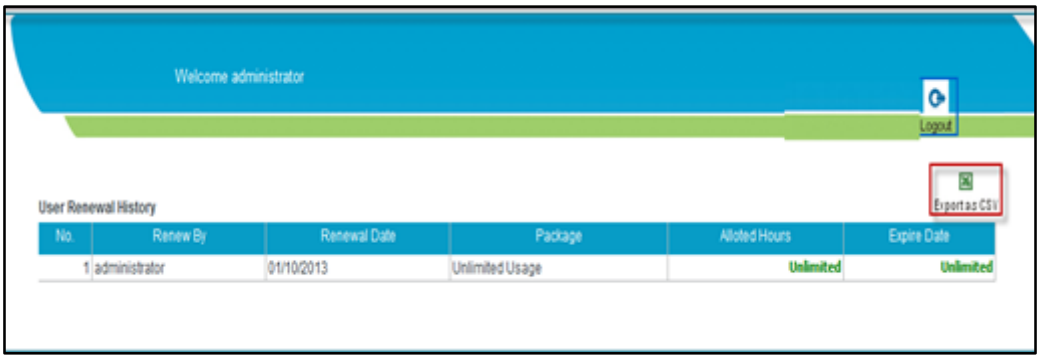

Figure: Users Renewal History

Renewal History detail	
Renewed By	Displays name of the renewal admin
Renewal Date	Displays renewal date
Package	Displays allotted package
Allotted hours	Displays allotted package
Expiry date	Displays expiry date of the package
Export as CSV	Using this option renewal history can be exported as CSV

Invoice

"**Invoice**" consists of the invoice generated regarding user's usage; Invoices can be generated Weekly, Monthly, and Quarterly, Half-yearly or yearly as per the configurations. It also includes invoice creation date as well as invoice-amount.

Use the '**Invoice**' button to view the invoice details of user.

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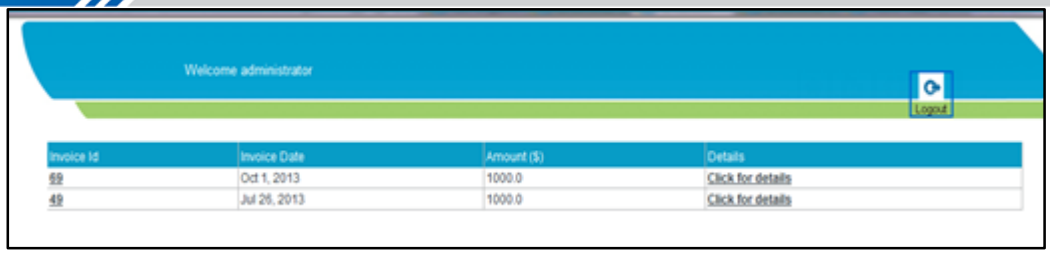
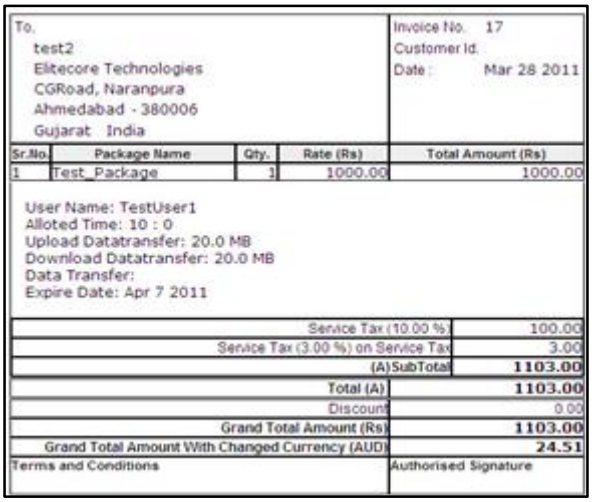


Figure: User My Account - Invoice

Invoice-details	
Invoice –Id	Displays ID of the invoice, click on "Invoice-Id" to get invoice in printable format
Invoice Date	Displays date of invoice creation
Amount	Displays invoice amount
Details	Click on details to get detailed data-transfer summary

Click on **Invoice-Id** to view invoice in printable format as shown below. The invoice details will be showed in a separate window in printable format and template (configurable).


To,
test2
Elitecore Technologies
CGRoad, Naranpura
Ahmedabad - 380006
Gujarat India

Invoice No. 17
Customer Id.
Date : Mar 28 2011

Sr.No.	Package Name	Qty.	Rate (Rs)	Total Amount (Rs)
1	Test_Package	1	1000.00	1000.00

User Name: TestUser1
Alloted Time: 10 : 0
Upload Datatransfer: 20.0 MB
Download Datatransfer: 20.0 MB
Data Transfer:
Expire Date: Apr 7 2011

Service Tax (10.00 %)	100.00
Service Tax (3.00 %) on Service Tax	3.00
(A) SubTotal	1103.00
Total (A)	1103.00
Discount	0.00
Grand Total Amount (Rs)	1103.00
Grand Total Amount With Changed Currency (AUD)	24.51

Terms and Conditions | Authorised Signature

Figure: User Invoice

Click "**Click for Session Details**" for session created by the user.

This screen contains internet usage details of the user; details of users each surfing session will be displayed. It will display internet usage details of the user with effective session time, download data, upload data, used time, start time, and stop time details for the time period selected. Following screen displays session details of the user:

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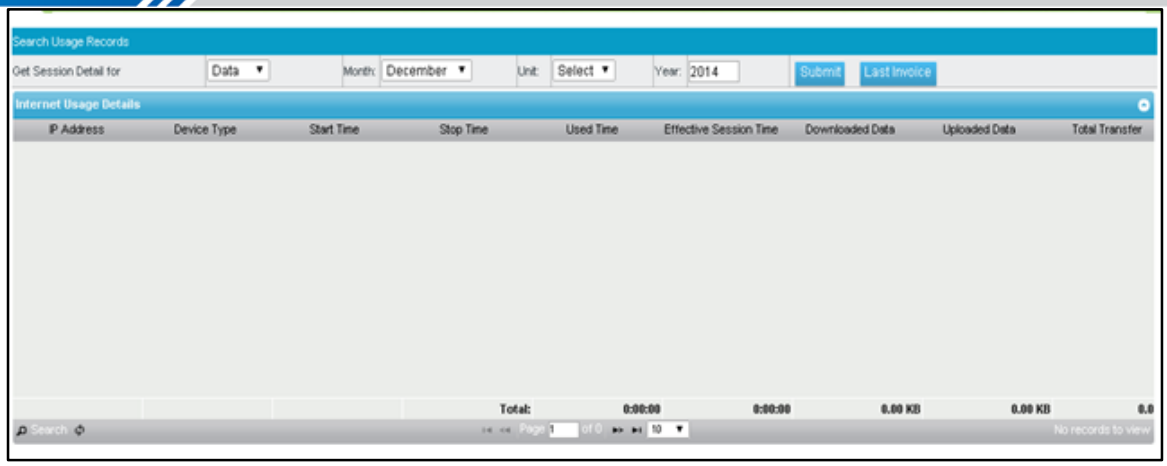

Figure: Session Details

Session Usage Details	
IP Address	Displays the IP address of the device
Device Type	Display device type from which surfing is done
Start Time	Displays the start time of surfing session
Stop Time	Displays the stop time of surfing session
Used Time	Displays the total surfing session duration
Effective Session Time	Displays effective session time of the user
Downloaded Data	Displays Download data transfer by the user
Uploaded Data	Displays upload data transfer by the user
Total Data Transfer	Displays total data transfer(i.e. Upload +Download) by the user

User-wise Bandwidth Usage Report

Select **Bandwidth Management > Bandwidth Usage Report** to get the complete Data transfer report.

Select the combobox displayed on the screen, to get daily, weekly, monthly as well as yearly bandwidth usage of the user.

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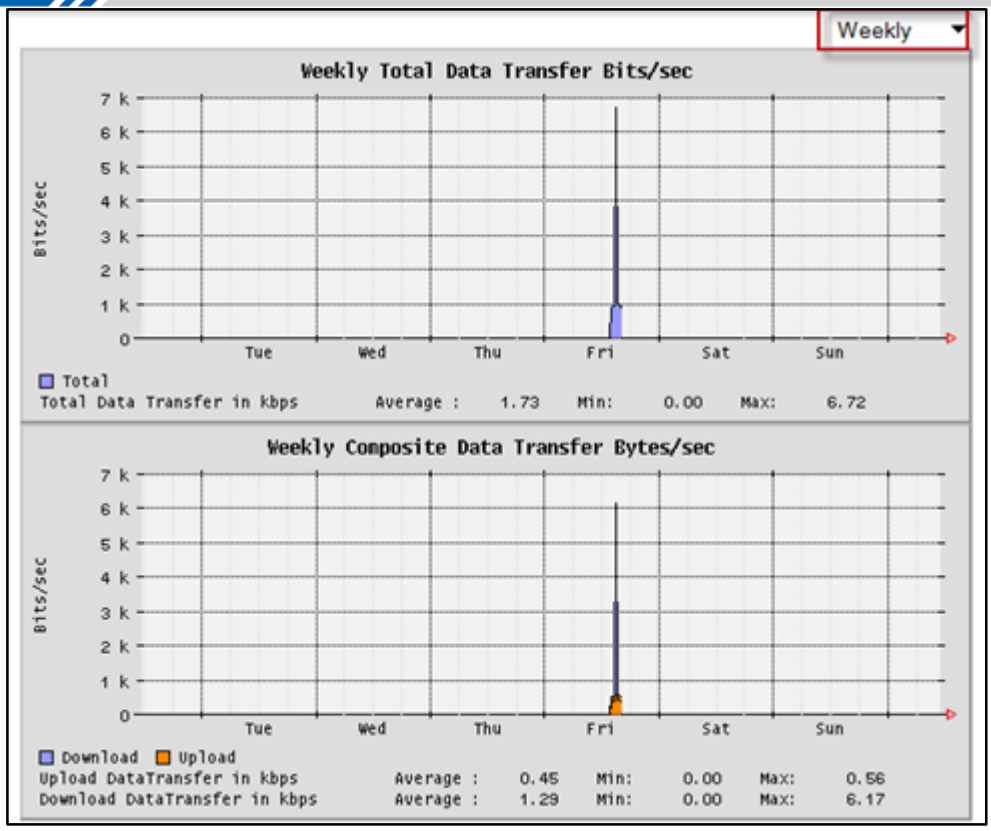

Figure: Bandwidth Usage Report

User-wise Session Usage Details

To get "**User-wise**" usage details for a specific period (maximum 2 months) using the date selection box and click on '**Submit**' button. The **unit** will display the records in terms of selected unit. System will display user's session history for the specific month, as shown in the below screen.

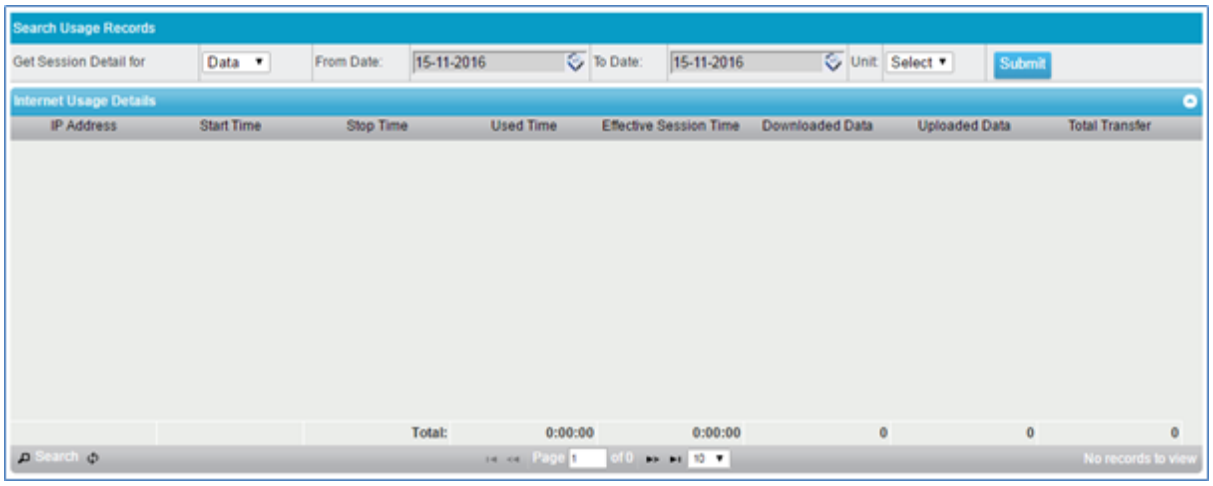

Figure: Session Usage Detail

Last Invoice Button

Use the '**Last Invoice**' button to view the current invoice of the user. The invoice details will be showed in a separate window in printable format and template (configurable).

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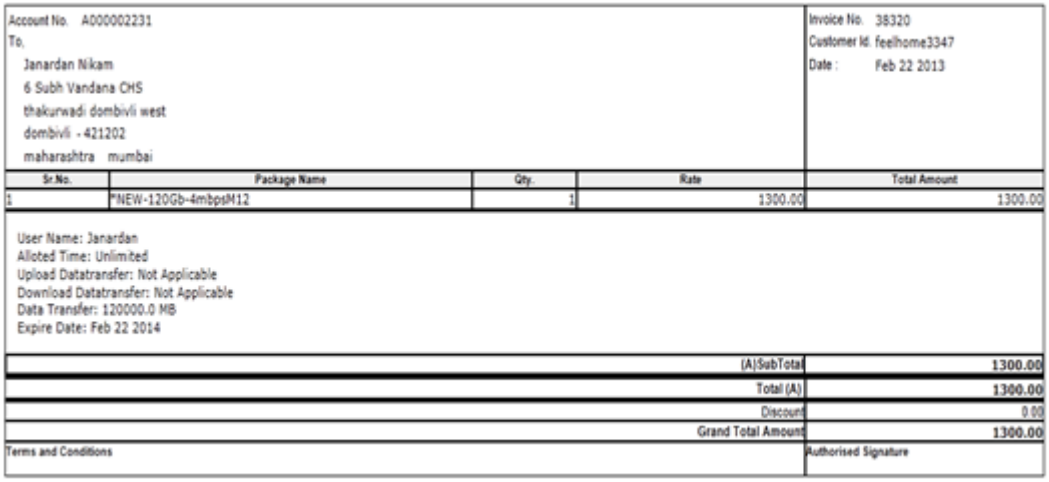

Account No. A000002231
To,
Janardan Nikam
6 Subh Vandana CHS
thakurwadi dombivli west
dombivli - 421202
maharashtra mumbai

Invoice No. 38320
Customer Id. feelhome3347
Date : Feb 22 2013

Sr.No.	Package Name	Qty.	Rate	Total Amount
1	*NEW-120Gb-4mbpsM12	1	1300.00	1300.00

User Name: Janardan
Alloted Time: Unlimited
Upload Datatransfer: Not Applicable
Download Datatransfer: Not Applicable
Data Transfer: 120000.0 MB
Expire Date: Feb 22 2014

(A)SubTotal	1300.00
Total (A)	1300.00
Discount	0.00
Grand Total Amount	1300.00

Terms and Conditions
Authorised Signature

Figure: Last Invoice

Suspend User

Use the '**Suspend User**' button to temporarily deactivate the user in the system. Normally, a user is suspended for different reasons like non-receipt of payment, illegal activities observed in access, etc. Under the suspended status, the user account remains eligible to be activated and again for stipulated period of time. After that time the suspended user is deleted from the system. The user will be displayed in the active users list with a tag as 'User Suspended'.

Swati Chaudhary (User Suspended)	A000000025	PMPL	one hour_prepaid		60 : 00	Unlimited	00 : 00
Sweta (User Suspended)	A000000048	ELITECORE	Test PrePackage		100 : 00	Unlimited	00 : 37

Figure: Suspend User

To renew such users again, you need select **Manage Users > Manage Active** from GUI menu. Click on the username, and from the user details page, select the '**Resume User**' button. The user account will be activated to normal '**active**' status.

Create child customer(s) in Parent Customer

24online User management allows creation of child customer in main parent account. Now imagine a situation where 5 members of the same family have individual account with same ISP and all receive separate invoices. To resolve issues where multiple users can be given same account-number, 24online User Management comes in handy.

With help of this option admin can avail functionality of multiple child customer creation under same parent account. Policies and package applicable to Parent account will be applicable to child also. Invoice generated will be sent to Parent customer.

Child customers share the same Account ID as parent account. User-type, Package assigned, POP, Zone (if module is ON and if pop and zone are specified for parent account) will remain same.

Bandwidth Policy, idle time-out, login restriction details, personal information details can be configured, if change is required. Comments can also be inserted, if required.

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This option is also helpful in-case you wish to create multiple customers with same customer-name. Customer type helps you demarcate in-between existing and new customer account. In-case of new account creation, admin has facility to select user-type, package, POP, zone etc.

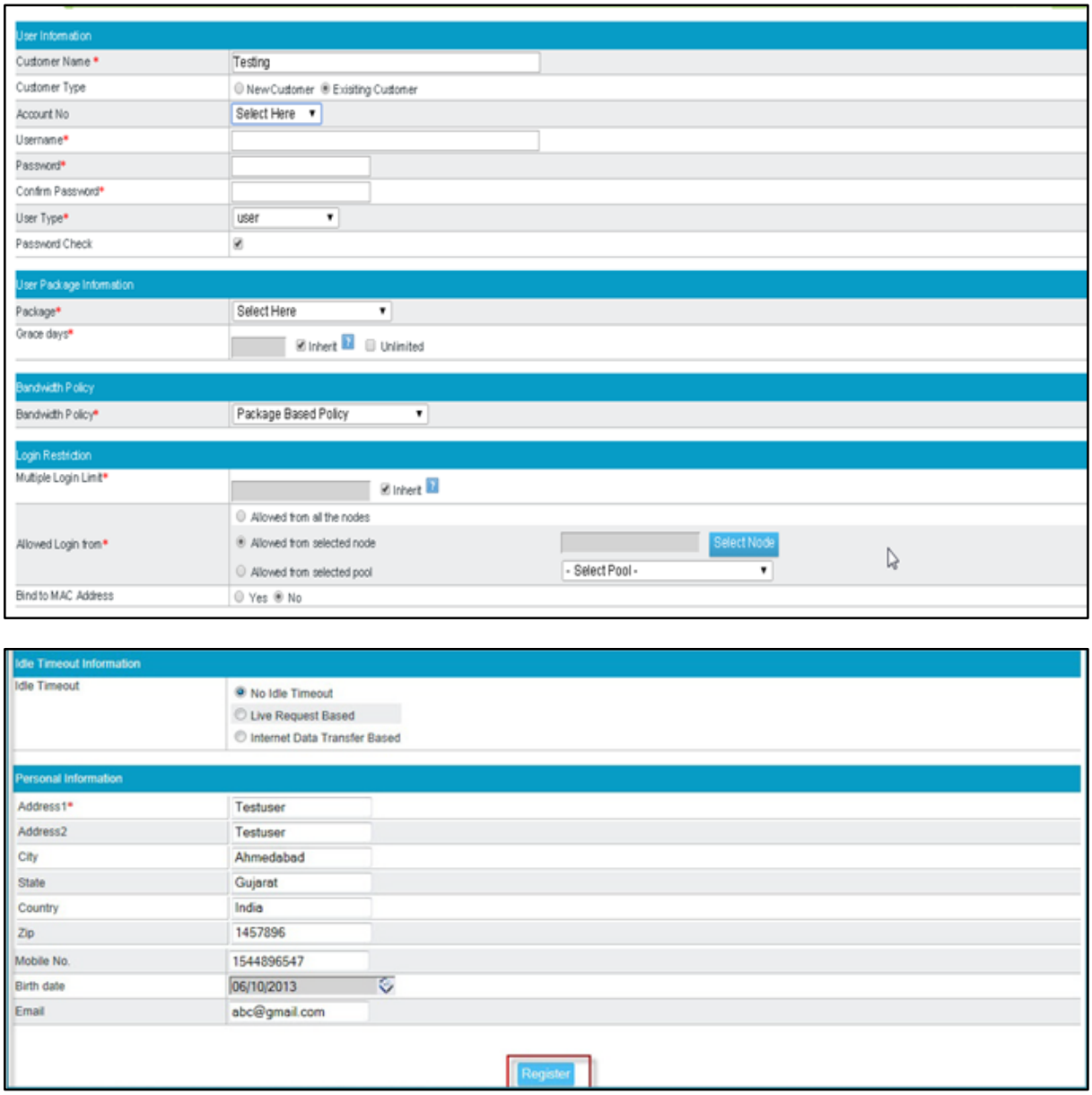

Figure: Creation of child user account

Creation of Child User Account	
User Information	
Customer name	Gives the information of the customer to which user added
Customer Type	In-case existing customer's name is entered, customer type options are : **New Customer** – Select to create new customer account with same customer name **Existing Customer** – Select to create child account in parent account

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Account No	Displays account number of **Existing customer** This row will not be displayed in **New Customer**
Username	Enter username
Password	Enter Password
Confirm Password	Re-enter password for confirmation
User Type	**New Customer -** Select User type **Existing customer** - User-type will be similar as parent account

User Package Information	
Package	**New Customer -** Select package **Existing customer** - Package will be similar as parent account
Grace Days	Insert grace days for the child user account, Select 'Inherit' checkbox for inheriting Package's grace days value.

Bandwidth Policy	
Bandwidth Policy	Bandwidth policy can be different for child user account

Login Restriction	
Allowed login from selective node(s)	Displays login restrictions defined while adding user. To view/update click **'Change/View Login Restriction'** button.
Bind to MAC address	Select the appropriate radio-button to Bind user to MAC

Idle Timeout	
Idle Timeout	Select the required radio-button **No idle Timeout**- will have no timeout value required **Live Request Based**- idle timeout will occur as per specified time-duration, when captive portal is off **Internet Data Transfer Based**- idle timeout will occur as per specified data-transfer duration
Idle Timeout(min)	Enter the idle-timeout value in minutes. Default idle timeout is 15 minutes.

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Personal Information
Enter Address/City/State/Country/Zip/ Mobile no./ Birth date and Email **of user**
Comment Information**- Enter comments, if required**

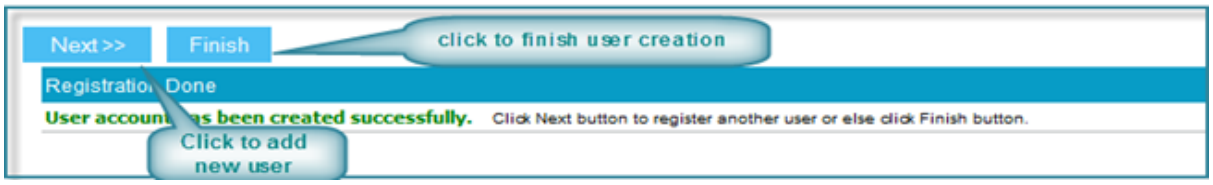

Figure: Child User Creation

In-case you wish to Add New User again, then click on '**Next**' which will lead you to Add User page. If you wish to Finish User Creation, click on '**Finish**'.

Once Child User is successfully created, it can be viewed in Manage Active user's page with a '**C**' next to it. 'C' depicts child user account.

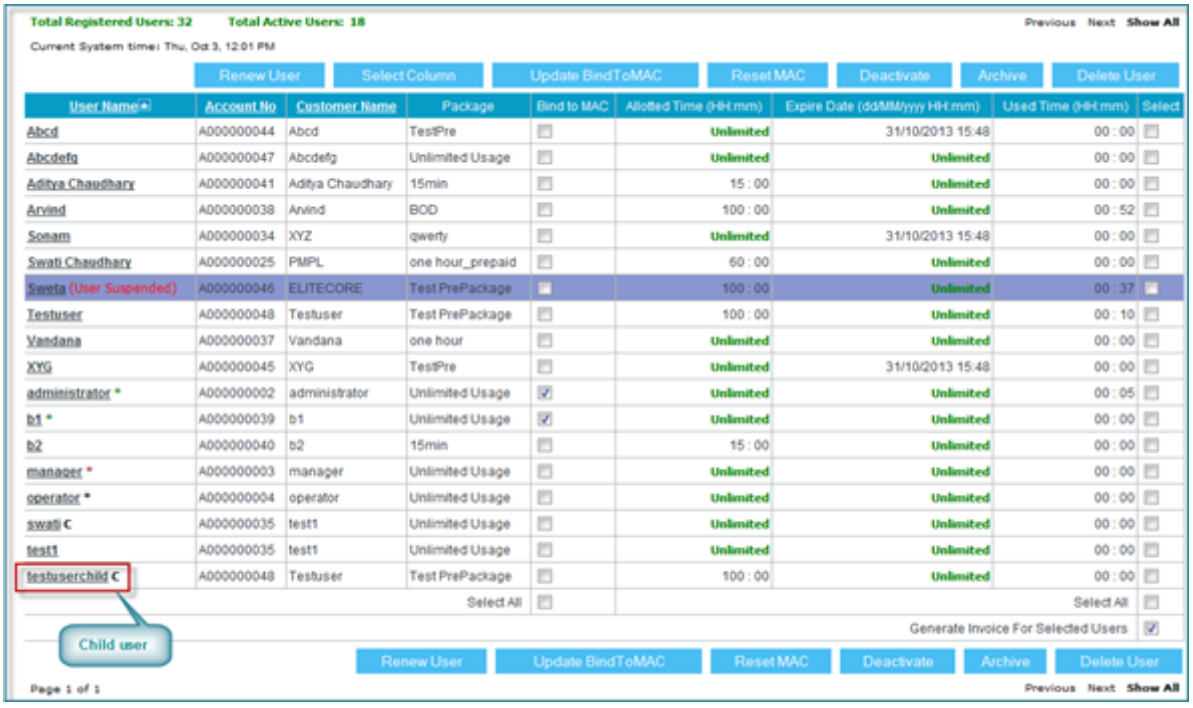

Figure: Child User Created Successfully

Leased Line Users

Leased line users are authenticated users who are always live and need no authentication. Leased line users are normally corporate users who need continuous internet-access without any login process. In-case leased line user faces any technical-glitch or sudden deactivation, renewal or resuming each user becomes a difficult task. 24online introduces an option to re-login specific or all leased line users with a single click!

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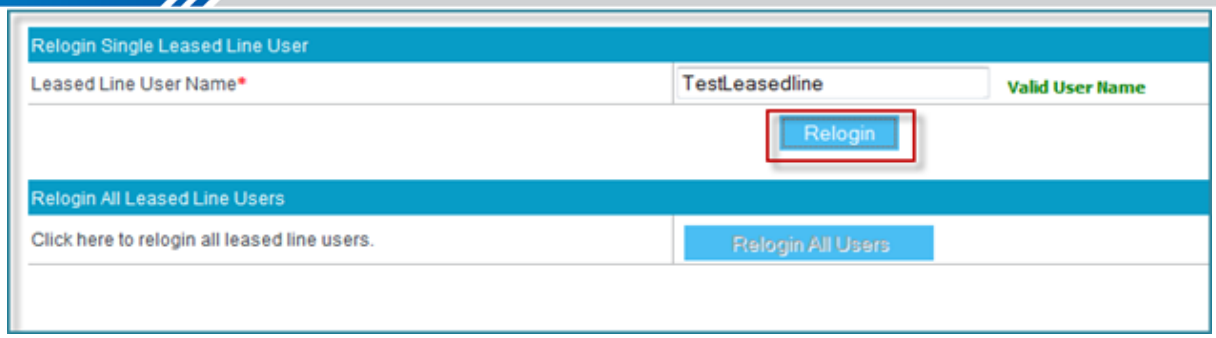

Figure: Re-login leased line users

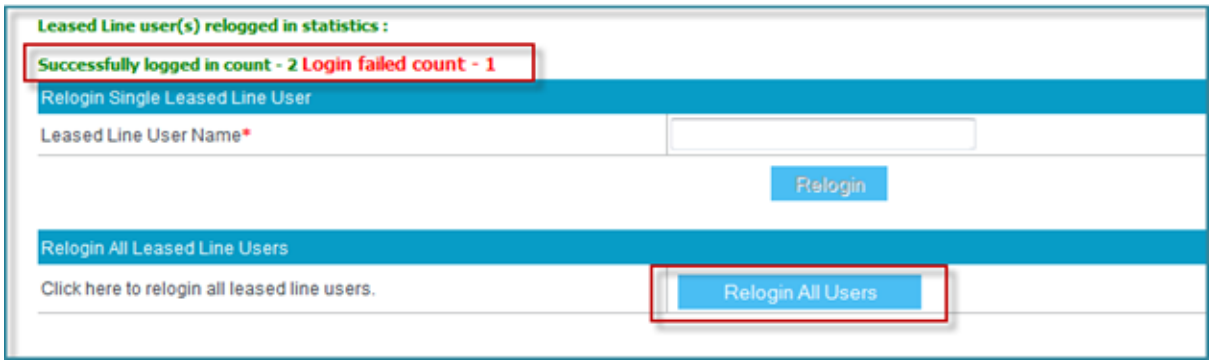

Figure: Re-login all leased line users

Relogin Leased Line User	
Relogin Single Leased Line User	Enter username in the text box and click the '**Re-login**' button
Relogin All Leased Line Users	To re-login all leased line users in the system in single click, use '**Re-login All Users**' button. System will also display the count of success and failure rate of login.

The system will automatically re-login single or all users as per the option selected

Live Users

Live user's page displays list of users connected with the network and surfing internet. With the help of this list you can get complete details of user's username, connected from the network address, IP addresses used to login, start-time of the session, uploaded and downloaded data transfer and bandwidth speed.

You can send any message on-the-fly to all live users, intimating about latest offers, advertisements, or technical error. You can also disconnect users, manually by selecting the checkbox against the username, if you find any user doing any malicious activity.

Manage Live Users

To manage live user, select **User > Live Users > Manage Live Users** from GUI:

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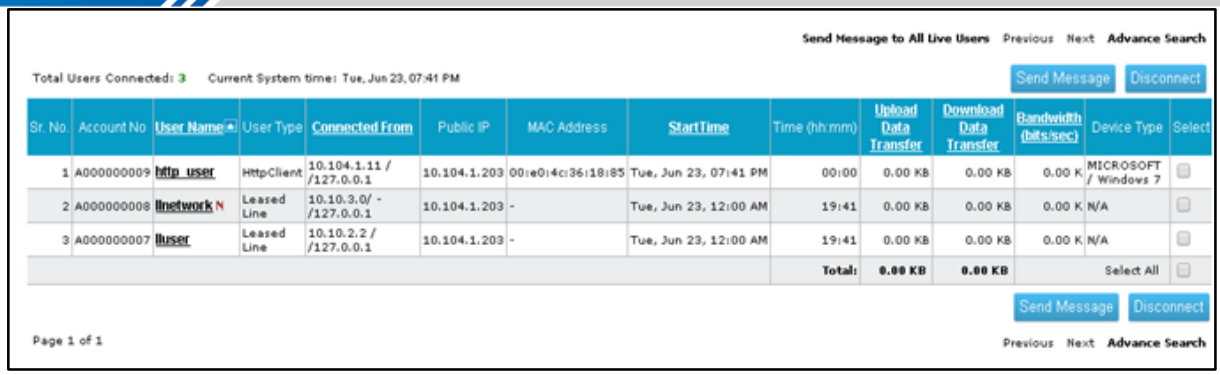

Figure: Manage Live Users

Manage Live Users	
Serial number	Shows number of users logged in – serial wise
Account No	Displays account number of customer
User Name	Displays the username of the user who is/are currently connected to the network
User type	Shows the type of users connected to the network
Connected from	Shows the IP address using which the user has logged in
Public IP	Shows the WAN IP used by the user to login the network
MAC Address	Shows the MAC address of the live user. MAC is the hardware address that uniquely identifies each node of a network
Start time	Shows the date and time when the user started surfing Internet
Time	Shows the actual time of surfing Internet
Upload data transfer	Shows the amount of data transfer uploaded by the user
Download data transfer	Shows the amount of data transfer uploaded by the user
Bandwidth	Shows the amount of bandwidth consumed by each user
Device Type	Shows device type of the user.
Select	Use to send message or delete user from the list. Select the checkbox and click appropriate button

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View User Details

To view the user details, click on the name of the user. The system pops-up a box which has complete details of the user.

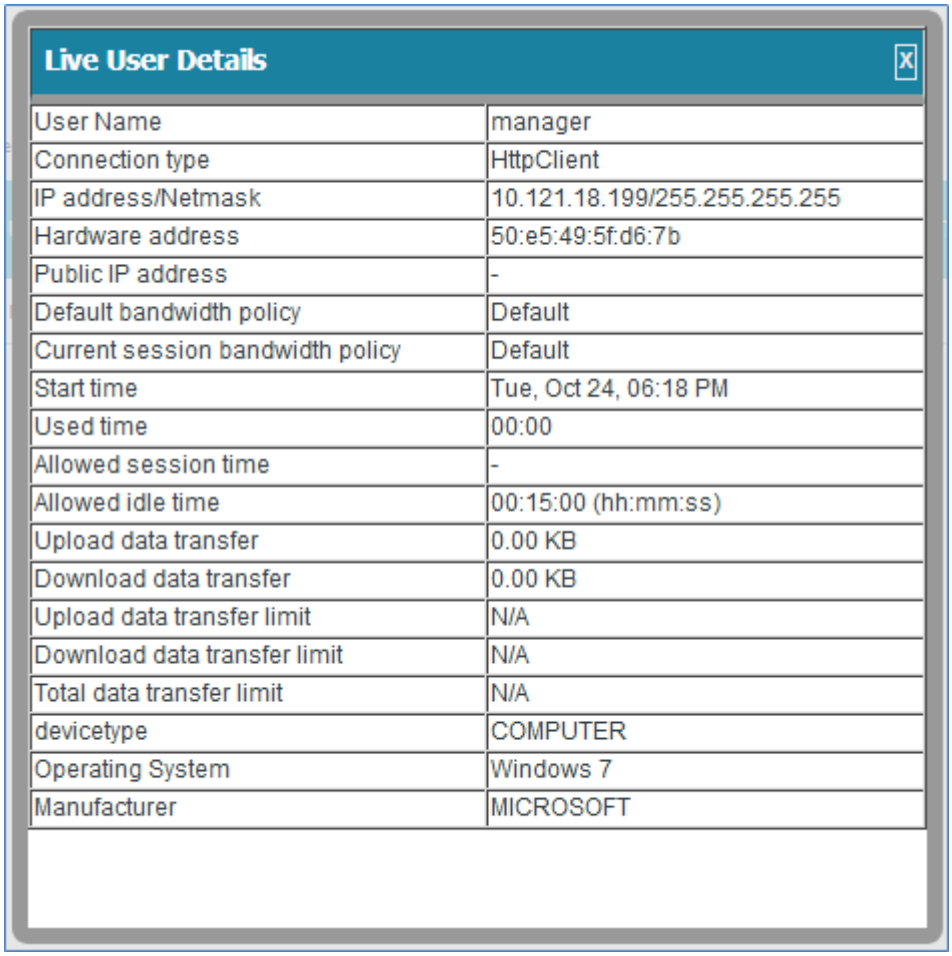

Figure: View User Details

View User Details	
Username	Displays the name of the user as defined by the system admin
Maximum concurrent login	Shows the number of login sessions of the user
Connection type	Shows the type of connection of the user with network
IP address/ net-mask	Shows the network IP address and the net-mask ID of the user connected from
Hardware Address	Shows the MAC Address of the computer from where user is connected
Public IP address	Shows the IP address allotted to the 24Online system. Default bandwidth policy shows the bandwidth policy attached with the user package
Current session	Displays the bandwidth limit being provided to the user

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bandwidth policy	
Start time	Displays the day, date and time of the user login session started
Used time	Shows the current sessions of the user
Allowed session time	Shows the total limit of access time allowed to the user
Upload data transfer	Shows the amount of data uploaded by the user, in megabytes
Download data transfer	Shows the amount of data downloaded by the user, in megabytes
Upload data transfer limit	Shows the amount of data uploading limit allowed to the user
Download data transfer limit	Shows the amount of data downloading limit allowed to the user
Total Data Transfer Limit	Shows the total data transfer limit configured.
Device type	Shows the device from where user has logged in
Operating System	Shows the operating system using which user has logged in
Manufacturer	Shows the manufacturer of the operating system

Send Message to Users

To send message(s) to users currently using Internet, you need to select the check box given against the user name. You can define the number of user records per page, using the '**records per page**' drop down box. And, click on the **send message** button. The system pop-ups a box which prompts you to enter the message you want to send, selected users. Enter the message, and click the send button. The message will be flashed to all users while using the internet.

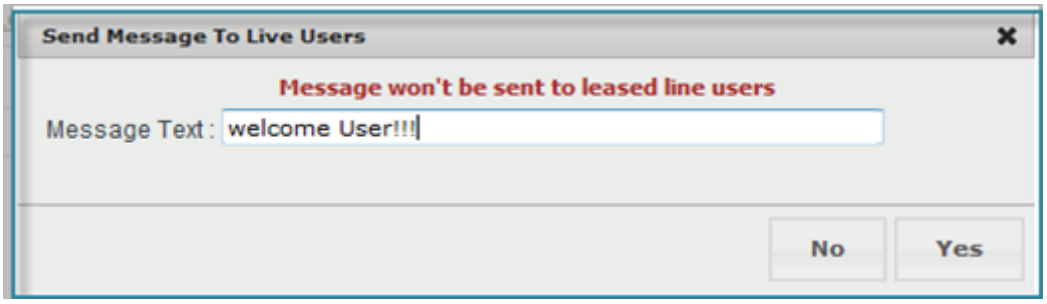

Figure: Send Message to Users

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Disconnect Live Users

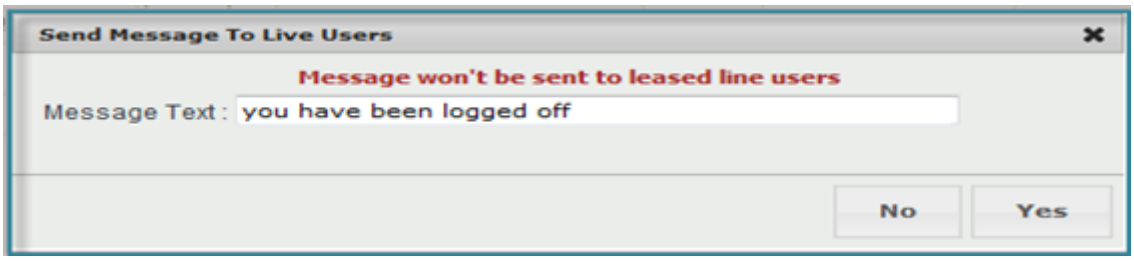

Figure: Disconnect Live Users

Block Live Users

The internet access from a device can be blocked directly from Live Users Page. With this feature, the MAC address of device gets blocked. Thus the user cannot access internet from any user account using the blocked device. The feature is helpful to curb the illicit internet usage by organization's middlemen, who have access to end user's login credentials.

Prerequisites

1. The feature is available as customization. Go to System > Client Services > Parameters to enable the feature. Once enabled, the 'Block' button will appear on live user's page.
2. The feature uses MAC address of the device. Make sure MAC address is enabled at access request (System > NAS Management > Preferences)

How to Block MAC Address from Live User's Page?

1. Make sure the Block MAC Address configuration is enabled from 'Parameter' page.
2. Select the MAC address that you want to block (Select only 1 MAC address).
3. Click on Block button.
4. System will ask for confirmation.
5. Select 'Yes' to block the MAC address.

A firewall rule will be created to disable any internet access from the blocked MAC address. To unblock the user:

1. Go to System > Firewall > Manage
2. Search the firewall rule. You can find it through the description 'MAC Address blocked through live user's page'.
3. Delete the rule.

Note: The feature is not available for PPPoE users.

Search Live Users

When there are hundreds of users online in the network, and you want to disconnect, or edit the details of any specific user, then in such case searching the specific user becomes a difficult task. If you want to list same type of users who have consumed specified amount of bandwidth, for such immediate search option, you can use the '**Search Users**' option.

To search live users, select **User > Live Users > Search Live Users** from GUI:

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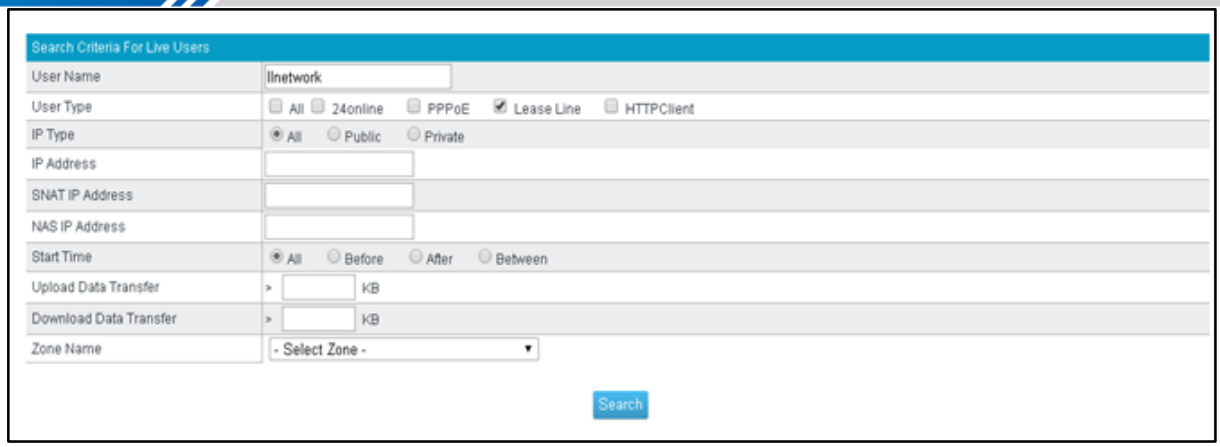

Figure: Search Live Users

Search Live Users	
Username	Specify username by which the user logs into the account, to search by username
User type	Specify the type of user, to search by user type: • '**All**' includes all types of users in the search • '**24online**' includes users using 24online exe • **'PPPoE'** includes only PPPoE users • **'Leased Line'** includes only Leased Line Users • **'HTTP client'** includes only HTTP client to login
IP type	To search user by IP type
System IP address	To search user by the system IP address
NAS IP address	To search user by NAS IP address
Start Time	'**All**' searches all the session timing of the user '**Before**' searches all the live user sessions before the specified date and time. '**After**' searches all the live user sessions after the specified date and time. '**Between**' searches all the live user's sessions between the specified date and time.
Search	Click after all specifications are completed

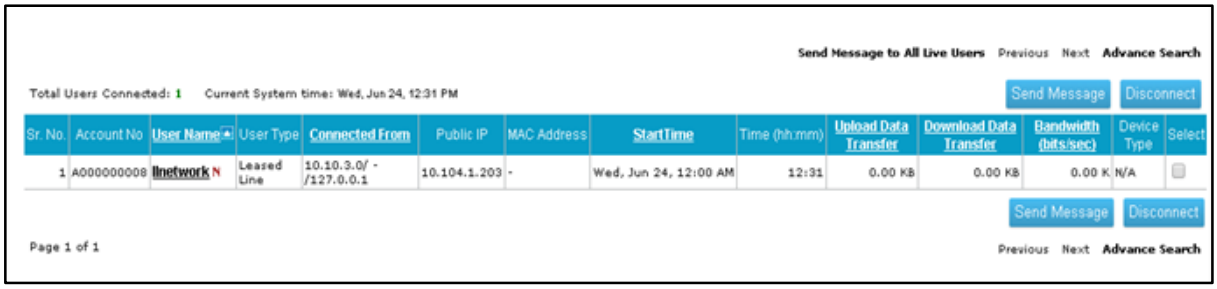

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Figure: Search Live User Result

Manage Customers

24online follows a hierarchy by which each user is attached with a customer in the system. The customer remains at the top position under which all users are added. With the help of this structure, multiple users can be added under the same customer.

For e.g. if there is a company ABC Pvt. Ltd. and there are 100 employees in the company. The company is added as a customer in the system and all employees are added as users under the customer name.

Invoice will be generated in the name of the customer with details of each user's usage and a composite bill, which becomes easier for the company to identity the usage of each employee. In such case, if the company name is changed or the customer is changed then in you need to add users again in another customer account. You can just rename the Customer Name using this option (i.e. Manage Customer)

Edit Customer

To manage customer, select **User > Manage Customers > Edit Customers** from GUI:

Figure: Edit Customers

Edit Customers	
Customer Name	Enter the name of the customer you want to edit. Auto-complete facility helps you find the specific customer easily
New Customer Name	Enter the name you wish to keep as the customer name
Update	Select after all specifications have been completed

Purge Customers

Un-necessary customer details not only consume system memory but also results in slow system activity. 24online offers 'Purge Customers' a facility where users deleted from the system are displayed in a list. With the help of this facility, you can delete or purge un-necessary customer details stored in the system. In such case, purging all the un-necessary or old customer information from the system, in regular interval is suggested. This options acts similar to the disk cleanup facility in our computers.

To purge customer, select **User > Manage Customers > Purge Customers** from GUI:

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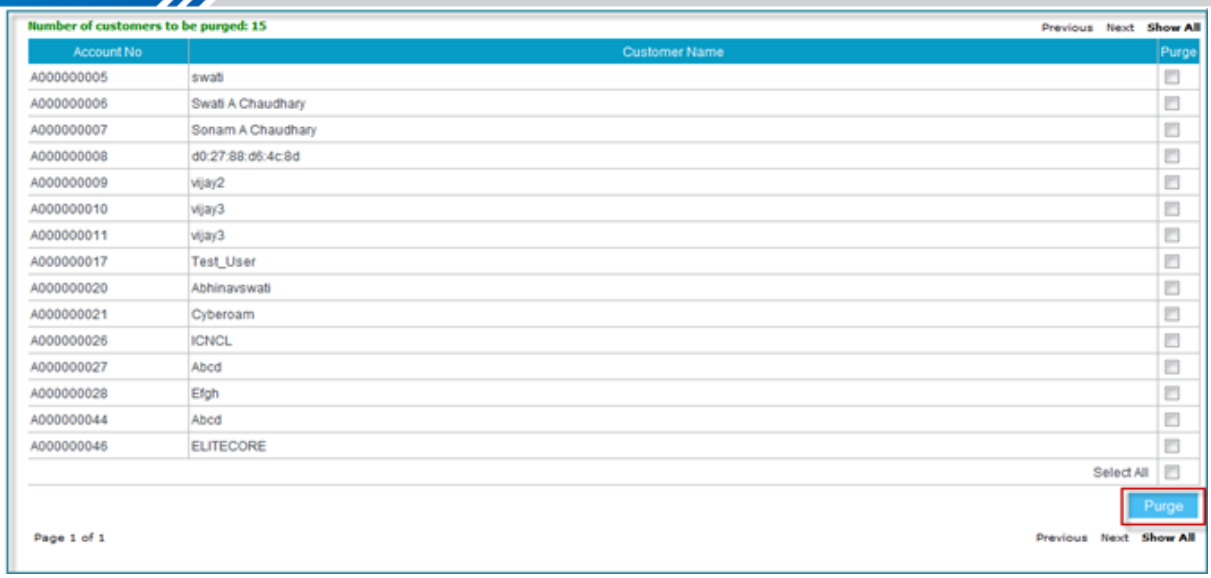

Figure: Purge Customers

Select the checkbox against the customer name you want to delete from the system and click the '**Purge**' button. Customer details once deleted from this menu will be permanently removed from the system.

Dynamize Fields

24online introduces 'Dynamize Fields', to ease task of administrator. All service providers ask their customers for different type of information while User registration. Keeping this in mind, 24online introduces 'Dynamize field' options for administrator which helps in generation of dynamic fields while User registration. Two fields are provided as dynamic fields, administrator can enter field name of his choice.

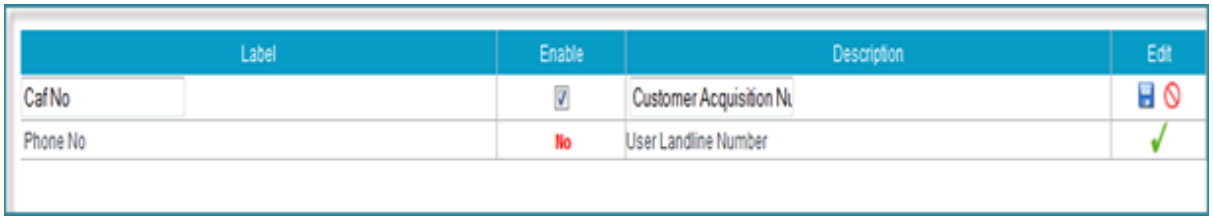

Figure: Dynamize Fields

To edit any label, administrator has to click on **check** icon to edit any given label. Use **Save** icon to save and **Delete** icon to cancel. Administrator can enter required label and select Enable radio-button. Enter required description and select Save.

Dynamize fields label will be displayed while User registration and the first label will be mandatorily collected while registration process. First entered field name will be reflected in reports, invoice and manage user page and second entered field name will only be collected and stored in database.

Demographic Fields

24Online introduces 'Demographic Fields' facilitating configuration of custom made fields to be added in 'New User Registration' form. The customized fields added from here will be placed under

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Personal Information section of the form. It provides the facility to add or delete these fields whenever required.

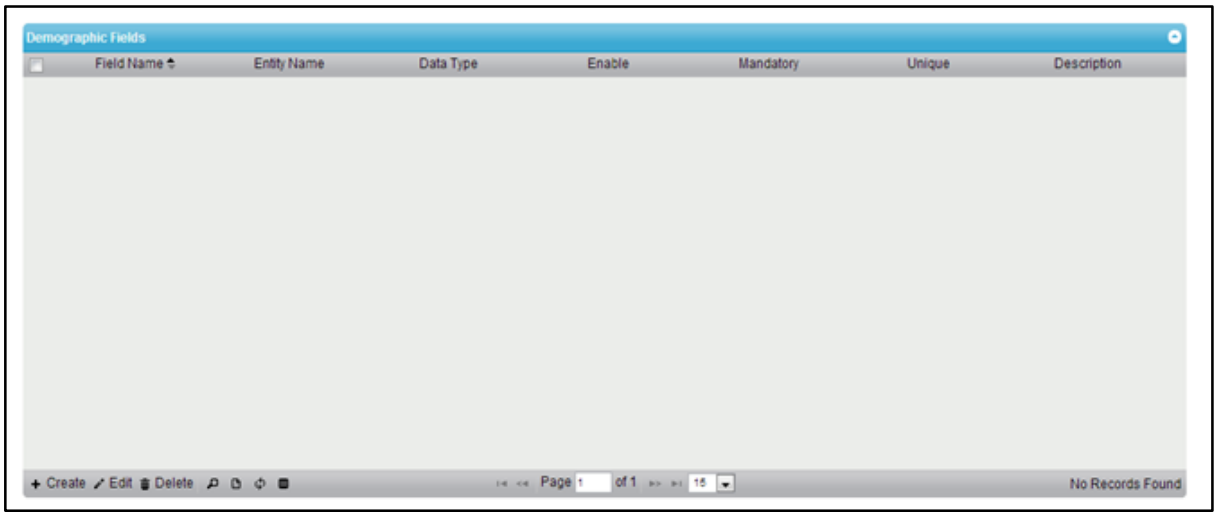

Figure: Demographic Fields

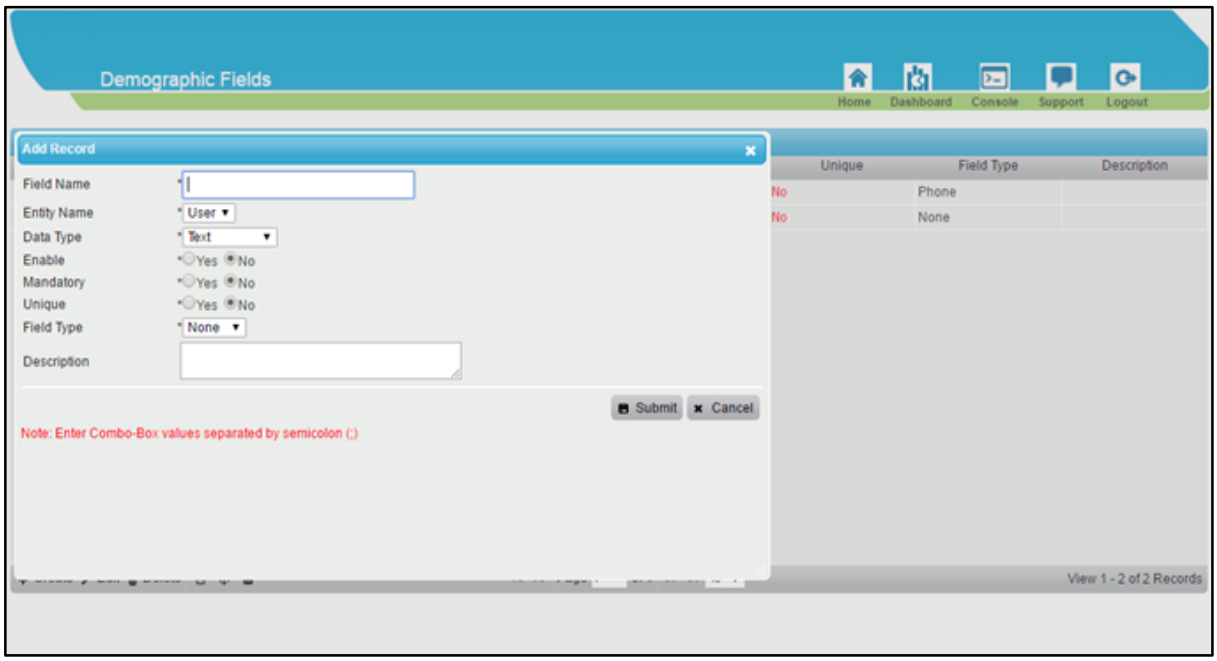

Figure: Demographic Fields - Add Records

Add Record	
Field Name	Enter the desired field name
Entity Name	Entity name needs to be selected here
Data Type	The type of the data value required for this particular field needs to be selected here. It can be 'text', 'Date', 'Numeric', or 'combo-box'.

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Enable	The field can be enabled/disabled whenever required.
Mandatory	The field can be kept mandatory while filling up the form by selecting 'Yes' option.
Unique	The value of the field can be defined as 'unique' from this option
Description	Description of the record to be added can be entered here for future reference
Submit	Click submit button to add the record successfully

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Alert

Introduction

Alert Management mainly focuses on sending an alert/update/notification to the user in-case of activation/ deactivation of the user account. The alert management is useful as the user can be updated about his recent activity like activation, renewal and expiry. The alerts can be sent to the user through emails using the e-mail reminder and mobile phone using the SMS Gateway.

Note: SMS Gateway module should be registered and enabled for SMS service.

Alert management is helpful in these situations:

- User registration
- User renewal
- Remind the user before the user expiry
- Birthday Wishes
- PDF Invoice
- Reminder after expiry
- User Deactivation
- User Archiving
- User Activation
- Forgot Password
- Password Change
- Alert before switchover FAP
- Alert on switchover FAP

Email Management

Email reminder facility is an effective way of communication with customers regularly. With the help of this option, all customers are regularly sent reminders about their registration, renewal and expiry. This option helps in sending reminders to subscribers, whenever their subscription is about to expire, renewed or registered. It also allows creating different templates for different users by which the email sending process becomes more attractive.

Create Template

Before sending emails to subscribers you need to have a professional template with company logo and format. With the help of create template option, you can create template as per your requirements. The email template is created with the help of different dynamic values which can be modified as per your requirements.

To create email template, select **Alert Management > Email Management > Create Template** from GUI:

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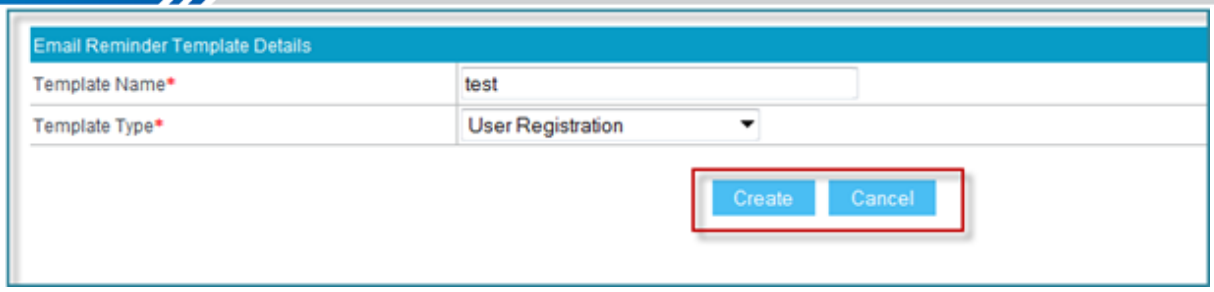

Figure: (a) Create Email Reminder

Reminder Template	
Template Name	Specify the name of the template
Template Type	Select the template type from the drop down box

After entering the necessary information, click the '**Create**' button. Use the dynamic values to update or modify the template message or contents. Click the '**Save**' button after updating the information in the email template.

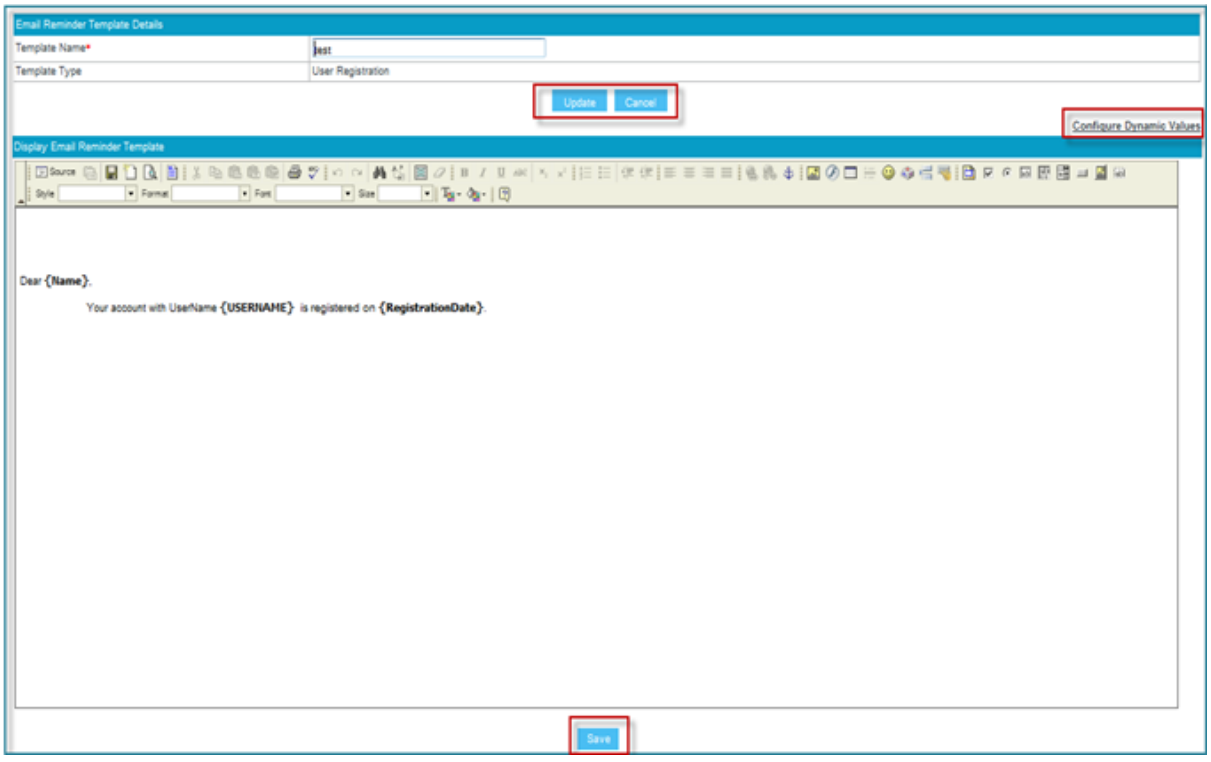

Figure: (b) Reminder Template

Manage Template

To view the created templates from a single page, 24online provides the functionality through GUI in Manage Email Template page. This page not only offers you the facility to update the email template but also you can 'Delete' templates from the list that are unused.

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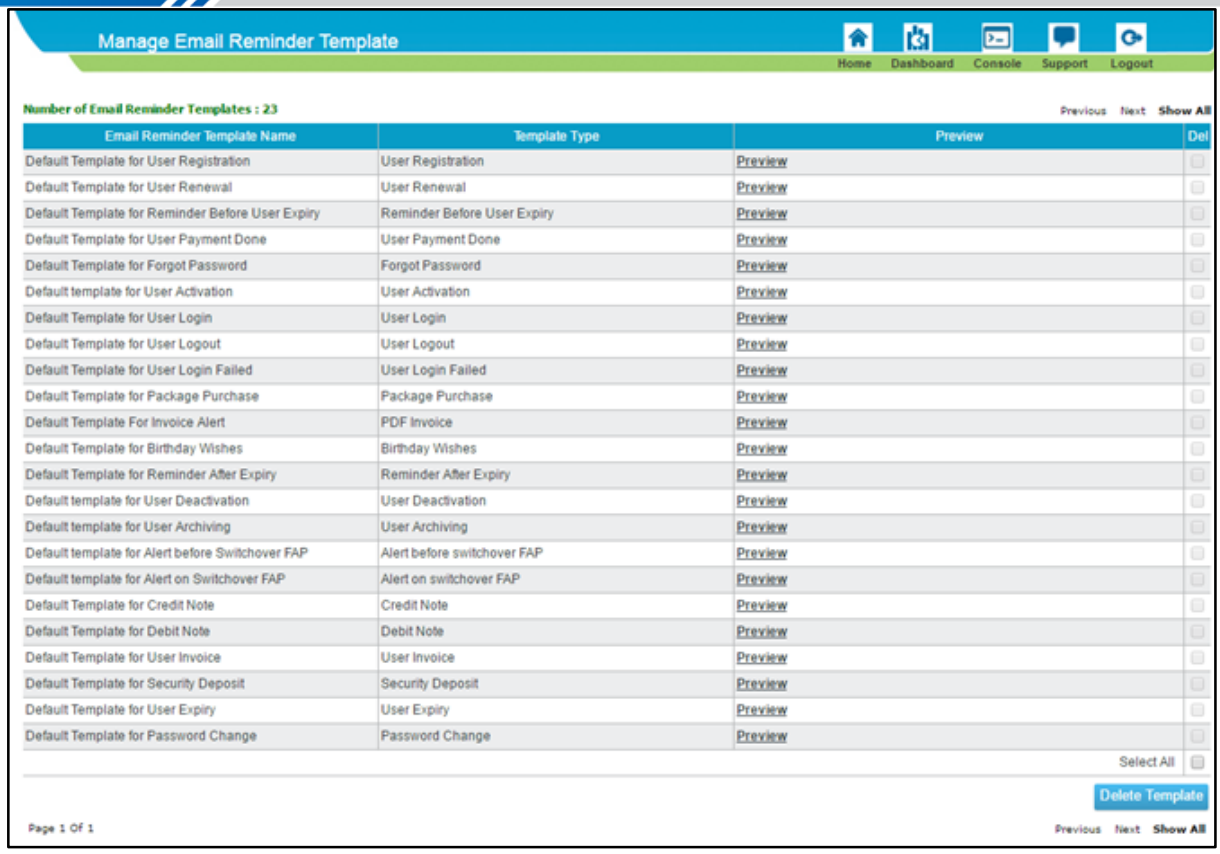

Figure: Manage Email Reminder Template

Manage Email Reminder Template	
Email Reminder Template	Shows list of names of the templates created in the system
Template type	Shows name of template types created in system
Preview	To preview any of the templates in the list, use Preview against each template
Delete	To remove any templates from list

Configure

With the help of **configure email reminder** option, you can set the details of email ID and subject details which can be sent to the subscribers. This is one time configuration which can be used to send multiple subscribers. For further modification in future, you can update the details as and when required.

To configure email reminder, select **Alert > Email Reminder > Configure Email Reminder** from GUI menu:

Configuration Type-

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- User registration
- User renewal
- Remind the user before the user expiry
- Birthday Wishes
- PDF Invoice
- Reminder after expiry
- User Deactivation
- User Archiving
- User Activation

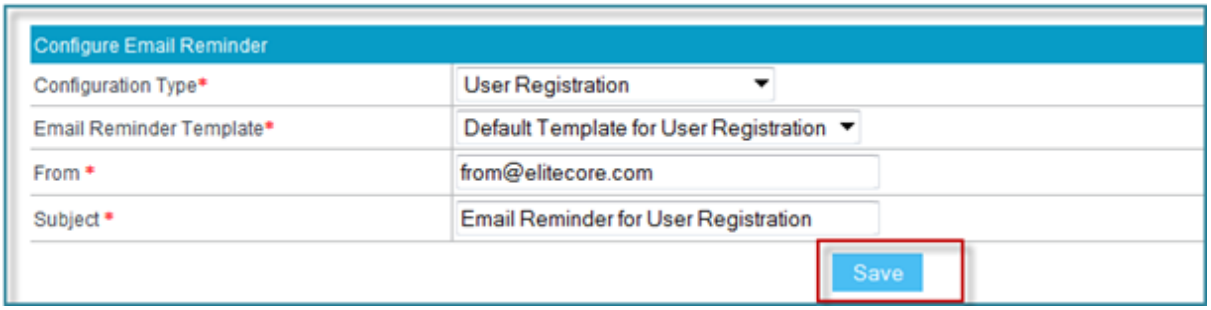

Figure: (a) Configure Email Reminder

Configure Email Reminder	
Configuration Type	Define the type of message you wish to send using this template list i.e. 1. User Renewal- renewal templates 2. User registration- registration template 3. Reminder before expiry 4. Reminder after expiry 5. PDF invoice- invoice template in pdf format 6. Birthday Wishes 7. User Deactivation 8. User Archiving 9. User Activation
Email-Reminder Template	Select the template to be used for sending emails
From	Specify the email ID using which the emails will be sent to the subscribers
Subject	Define the subject of the email ID
Save	Use the 'Save' button to update the template

Note

- **If Pop module is enabled, select the pop name first and configure the rest of the settings.**

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- **Follow similar steps for configuration 'User Renewal/PDF invoice/ user-Deactivation/ Archiving/Activation'**

Configuration Type - Reminder Before User Expiry

Searching list of users in the system whose account is going to be expired and sending reminder emails to each and every user manually is a hectic task. For such reason 24online offers a simple solution.

Select the configuration type as '**Reminder before User Expiry**' from the '**Configure Email Reminder**' option. Please follow the instructions given below to configure the automatic email reminder before user accounts are expired:

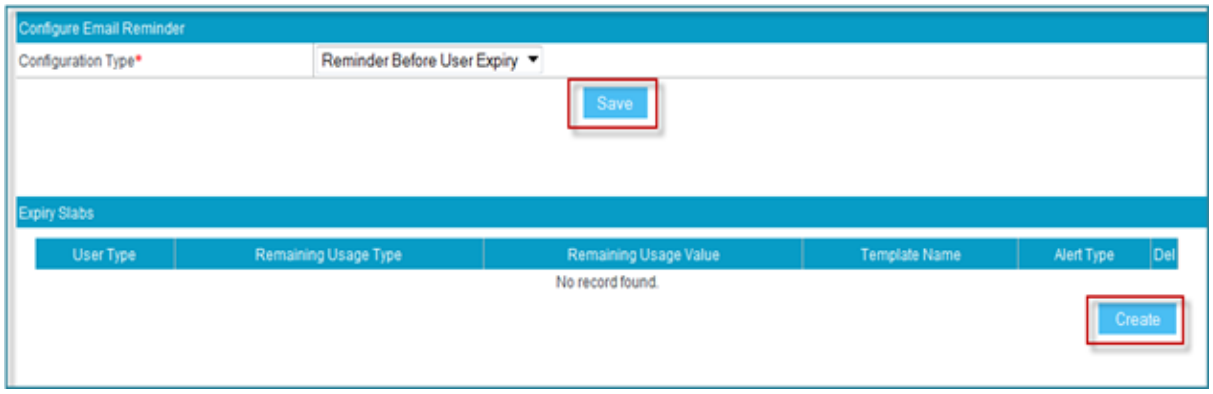

Figure: (b) Create Expiry Slab

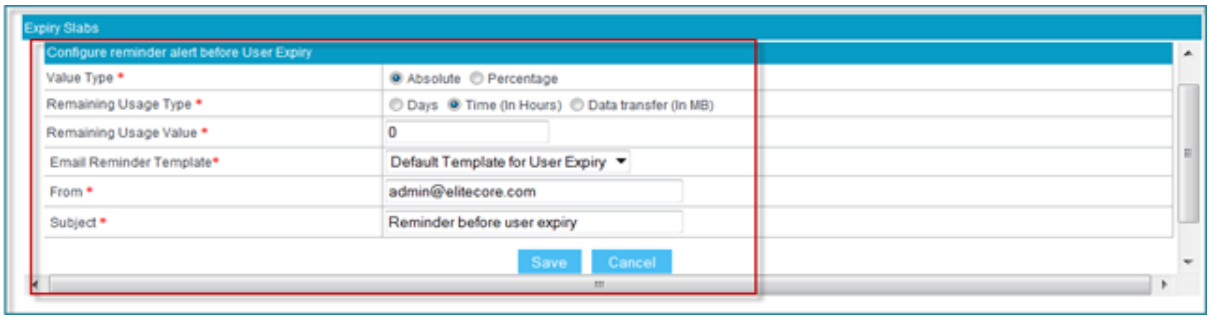

Figure: (c) Expiry Slab

Screen (b) displays the '**Create**' button. Click the button to create the Expiry Slabs for the email reminder. Screen (c) displays the Expiry slabs screen. The screen elements are as explained below:

The Expiry Slabs are email alert slabs that are configured before the user account gets expired.

The Value type refers to the value by which you wish to create the slab i.e. absolute number of days/time/data transfer and percentage.

- Suppose the user account is expiring in 10 days and '**Absolute**' is the value type then the user will be sent an email reminder on the 10th day.
- Suppose the user account is on '**Percentage**' and the percentage is set for example 50%, then the user will be sent an email reminder on the 5th day.

'**Remaining Usage Type**' is the selection of the type of usage that the user is allocated.

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- In-case you want to send a reminder '**Day based**', then select the **DAY** radio button
- In-case you want to send a reminder '**Time based**', then select the **TIME** radio button
- In-case you want to send a reminder '**Data Transfer based**', then select the **DATA TRANSFER** radio button

'**Remaining Usage Value**' is the text-box where the number of Days/Time (in hours)/Data Transfer (in MB) should be entered. Note to enter the value according to the selection made in '**Remaining Usage Type**'.

- Select the Email Reminder Type from the drop-down box
- Enter the sender's email address
- Enter the Subject of the Email
- To save the slab created, select 'SAVE'

Configuration Type - PDF Invoice

Sending and receiving pdf invoices to customers and operators is a common practice now in the market. Encouraging this practice, 24online also enables pdf invoice generation and sending via email directly to user email ids. With the help of this facility you can now send all your invoices to users in pdf document, which also offers password facility to open, making it more safe and secured communication. This facility helps service provider to advertise their promotional offers in the invoice template and also save lot of paper expenses!

With the help of PDF Invoice option, you can send the Invoice via email to all your subscribers. This is one time configuration which can be used to send invoices to all multiple subscribers. For further modification in future, you can update the details as and when required.

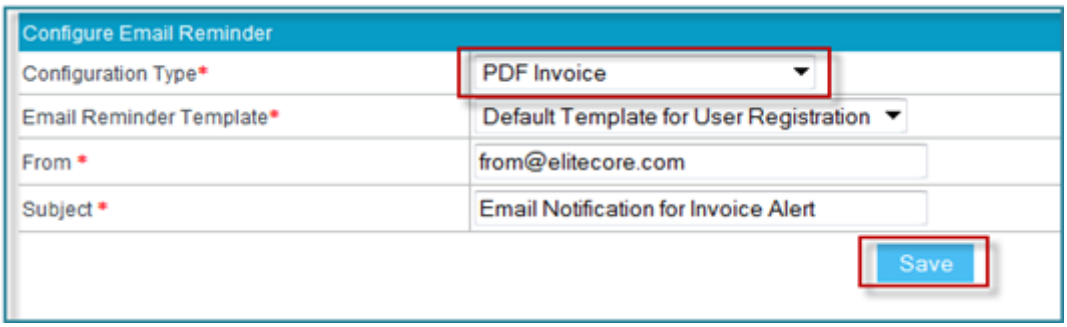

Figure: (d) Configure Email Reminder

	Configure Email Reminder
Configuration Type	PDF invoice- invoice template in pdf format
Email-Reminder Template	Select the template to be used for sending emails
From	Specify the email ID using which the emails will be sent to the subscribers

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Subject	Define the subject of the email ID
Save	Use the '**Save**' button to update the template

Configure Type - Reminder After Expiry

Retaining customers is always an add-on advantage for any business, as this shows customer-trust and quality of service. Facilitating such services, 24online enhances its email reminder services by introducing 'Reminder after user expiry'. Administrator can configure the number of days, intervals of days and also customize templates for emails! Customers will receive the reminder emails as per the pre-defined days and they can easily be reminded about their user-account! For further modification in future, you can update the details as and when required.

Absolute Slab

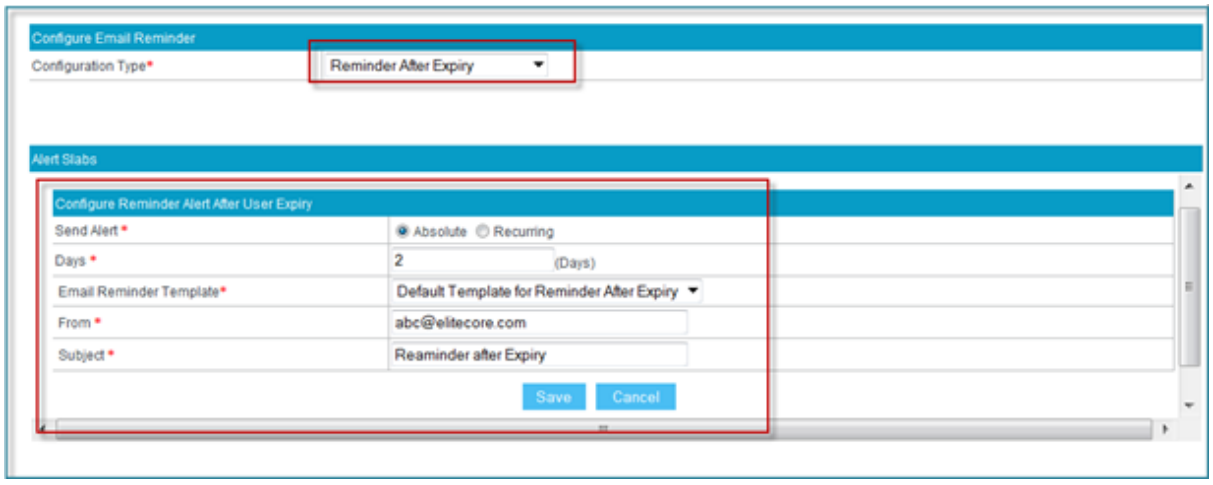

Figure: (e) Absolute Slab Creation for Reminder after Expiry

Configure Email Reminder	
Configuration Type	Reminder after expiry
Alert Slab-Configure Reminder after User expiry	
Send Alert	Select the required radio button Absolute/Recurring • Absolute- Select if you want to define exact number of days • Recurring- Select if you wish to send alerts in a span/range of days
Days	Enter the exact number of days (in-case of '**Absolute**')
Email-Reminder Template	Select the template to be used for sending emails
From	Specify the email ID using which the emails will be sent to the subscribers

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Subject	Define the subject of the email ID
Save	Use the '**Save**' button to update the template

Recurring Slab

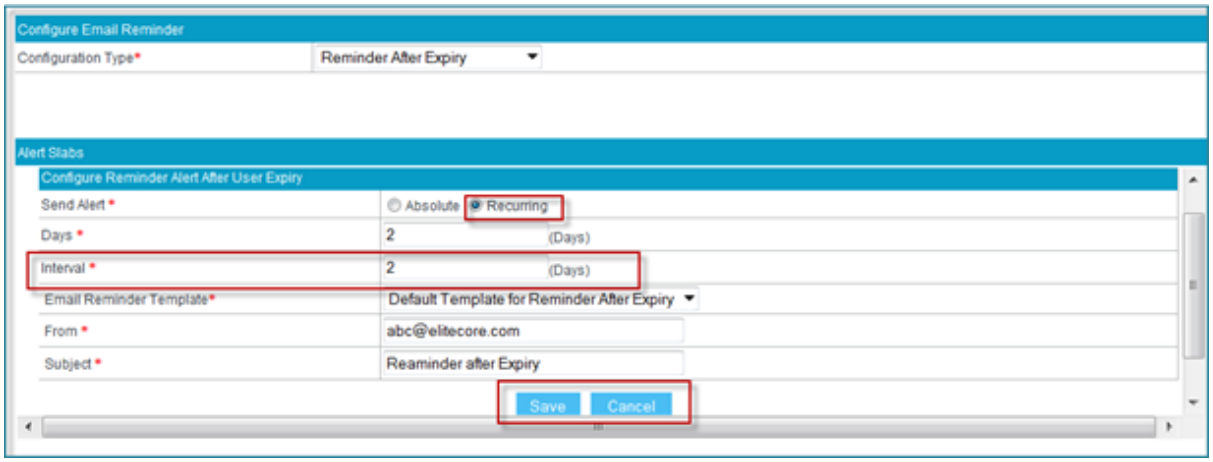

Figure: (f) Create Recurring Slab for Reminder after Expiry

Configure Email Reminder	
Configuration Type	Reminder after expiry
Alert Slab-Configure Reminder after User expiry	
Send Alert	Select the required radio button Absolute/Recurring • Absolute- Select if you want to define exact number of days • Recurring- Select if you wish to send alerts in a span/range of days
Days	Enter the exact number of days
Interval	Enter the interval of days you wish to send alert E.g. Alert is to be send for 20 days with an interval of 2 days, hence subscriber will receive 10 alerts in a span of 20 days.
Email-Reminder Template	Select the template to be used for sending emails
From	Specify the email ID using which the emails will be sent to the subscribers
Subject	Define the subject of the email ID

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Save	Use the '**Save**' button to update the template

Configuration Type - Birthday Wishes

Providing your business a personal touch, 24online introduces Birthday wishes. An interactive marketing strategy to build a healthier relation with your customers. Now send E-mail or SMS to all your customers on their birthday! Administrator can collect customers birth-date while user-registration and create birthday wishes template! Your wishes will be sent to customers on the pre-defined time via e-mail/SMS.

Email Receiver - User

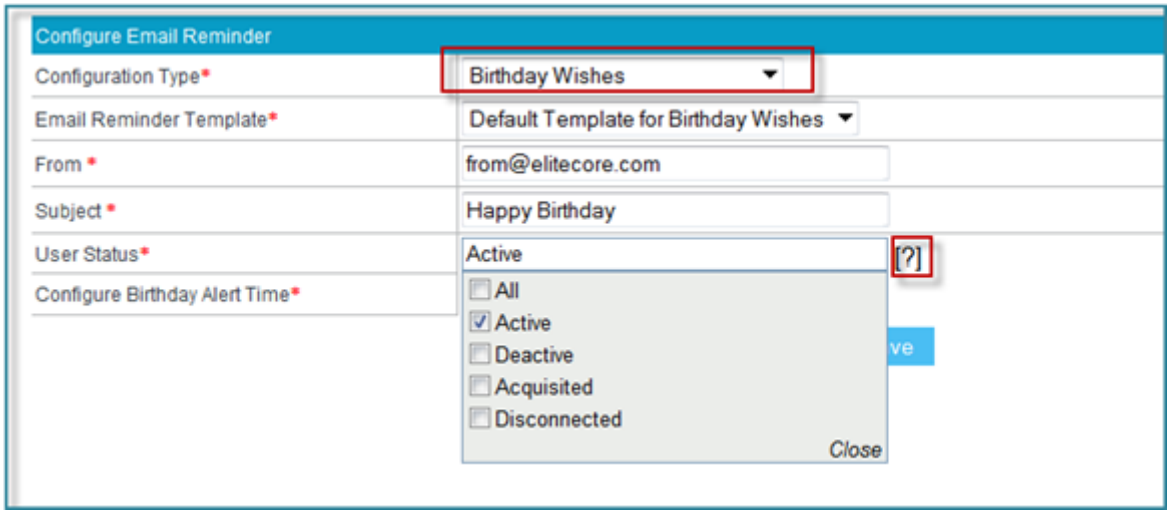

Figure: (g) Birthday Wishes

Configure Birthday Wishes	
Configuration Type	Select 'Birthday Wishes'
Email-Reminder Template	Select the template to be used for sending emails
Email Receiver	Select appropriate radio-button for email receiver i.e. user, administrator or both
From	Specify the email ID using which the emails will be sent to the subscribers
Subject	Define the subject of the email ID

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User Status	Select the required User status from the drop-down select box. All- Sends e-mail to all users in system Active- sends e-mail only to active users De-Active- sends e-mail only to de-active users Acquisited - sends e-mail only to acquisited users Archive- sends e-mail only to archive users
Configure Birthday Alert time	Select the HH:MM from the drop-down box. Alert will be sent to user according to the pre-decided time
Save	Use the '**Save**' button to update the template

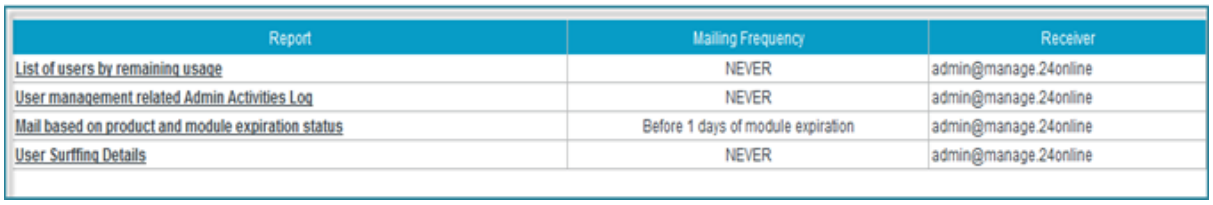
Proactive Reports

There are certain reports which are regularly required by admin for understanding the user's usage. Based on the report, admin is able to make certain decisions like remaining usage in user's package, renewal user's account, necessary system activities; necessary modules license expiry date etc. So, with the help of proactive reports, 24online has combined such frequently required reports in this section. **This option allows the admin to generate certain reports at regular intervals and automatically email to the specified IDs**.

Currently 24online has four defined proactive reports:-

- List of users by remaining usage
- User management related admin activities log
- Mail based on product and module expiration status
- User Surfing Details

Each of these reports requires different configurations to generate different reports. Select **Alert > Email Management > Proactive Reports** from GUI menu:



Report	Mailing Frequency	Receiver
List of users by remaining usage	NEVER	admin@manage.24online
User management related Admin Activities Log	NEVER	admin@manage.24online
Mail based on product and module expiration status	Before 1 days of module expiration	admin@manage.24online
User Surffing Details	NEVER	admin@manage.24online

Figure: (a) Proactive Reports

Click on the name of the report to configure.

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(i) List of users by remaining usage

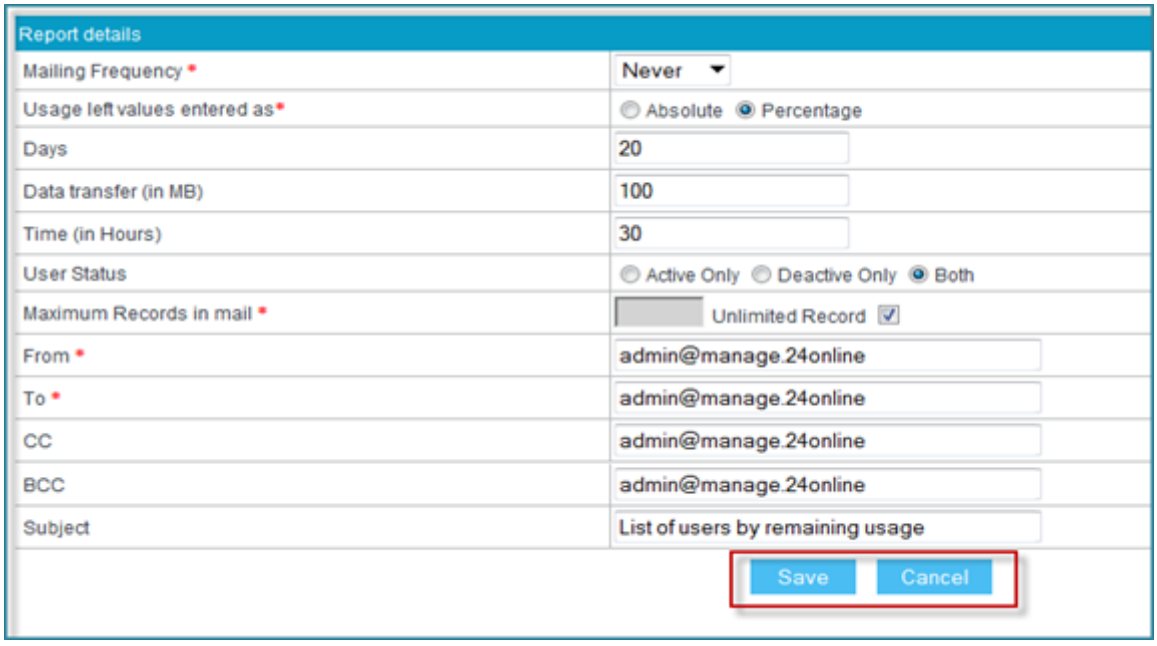

Figure: (b) Proactive Reports - List of users by remaining usage

List Of Users By Remaining Usage	
Mailing Frequency	Options available are: Daily option sends email daily Weekly option sends email in an interval of every week. [System sends email every Monday, if this option is selected]. To avoid sending any emails select never
Usage left values entered as	Values can be entered in percentage or absolute.
Days	Enter the number of days in the text box. Before the specified number of days of user's package expiry, email would be sent to the user. In case of percentage, define the percentile value of days, before which the email will be sent. E.g. suppose user's package is allowed 100 days of usage, and value defined is 10% then the system will automatically send the email 10 days before the user's package gets expired.
***Data Transfer *(can be used only when Data Transfer Module is registered)**	Enter the amount of data transfer in the text box. Before the specified amount data transfer in user's package exhaust, email would be sent to the user. In case of percentage, define the percentile value for data transfer, before which the email will be sent. E.g. suppose user's package is allowed 100 MB of usage, and value defined is 10% then, the system will automatically send an email before 10 MB of data transfer in user's package is exhausted.

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Time	Enter number of hours in the text box. Before the specified amount of hours in user's package, email would be sent the user. In case of percentage, define the percentile value for hours, before which the email will be sent. E.g. suppose user's package is allowed 100 hours of usage, and value defined is 10% then, the system will automatically send an email before 10 hours in user's package is completed.
User Status	Active only – the user is in active status De-active only – the user is in de-active status Both – the user is in active but to be deactivated
Maximum Records	Define the number of records to be sent in the email. In-order to send unlimited records in the mail, select the check box
From	Specify email address of the sender in the text box
To	Specify email address of the receiver in the text box
CC	Specify email address to send the carbon copy of the email
BCC	Specify email address to send the blind carbon copy of email
Subject	Specify the subject of the email address

(ii) User management related admin activities log

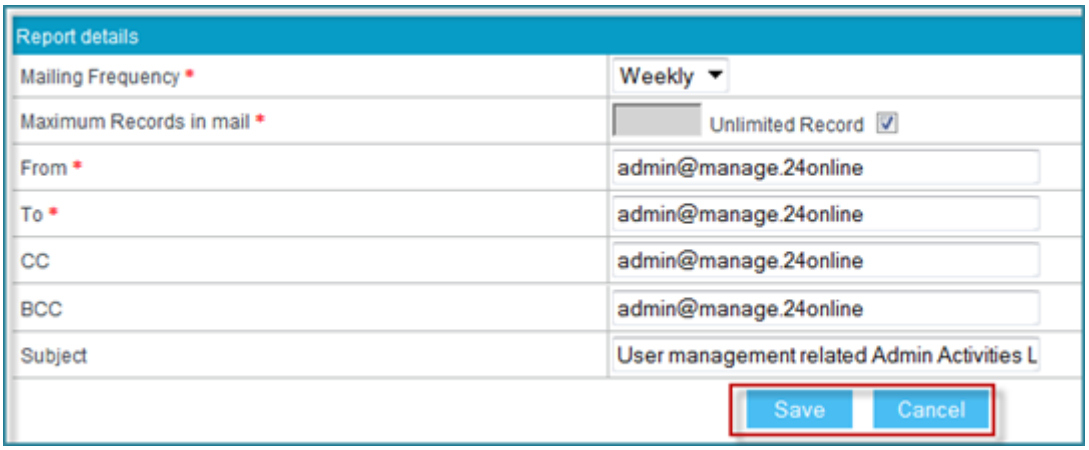

Figure: (c) User management related admin activities log

User Management related Admin Activities Log

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Mailing Frequency	Options available are: Daily option sends email daily Weekly option sends email in an interval of every week To avoid sending any emails select Never
Maximum record in mail	Specify number of records to be sent in the mail. In-order to send unlimited records in the mail, select the check box
From	Specify email address of the sender in the text box
To	Specify email address of the receiver in the text box
CC	Specify email address to send the carbon copy of the email
BCC	Specify email address to send the blind carbon copy of email
Subject	Specify the subject of the email address

(iii) Mail based on product and module expiration status

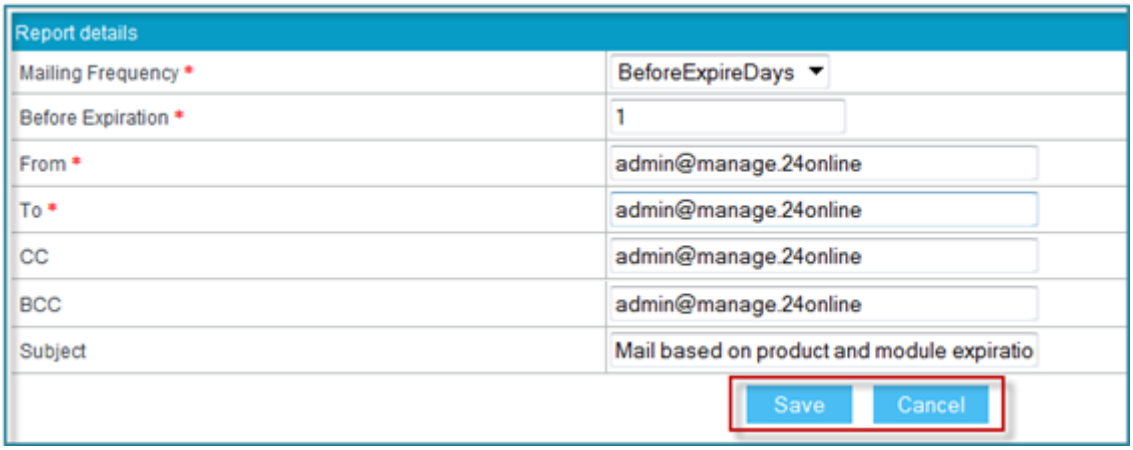

Figure: (d) Mail based on product and module expiration status

Mail Based on Product and Module Expiration Status	
Mailing Frequency	**Options available are:** -Before Expiration Days -To avoid sending any emails select Never
Before Expiration	Enter the number of days in the text box. Before the specified number of days of product or module expiry, email would be sent to the admin or email as defined
From	Specify email address of the sender in the text box
To	Specify email address of the receiver in the text box
CC	Specify email address to send the carbon copy of the email

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BCC	Specify email address to send the blind carbon copy of email
Subject	Specify the subject of the email address

(iv) User surfing details

User surfing details report is a part of the proactive reports. The report can be scheduled from the GUI, the number of records to be listed in the email can also be pre-decided, the recipients of the email can be specified in the '**TO**','**CC**' and '**BCC**'.

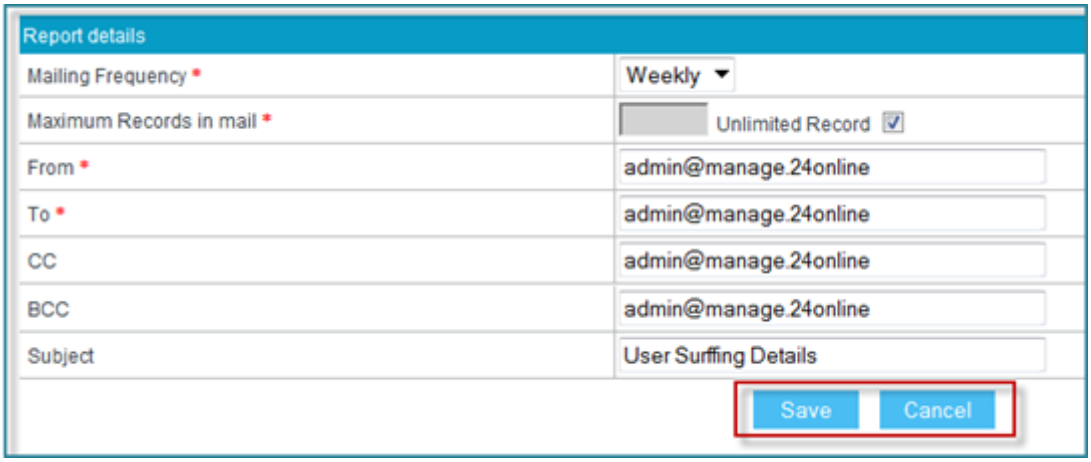

Figure: (e) User surfing details

User Surfing Details	
Mailing Frequency	Options available are: -Never -Daily -Weekly
Maximum Records in mail	Limited Record - Enter the desired number of records in the textbox Unlimited Record – Select the checkbox for sending unlimited number of records in the mail
From	Specify email address of the sender in the text box
To	Specify email address of the receiver in the text box
CC	Specify email address to send the carbon copy of the email
BCC	Specify email address to send the blind carbon copy of email
Subject	Specify the subject of the email address

'**TO**','**CC**' and the '**BCC**' field specified recipients will receive the report as shown below.

The Customer name, user name, start time, stop time, Mac address, Client IP address, Download details, Public IP address, NAS IP address and the NAS Identifier details are shown in the User Surfing Details below.

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User Surfing Details

Name	User Nme	Start Time	Stop Time	Mac Address	Client IPaddress	Download Data	Upload Data	Public IPaddress	Nas IPaddress	Nas Identifier
HCFL1	hf1	12:36 PM	12:50 PM	--	10.104.1.189	0.00 KB	0.00 KB	--	127.0.0.1	EliteNAS#173
HCFL1	hf1	01:06 PM	02:38 PM	--	10.104.1.189	1.31 MB	1.75 MB	--	127.0.0.1	EliteNAS#173
HCFL2	hf2	01:07 PM	03:12 PM	--	10.104.1.188	11.22 MB	633.73 KB	--	127.0.0.1	EliteNAS#173
HCFL1	hf1	02:38 PM	03:12 PM	--	10.104.1.189	212.83 KB	38.11 KB	--	127.0.0.1	EliteNAS#173

Figure: (f) User Surfing Details

SMTP Configuration

From this section, SMTP configuration can be easily done from GUI.

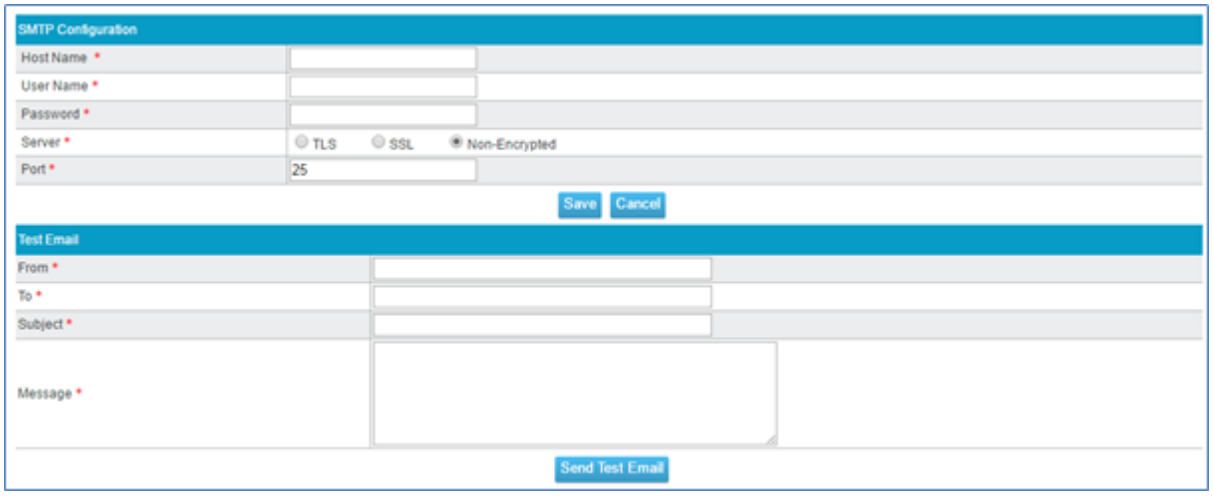

Figure: (a) SMTP Configuration

SMTP configuration	
Host Name	Enter host id here
User Name	Enter username details here
Password	Enter password here.
Server	Select server from the 'TLS', 'SSL', and 'Non-Encrypted' options available.
Port	Enter port number here.

The SMTP settings can be tested by sending the test email. Enter the fields of test email and click 'Send Test Email' button. If the receiver gets the email, it means the settings are correct.

Test Email

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From	Enter the sender's email address
To	Enter the receiver's email address
Subject	Enter the subject of email
Message	Enter the test email message body text

System Alerts

System alerts can be used to set email alerts if any service stops abruptly. User receives the alerts if system experience some network related issues and could not perform desired tasks. Also, if a service is disabled for 30 minutes, concerned user will get the alert.

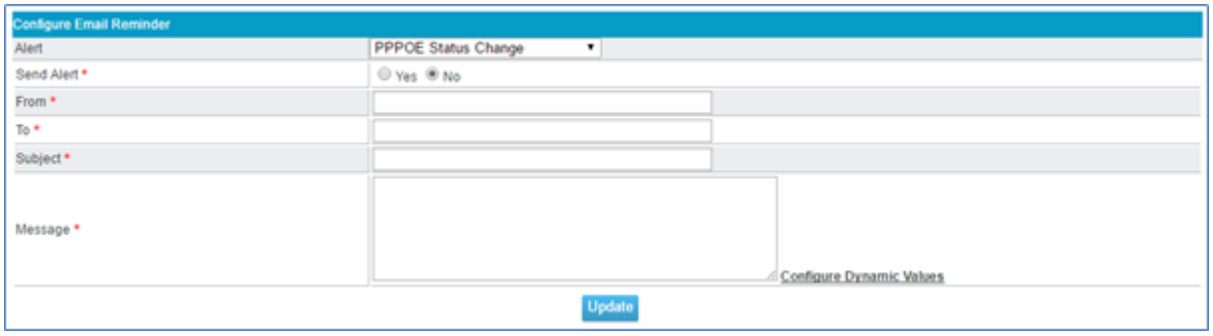

Figure: (a) System alert email configuration

System alert email configuration	
Alert	Select the type of alert: • Interface Status Change • NAS Component Status Change • Too Many Authentication Failure • DNS Status Change • User License Exceeds • Hard disk Usage Limit Exceeds • System Start-up • DHCP Status Change • HTTP Status Change
Send Alert	Select Yes to send the email when any system service stops.
From	Enter the sender's email address
To	Enter the receiver's email address
Subject	Enter the subject of email

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Message	Enter the message you want to send as body. For dynamic values click on 'Configure Dynamic Values'

Alert Configuration

The Alert configuration is the GUI where the alerts can be managed. Both the email and SMS alerts can be managed in the alert configuration page.

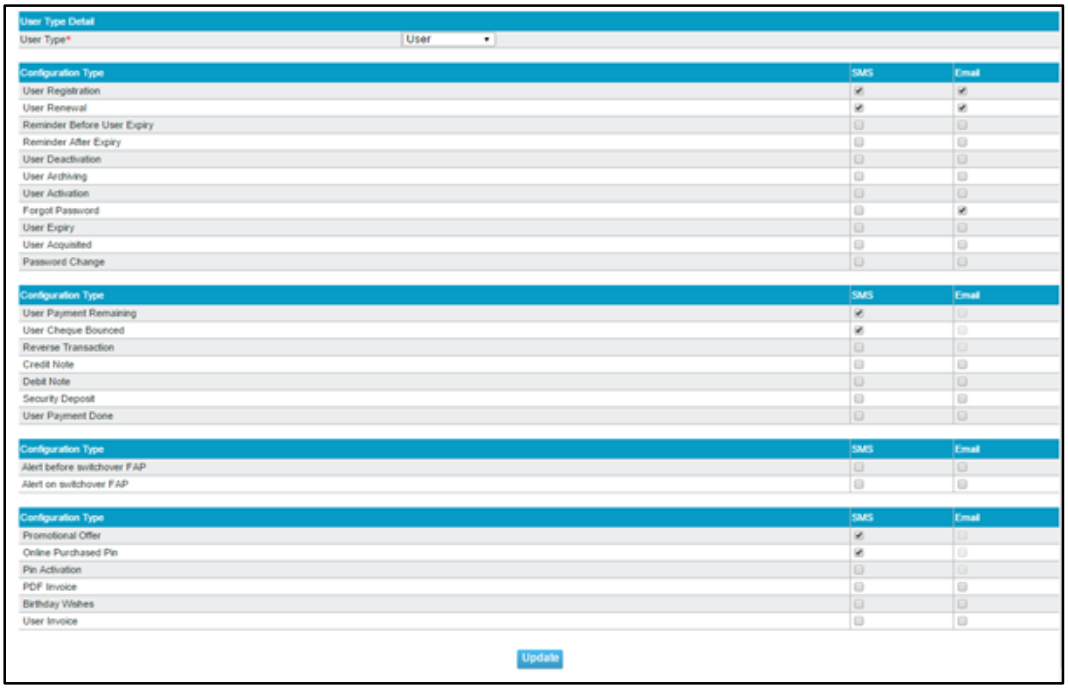

Figure: Alert Configuration

Alert configuration	
User Type	It is the list of admin entities for which alerts can be configured.
Configuration type	It's a list of the services for which the alerts can be sent.
Email	Select the checkbox against the service for which the email alert is to be sent.
Update	Use the 'Update' button to save the configuration

Note:

- Alert management has options to configure SMS reminder also.
- SMS is an addon module. Kindly refer to SMS module for further details.

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Reports

Introduction

Graphical/pictorial representations have always been easier to understand when one is burdened with large volumes of data!! 6 With help of this feature and list of options, service provider can generate different types of reports on data transfer, bandwidth consumption, active and inactive users as well as audit reports, availing details of each and every aspect of the system. These reports can be generated in tabular, graphical, and printable and CSV formats.

On clicking the Reports option, the system will open two options, as shown in the image below. Reports Tool introduced by 24online is a completely new set of reports which can be viewed in a separate browser with number of options to create different types of reports according to different conditions as provided. Admin can also avail functionality to view in Normal reports format or synchronize old reports with the Reports tool.

Currently 24online offers list of reports, like:

1. Internet Usage Reports
2. MIS Reports

Let's understand each reports in-detail, in the below sections:

Notes

- Web-surfing Logger and NetKapture are add-on modules. You need to register with 24online.
- Zone-wise reports will also be included in MIS and Internet-usage reports. Management module must be registered with 24online for the same. Zone Management is an add-on module.
- POP-wise reports will also be included in MIS and Internet-usage reports. POP Management module must be registered with 24online for the same. POP Management is an add-on module.

Reports Configuration

24online introduces Reports Tool which enables administrators for easier view of reports in pictorial format. 24online Reports Tool also introduces many new graphs exportable in various different formats like PDF, HTML, CSV, Excel, zip etc. 24online Reports Configuration allows administrator to configure reports as Normal or Reports Tool. Normal reports option allows admin to view reports in the normal format as suggested below; whereas Reports Tool allows admin to view and manage reports in 24online Reports Tool

Report Tool Sync button allows admin to synchronize the old reports with the new 24online Reports Tool. After selecting the reports option i.e. Reports Tools, admin has to click on 'Sync' button and 'Save' the option. When admin now refers to Reports-> Reports, 24online reports tool will be enabled.

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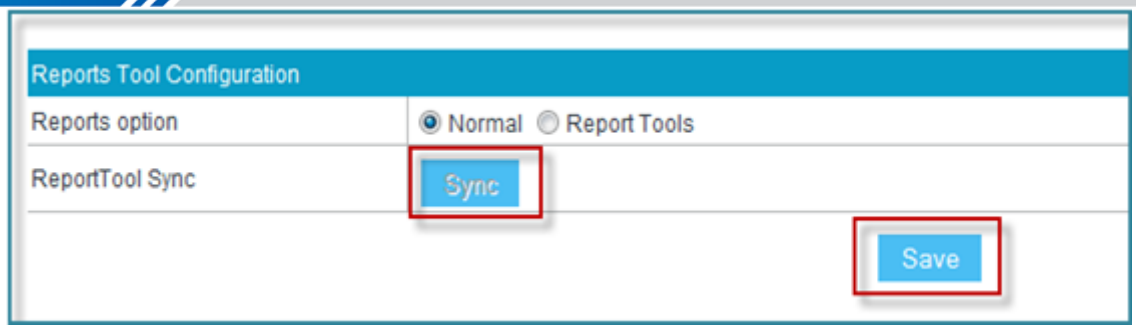

Figure: Report Configuration

Internet Usage Report

With the help of this feature, you can easily generate date wise usage report and other details on data transfer, high surfing time users, package wise data transfer etc. These reports can be generated according to Organization, Package, User, SNAT, or Zone. Reports can be generated in CSV and printable formats.

Organization wise Internet Usage Report

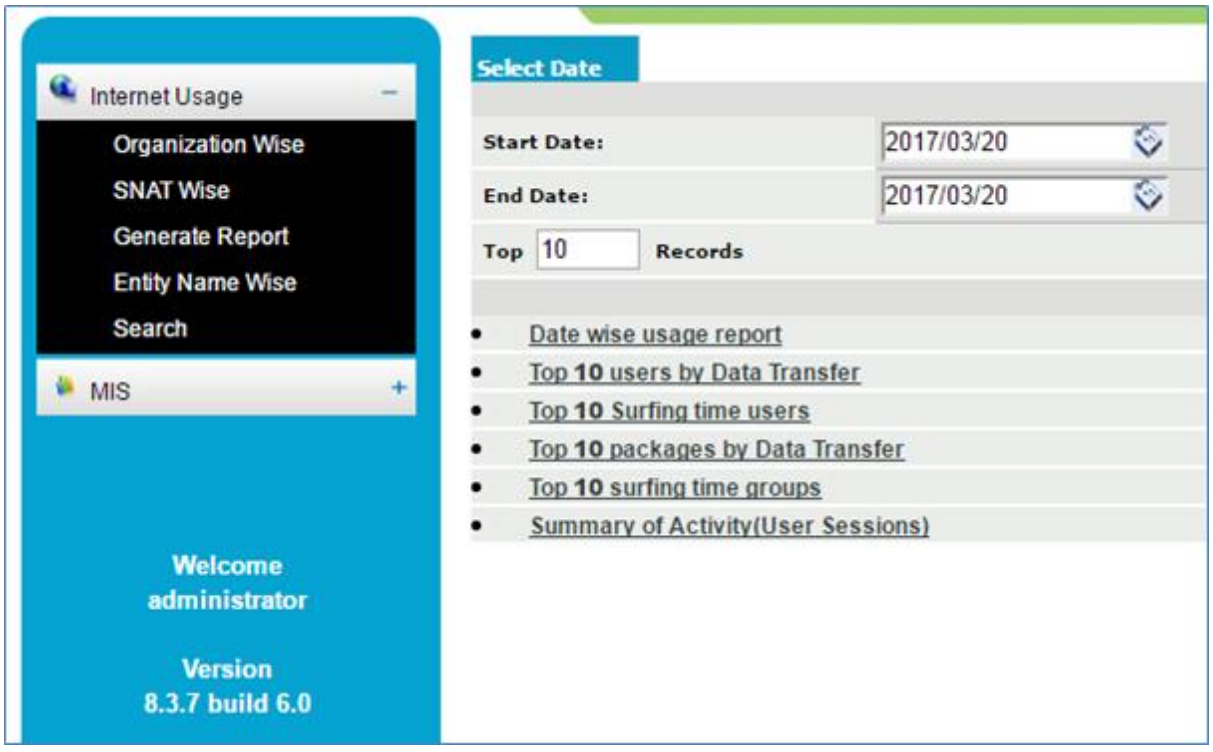

Figure: Organization wise Internet Usage Report

Use the calendar option and select start and end date to define duration of report. The start date should be always less than or equal to end date.

Types of report- Organization Wise Internet Usage Report

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Date Wise Usage Report	Select this option to view date wise usage report for specified period
Top 10 Users By Data Transfer	Select to view details of top 10 users who have made maximum amount of data transfer in the specified duration
Top 10 Surfing Time Users	Select to view details of top 10 users who have done maximum surfing in the specified duration
Top 10 Package by Data Transfer	Select to view details of top 10 packages used and amount of data transferred using these packages, in the specified duration
Top 10 Surfing Time Groups	Select to view details of top 10 packages used and maximum time surfed using these packages, in the specified duration
Summary Of Activity	Select to view details of user sessions and actions taken during the session

To understand the details of each report, please go through each screen shown below in sequential manner:

Date wise Usage Report

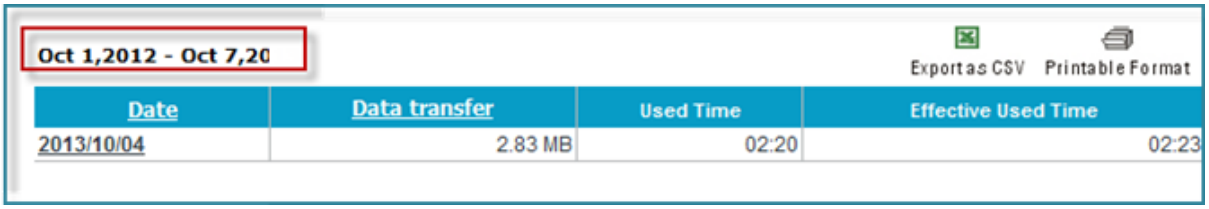

Figure: Date wise Usage Report

Data Wise Usage Report	
Date	Shows list of dates, ranging from the start date and end date specified in the search criteria
Data Transfer	Shows the amount of data transferred against each date in the list
Used Time	Shows actual amount of Internet time used by user(s)
Effective time	Shows total amount of Internet session created by users

Use the appropriate report format i.e. CSV or Printable

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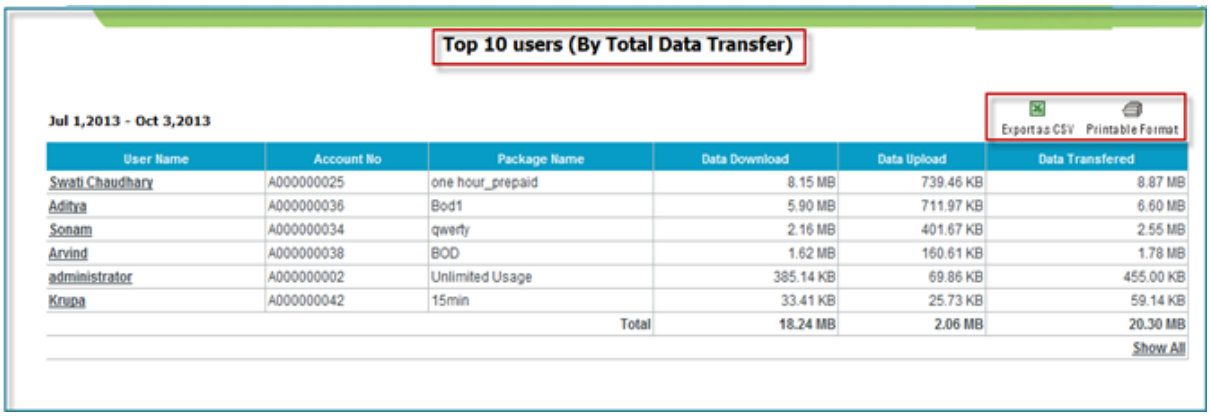

Figure: Top 10 Users by Data Transfer

Top 10 Users by Data Transfer	
Username	Shows list of users with high amount data transfer
Account No	Displays account no of the customer
Package Name	Displays package name assigned to user
Data download	Shows amount of data downloaded by each user in specified time duration
Data upload	Shows amount of data uploaded by each user in specified time duration
Data transferred	Shows total amount of data transfer the combination of data uploaded and data downloaded in the specified time duration

To understand the date wise usage details of any specific user, click on the name of the user:

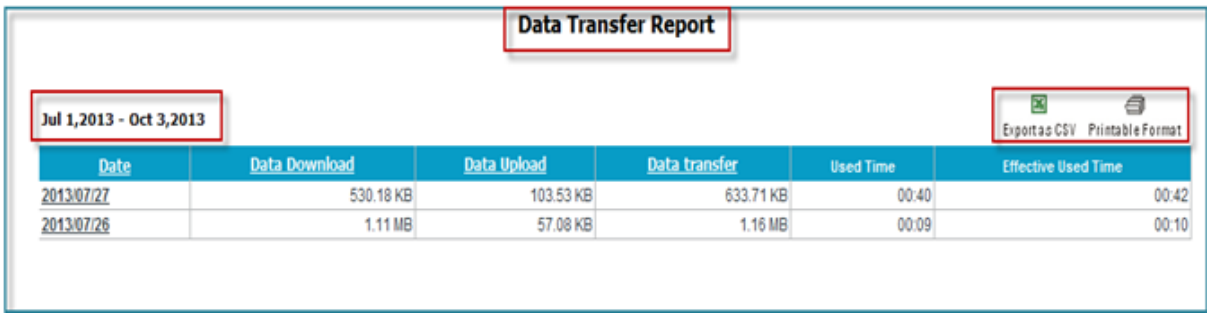

Figure: Top 10 Users by Data Transfer

Select the appropriate format of report, i.e. Printable or CSV

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Top 10 Surfing Time Users

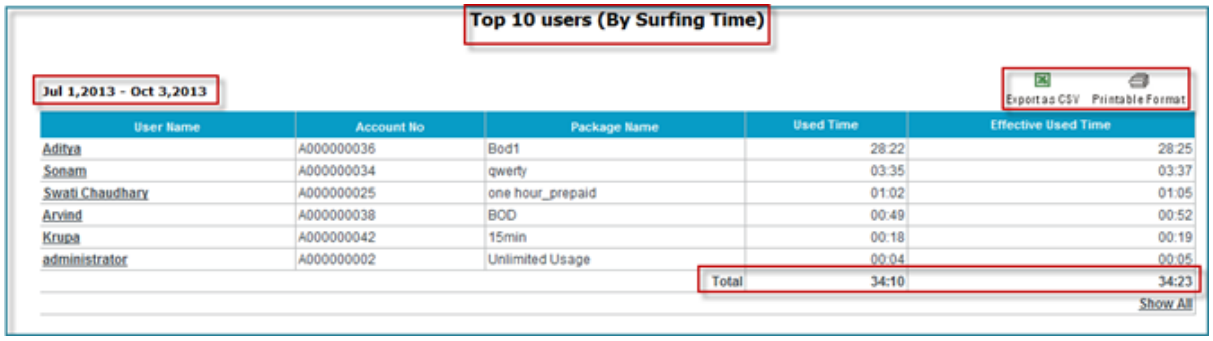

Figure: Top 10 Surfing Time Users

Top 10 Surfing Time Users	
Username	Shows list of users with high surfing time in specified duration
Used time	Shows the actual amount of Internet time used by user(s)
Effective time	Shows the total amount of Internet session created by users

- Select the appropriate format of report, i.e. Printable or CSV
- To understand the date wise usage details of any specific user, click on the name of the user:

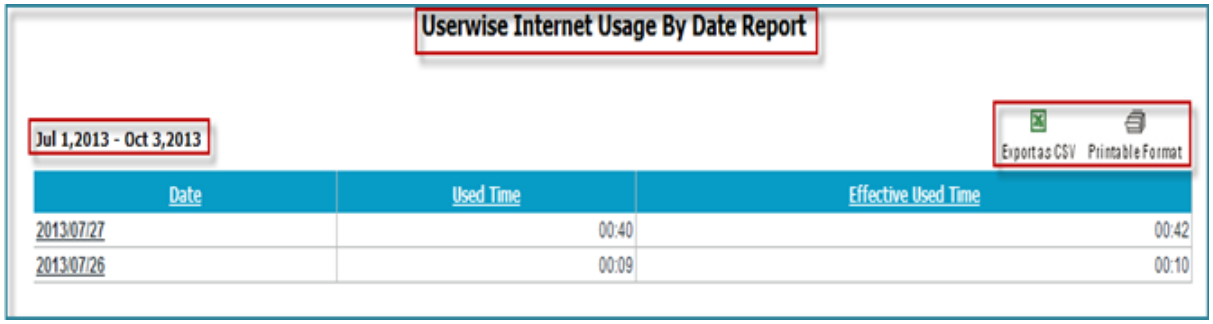

Figure: Top 10 Users by Data Transfer

Top 10 Packages by Data Transfer

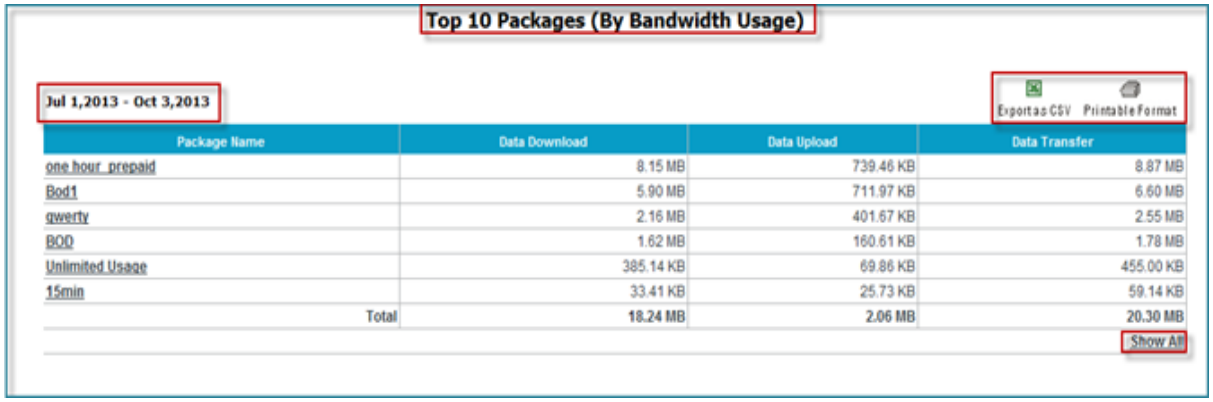

Figure: Top 10 Package Time Users

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Top 10 Package Time Users	
Package Name	Shows list of packages highly consumed in the specified time duration
Data download	Shows amount of data downloaded by each user in specified time duration
Data upload	Shows amount of data uploaded by each user in specified time duration
Data transferred	Shows total amount of data transfer the combination of data uploaded and data downloaded in the specified time duration

To understand the user wise usage details of any specific package, click on the name of the package:

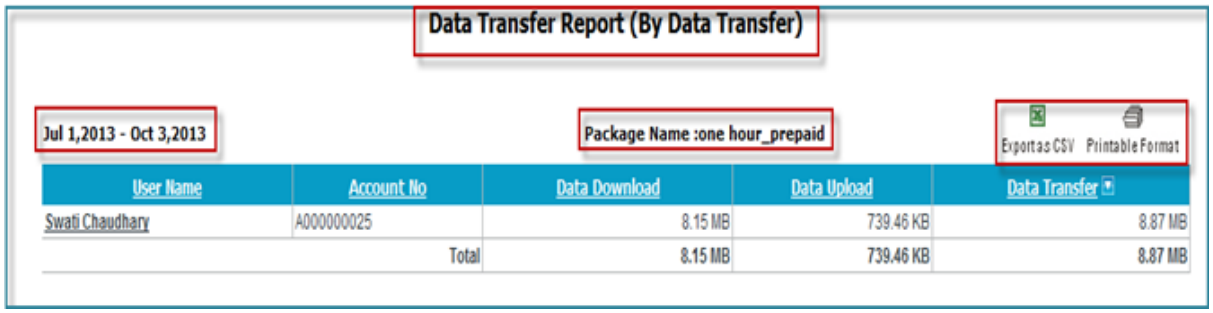

Figure: Top 10 Users by Data Transfer

Select the appropriate format of report, i.e. Printable or CSV

Top 10 Surfing Time Groups

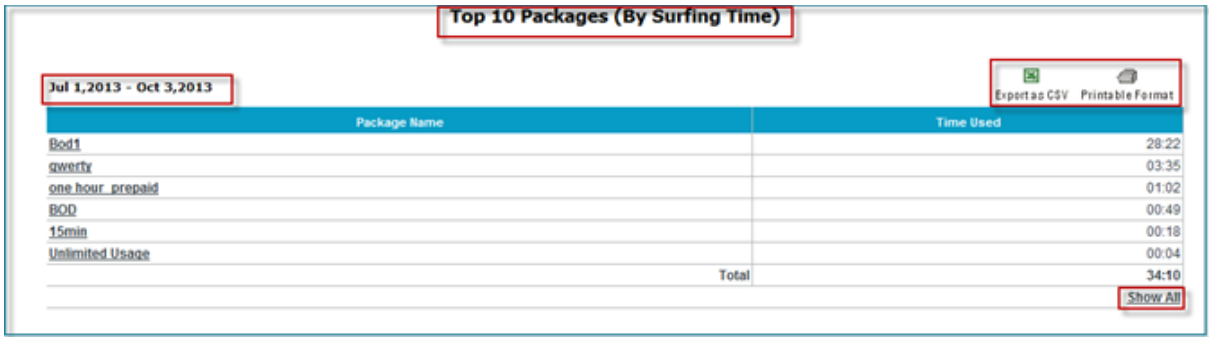

Figure: Top 10 Package by Surfing Time Users

Top 10 Package by Surfing Time Users	
Package Name	Shows list of packages highly consumed in the specified time duration
Time used	Shows total no. of hours and min consumed using each package

To understand the user wise usage details of any specific package, click on the name of the package:

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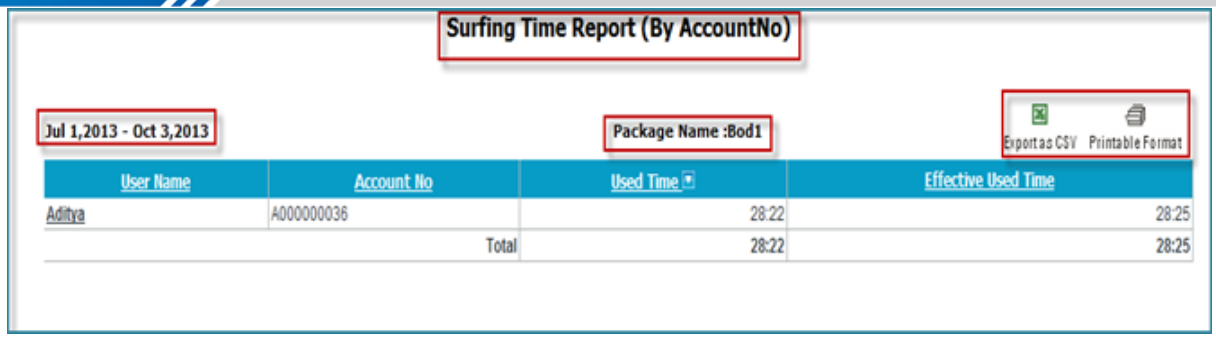

Figure: Top 10 Packages by Surfing Time Users

Select the appropriate format of report, i.e. Printable or CSV

Summary of Activity (User Sessions)

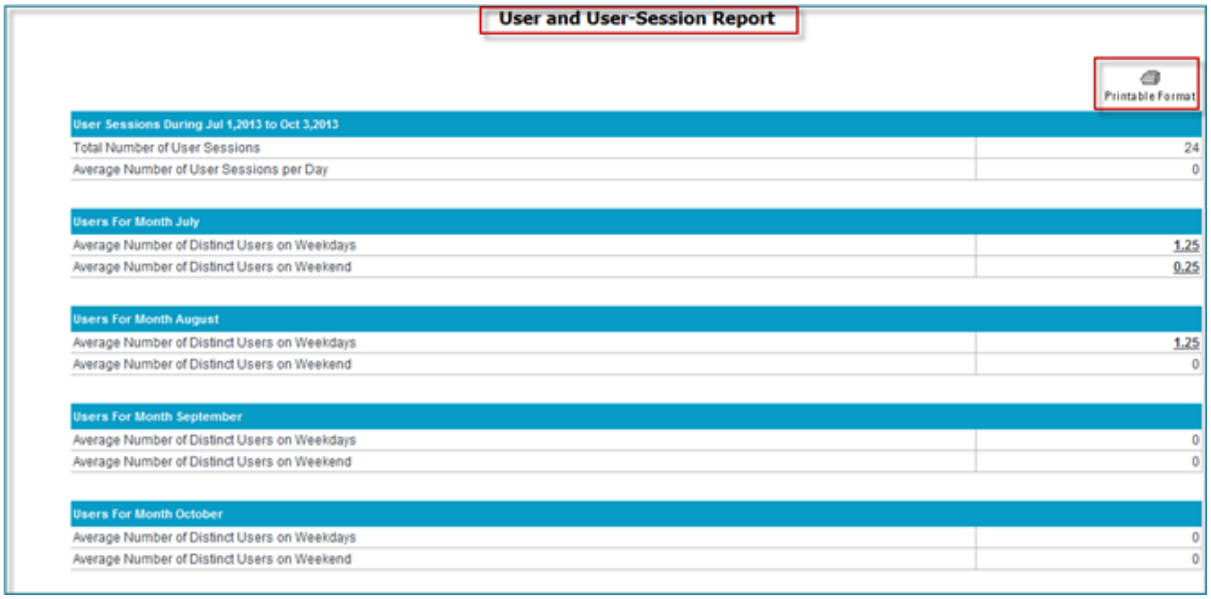

Figure: Summary of Activity per User Session

Summary of Activity per User Sessions	
Total number user sessions	Shows the total number sessions created in the specified duration
Average number of user sessions per day	Shows average of per day session created in the specified duration
Average number of distinct users on weekdays	Shows the number of distinct users logged in weekdays
Average number distinct users on weekends show	Number of distinct users logged in weekends

To understand the day wise session details, click on the total session count:

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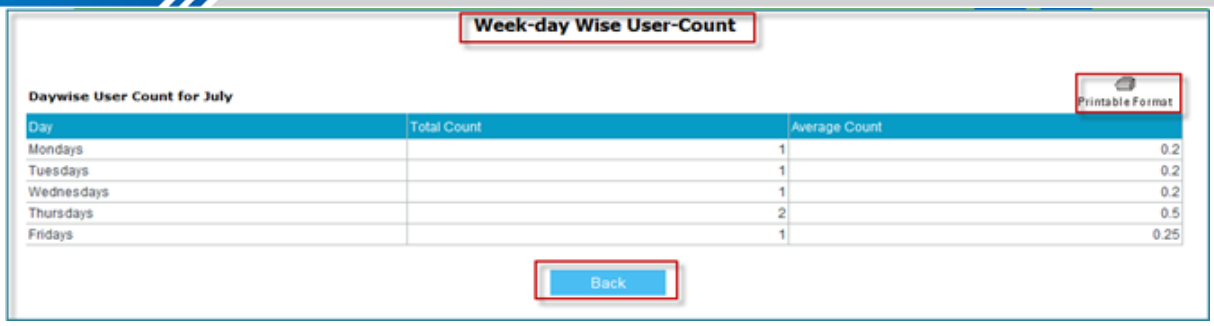

Figure: Top 10 Package by Surfing Time Users

Select the appropriate format of report, i.e. Printable

Bandwidth Graph Usage

Bandwidth usage graphical report allows you to monitor the amount of data uploaded or downloaded by the users at a single glance. Generate reports of live bandwidth usage as well as daily, weekly, monthly or yearly reports. With the help of this report admin is free to determine the following as given below:

- To increase or decrease the bandwidth limit
- Type of traffic is consuming the majority of the bandwidth
- Inbound/outbound traffic has consumed the maximum bandwidth in a week/month
- Pricing of the package can determined according to the consumption

View Graph – Select whether you want to generate **Gateway-wise** report or **Pool-wise** report or a Total report

Graph Period - Use the drop-down box and select the period to generate graph

List of Gateway/Pool - Select the gateway/pool for which you want to generate the report

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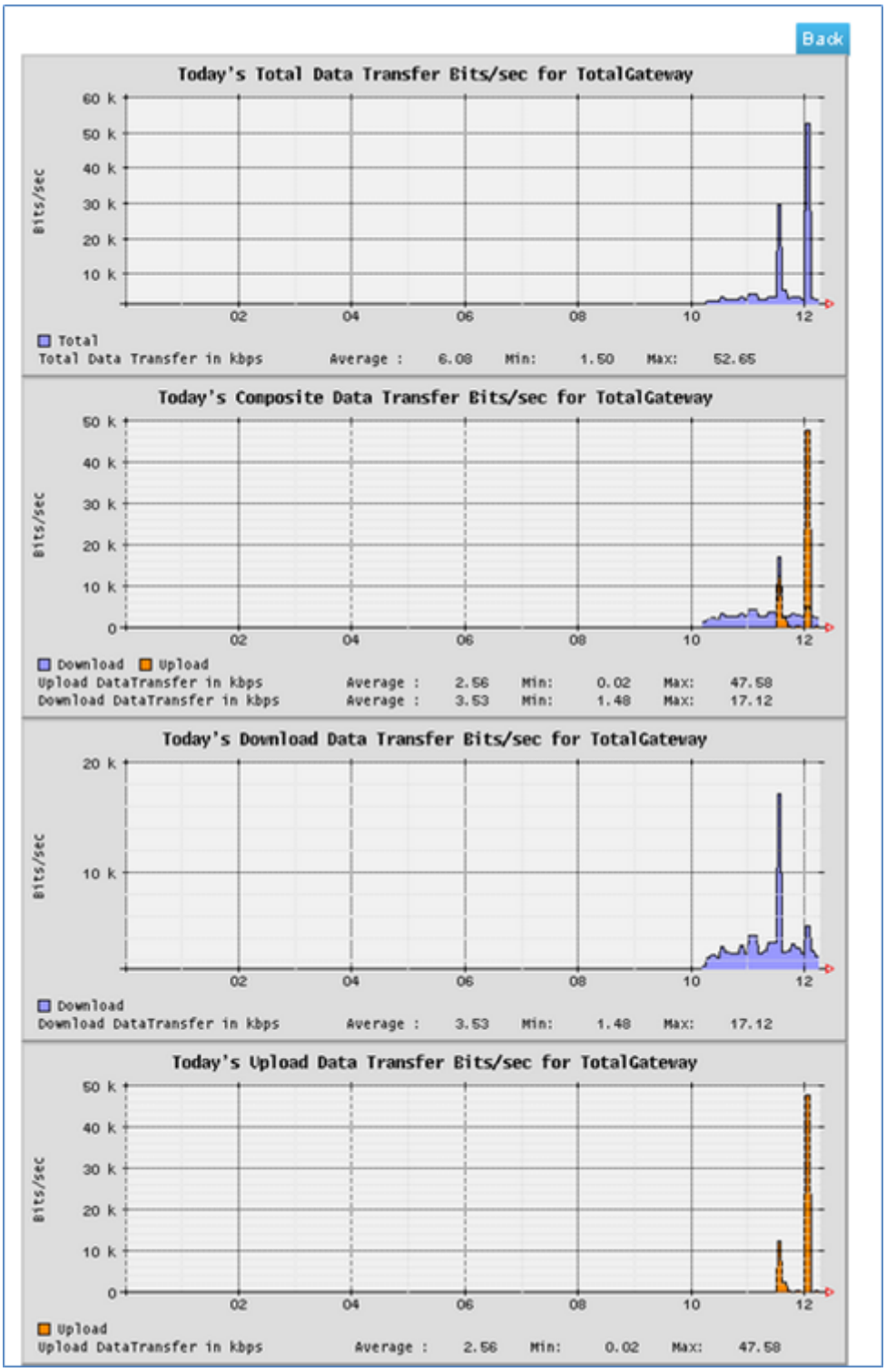

Figure: View Bandwidth Graph - Gateway

Upload, download, total data transfer and total composite data in transfer can be viewed in bits/sec in gateway-wise report easily.

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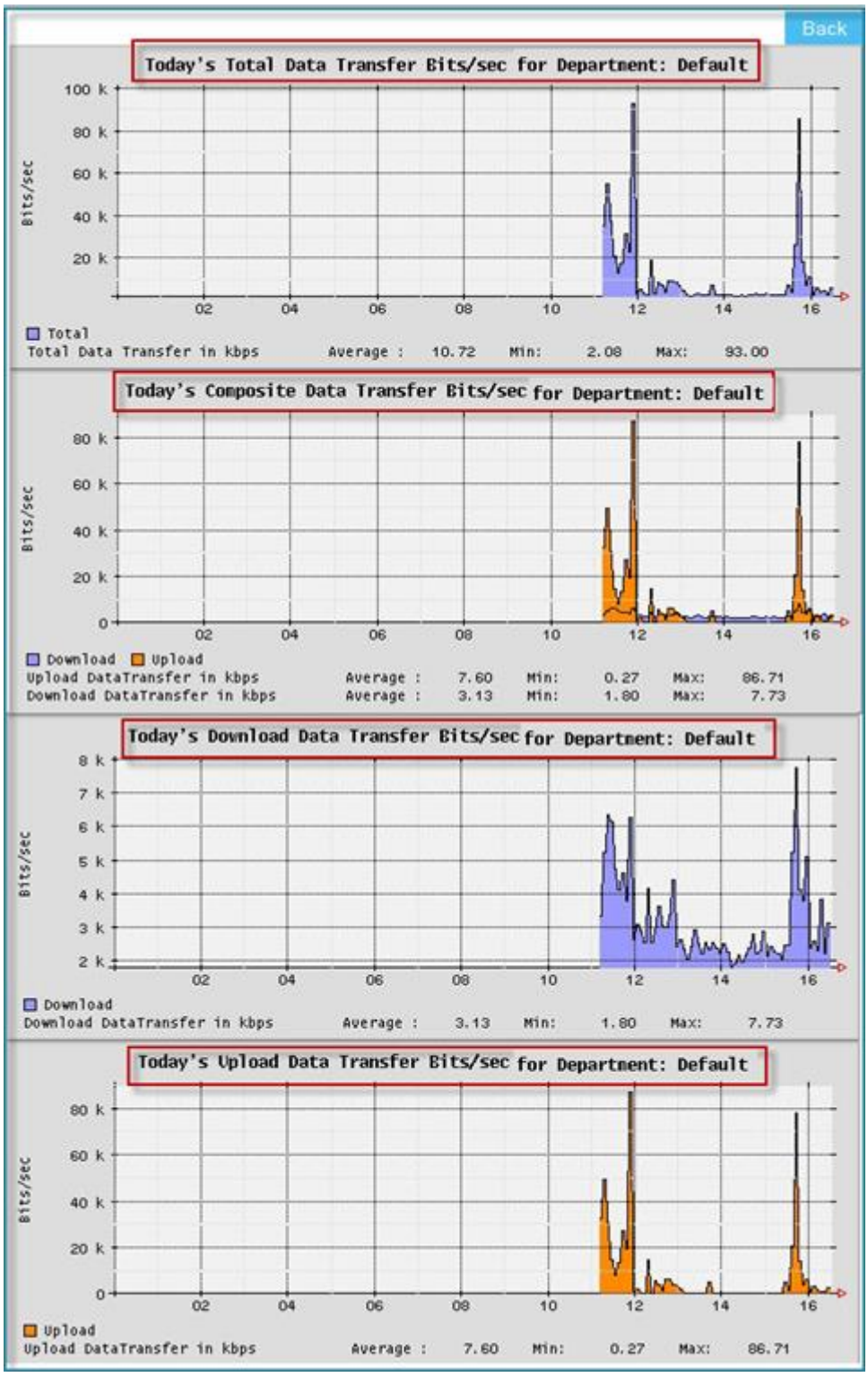

Figure: View Bandwidth Graph - Pool

Total – To generate all types of graph click the '**Total**' option.

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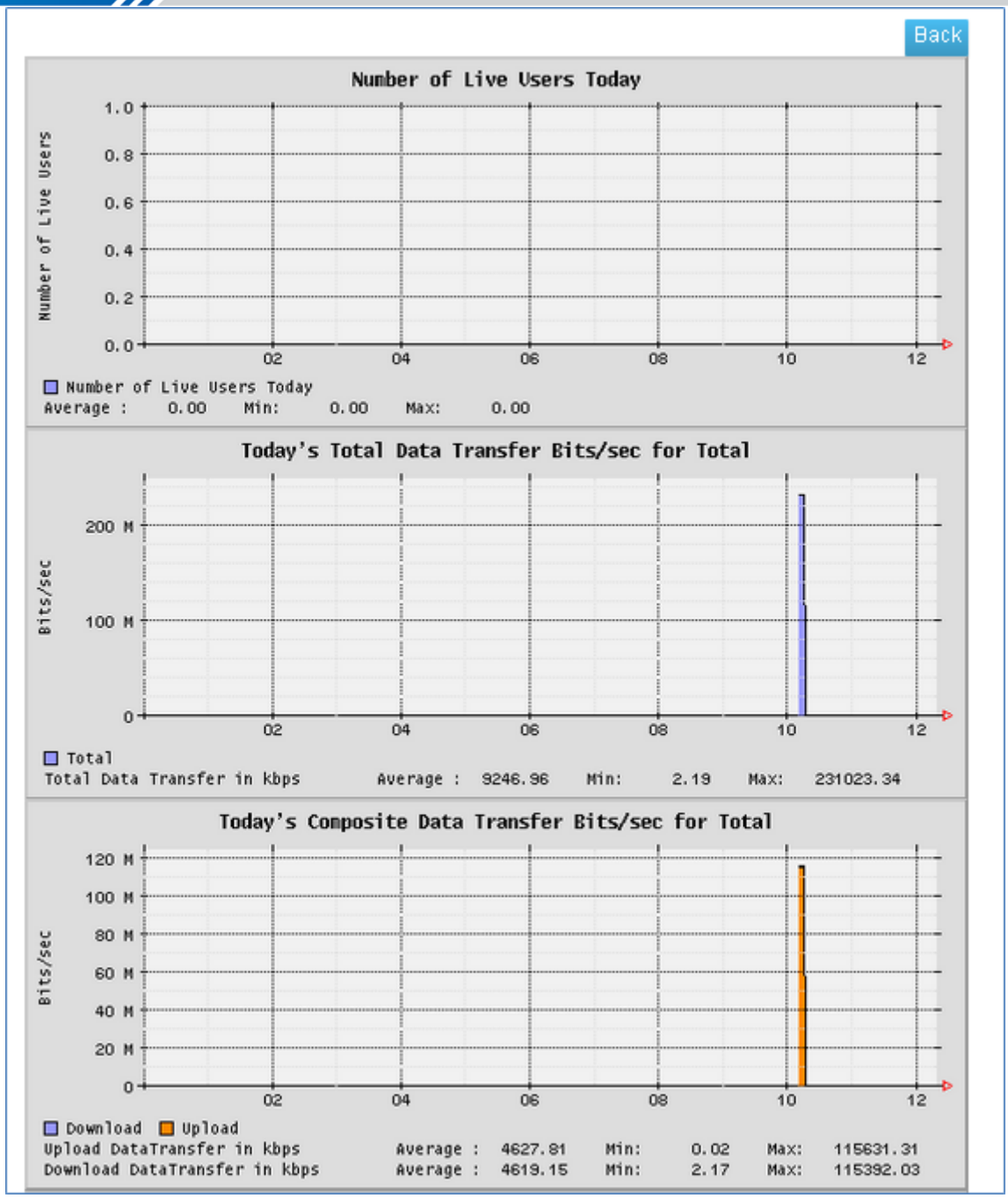

Figure: View Bandwidth Graph - Total

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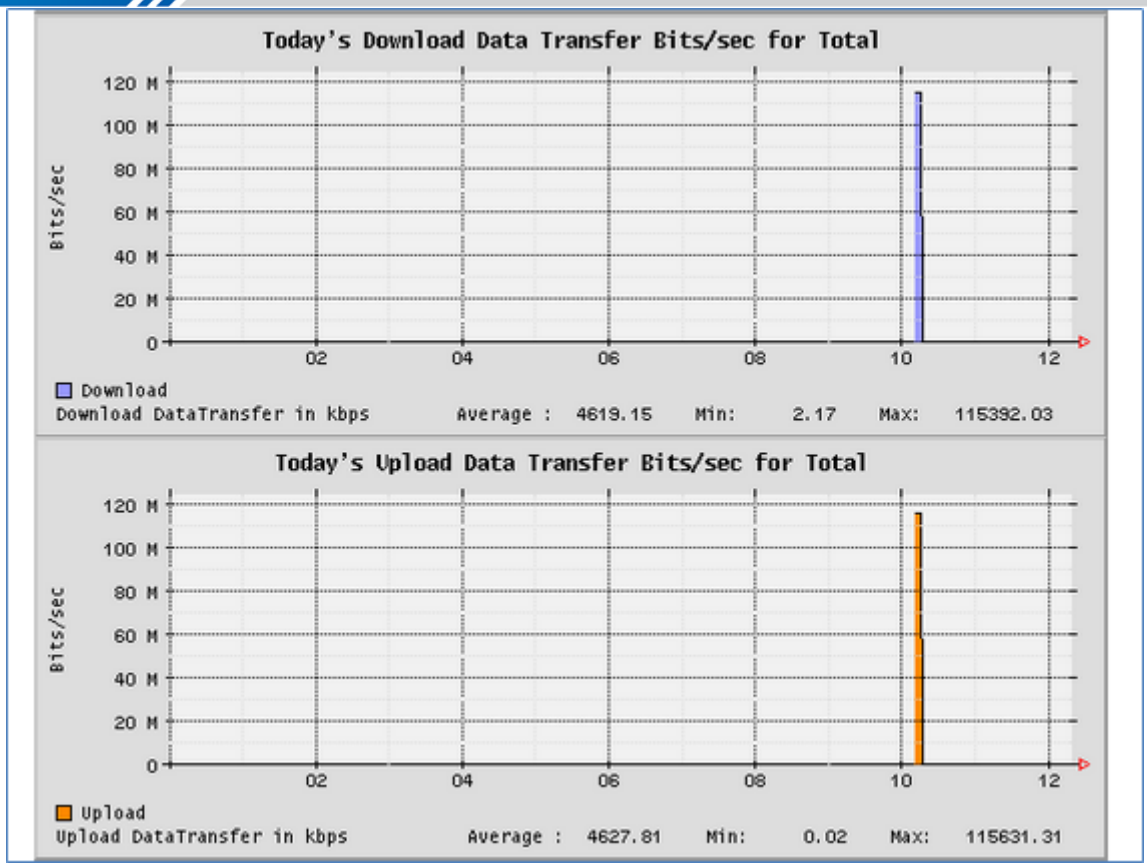

Figure: View Bandwidth Graph - Total

Generate Report

This report gives complete details of users with start time and end time including client IP, SNAT IP, data transfer and usage time.

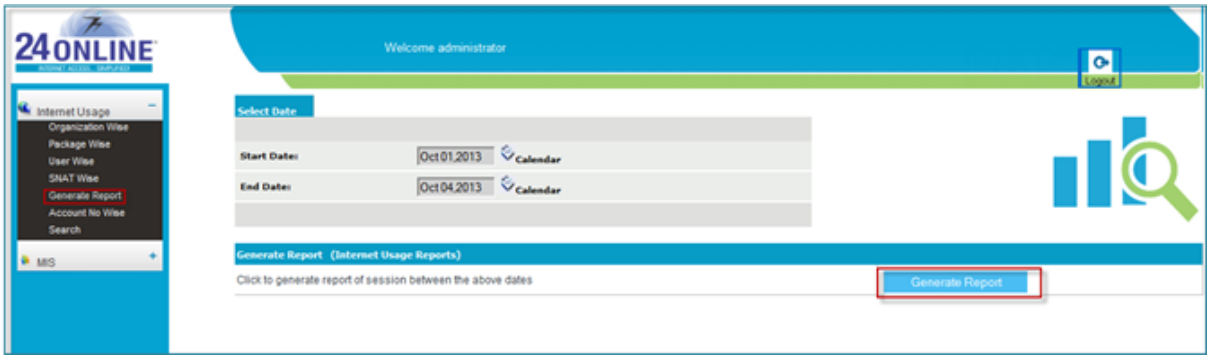

Figure: Generate Report

- Use the calendar option and select start and end date to define duration of report. The start date should be always less than or equal to end date
- Click the 'Generate Report' button to generate the session details report for above dates

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A	B	C	D	E	F	G	H	I	J	K	L
User Name	Start Time	Stop Time	Client IP Address	MAC Address	SNAT IP Address	Download Bytes	Upload Bytes	Total Bytes	Date	Sort On Time	Used Time
Krupa	28-03-2012 13:52	28-03-2012 13:53	10.104.1.165			460	52	512	Mar 28 20:	70	00:01:10
Macuser	28-03-2012 15:25	28-03-2012 15:26	10.104.1.165			460	48	508	Mar 28 20:	20	00:00:20
shreya	28-03-2012 14:27	28-03-2012 14:27	10.104.1.165			0	0	0	Mar 28 20:	2	00:00:02
shreya	28-03-2012 14:27	28-03-2012 14:27	10.104.1.165			460	52	512	Mar 28 20:	10	00:00:10
Testing	28-03-2012 11:28	28-03-2012 11:32	10.104.1.165			1160	408	1568	Mar 28 20:	256	00:04:16
vinit	28-03-2012 14:26	28-03-2012 14:27	10.104.1.165			420	52	472	Mar 28 20:	33	00:00:33

Figure: User Session Wise

Generate Report- User session wise	
Username	Shows list of users who have access Internet in the specified time duration
Start time	Shows the time and date when the user started accessing Internet using the IP address specified against the username
Stop time	Shows the time and date when the user stopped access Internet using the IP address specified against the username
IP address	Shows the list of IP address used by each user
MAC address	Shows the list of MAC address of each user in the list (These details appear if the 'Bind User MAC ID' option is selected while adding user in the system)
SNAT IP address	Shows the list of SNAT address used by each user to surf Internet during the specified time period
Download bytes	Shows the amount of data downloaded each day by the user
Upload bytes	Shows amount of data uploaded each day by the user
Data transfer	Shows total amount of data transferred each day by the users
Date	Shows the date on which the user accessed Internet
Sort on time	Shows time of user session in seconds
Used time	Shows actual amount of Internet time used by each user

You can use the print command '**Ctrl + P**' from keyboard option to print the report

Entity Name Wise

Entity name wise reports allows you select the fields to generate report. The reports are the internet usage reports in terms of entity and session usage.

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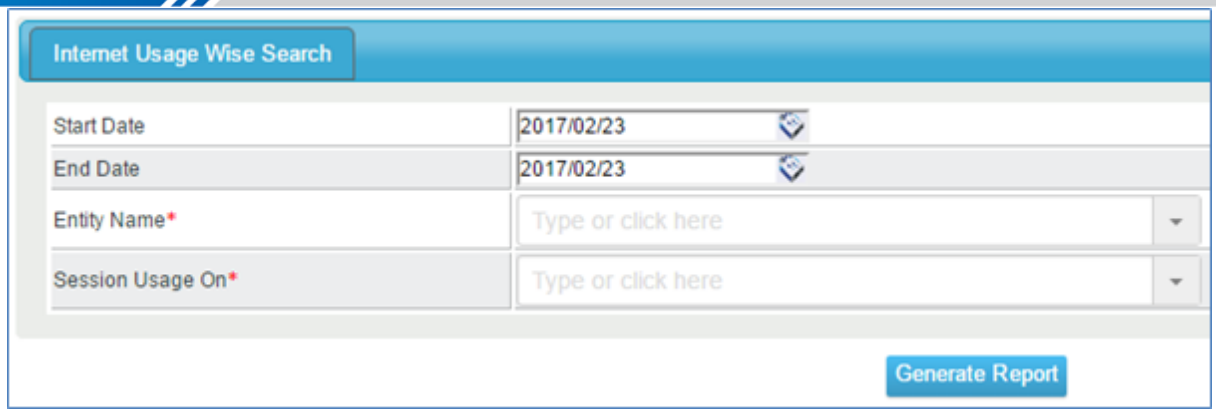

Figure: Entity Name wise Report

- The available entity names are: User, package, zone and account number.
- The available reports for session usage according to: Data transfer, surfing time and usage.

Search

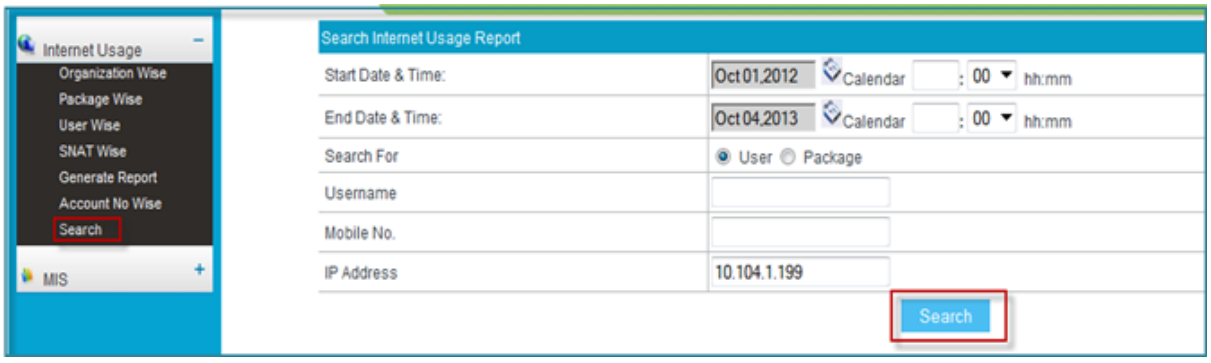

Figure: Search Internet Usage Reports

Search Internet Usage Reports	
Start date & time	Define end date of Internet usage according to which the report will be generated. You can also narrow the search by defining the start time and stop time when the user had logged in
End Date & time	User wise details shows list of users and usage in the specified time duration Package wise details shows list of packages used by different users in the specified time duration
Search For	To search details of any specific username
Username	To search details of any specific mobile no
Mobile Number	To search details of any specified IP address

After entering the required search criteria, click the '**Search**' button.

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Internet Usage Search Result

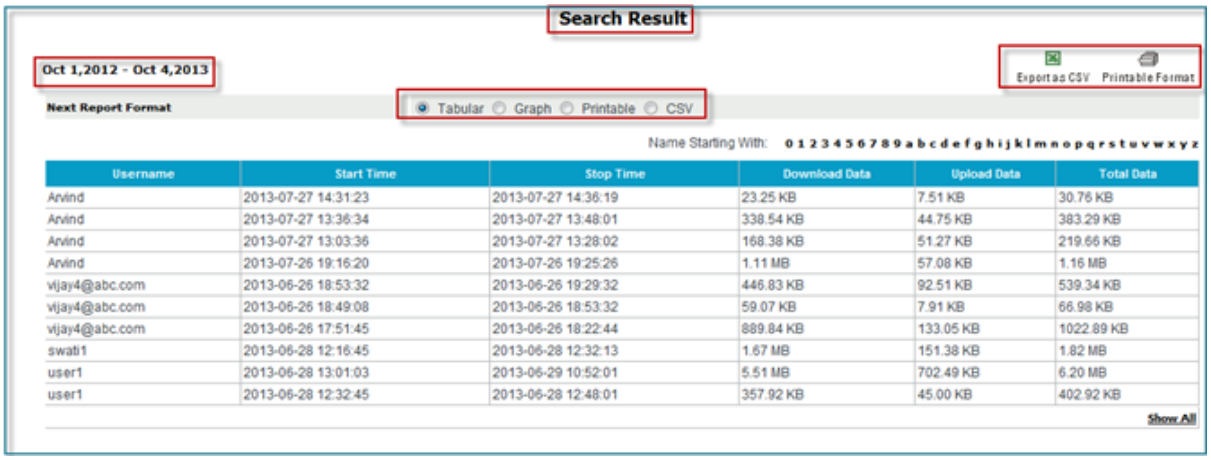

Figure: Search Internet Usage Report

Search Internet Usage Reports	
Username	Shows list of users who have access Internet during the dates selected in the search criteria
Start time	Shows the time and date when the user started accessing internet
Stop time	Shows the time and date when the user stopped access internet
Download data	Shows amount of data downloaded each day by user
Upload data	Shows amount of data uploaded each day by user
Data transfer	Shows total amount of data transferred each day by user

MIS Reports

MIS report provides detailed information about package, POP, zone, pool, user and invoice. With the help of this feature 24online user can generate report of active and de-active users as well as registration and renewal details for each package, zone, and pool.

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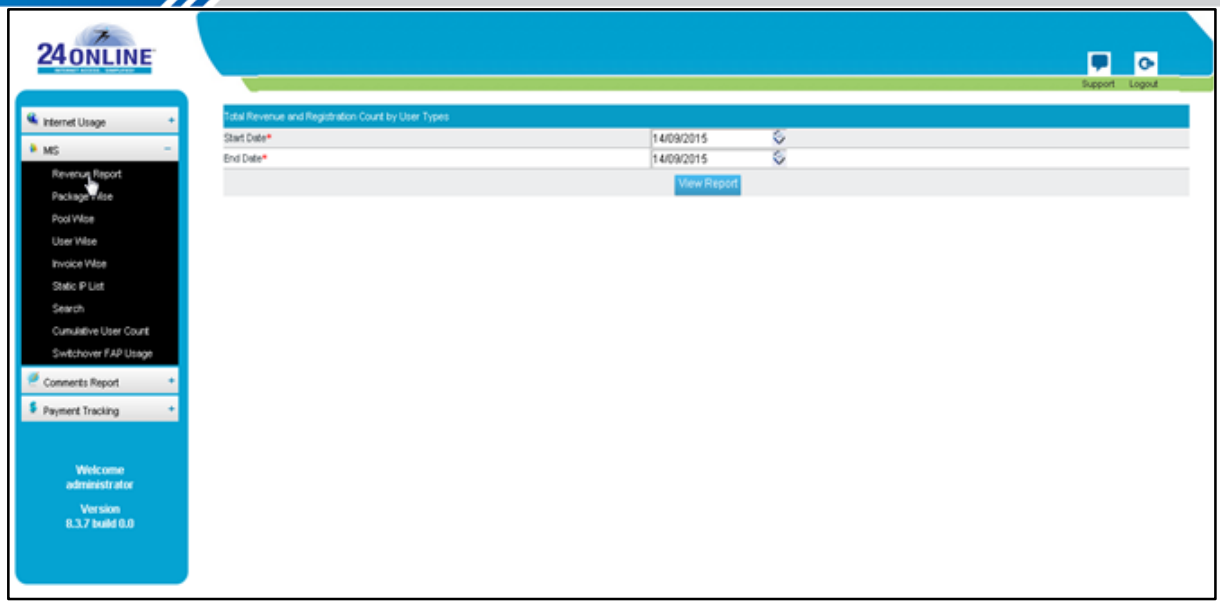

Figure: MIS Revenue Report

Use the calendar option and select start and end date to define duration of report. The start date should be always less than or equal to end date.

Invoice wise Report

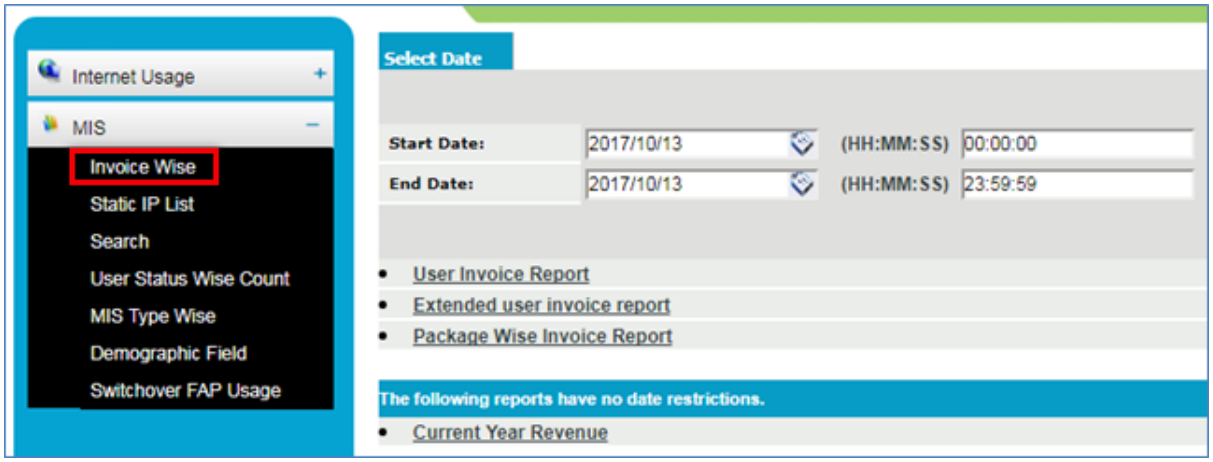

Figure: Invoice wise Report

- Use the calendar option and select start and end date to define duration of report. The start date should be always less than or equal to end date
- After specifying the details, click on the required report from the five different types of reporting options:
    - Invoice Report shows various invoices created in the specified time duration
    - Extended user invoice report provides you option to select columns of reports. The report has columns related to billing information, taxation, address information, revenue and internet packages. The report considers default and demographic fields for the columns. Users can select the required columns and hide remaining columns in report.

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- Package wise shows amount of revenue generated package wise in the specified duration

User Invoice Report

Zone Details will be displayed only-if Zone Management module is **ON**. Please refer to Zone Management module for further details. Zone Management is an add-on module.

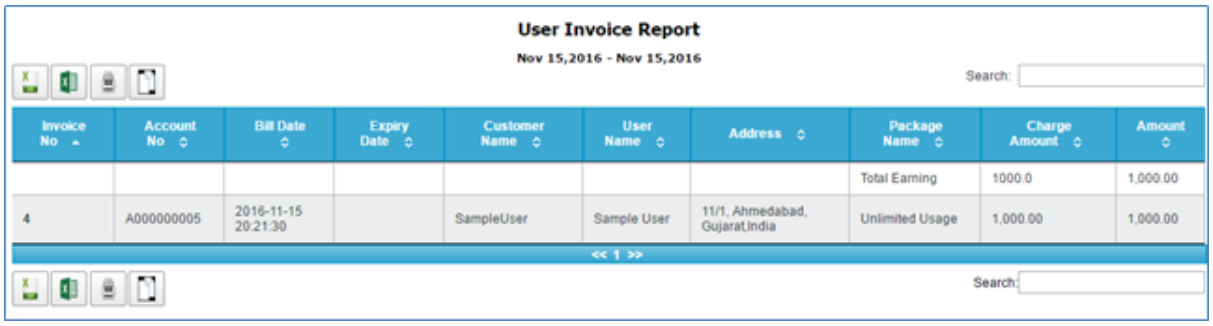

Figure: Invoice wise Report

Invoice Wise Report	
Invoice No	Shows the invoice number defined while generating each invoice
Account no	Shows account number of the user
Bill date	Shows the billing date and time of the user
Expire date	Shows the expire-date of user
Customer ID	Shows the customer ID of the users
Zone Name	Shows zone name of the customer
Customer Name	Shows customer name
Username	Shows username of the customer
Address	Shows the address of each customer
Package name	Shows the name of the package sold to each customer
Charge Amount	Shows amount charged from user
Amount	Shows the amount of each package sold to the customer

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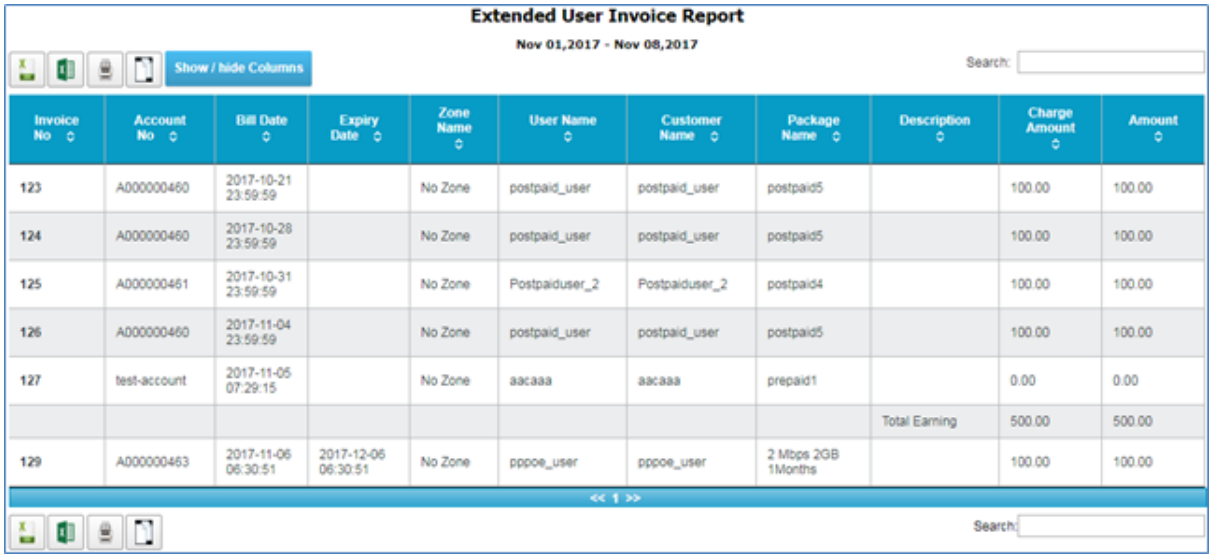
Extended User Invoice Report



Extended User Invoice Report

Nov 01,2017 - Nov 08,2017

Show / hide Columns

Search:

Invoice No	Account No	Bill Date	Expiry Date	Zone Name	User Name	Customer Name	Package Name	Description	Charge Amount	Amount
123	A000000460	2017-10-21 23:59:59		No Zone	postpaid_user	postpaid_user	postpaid5		100.00	100.00
124	A000000460	2017-10-28 23:59:59		No Zone	postpaid_user	postpaid_user	postpaid5		100.00	100.00
125	A000000461	2017-10-31 23:59:59		No Zone	Postpaiduser_2	Postpaiduser_2	postpaid4		100.00	100.00
126	A000000460	2017-11-04 23:59:59		No Zone	postpaid_user	postpaid_user	postpaid5		100.00	100.00
127	test-account	2017-11-05 07:29:15		No Zone	aacaaa	aacaaa	prepaid1		0.00	0.00
								Total Earning	500.00	500.00
129	A000000463	2017-11-06 06:30:51	2017-12-06 06:30:51	No Zone	pppoe_user	pppoe_user	2 Mbps 2GB 1Months		100.00	100.00

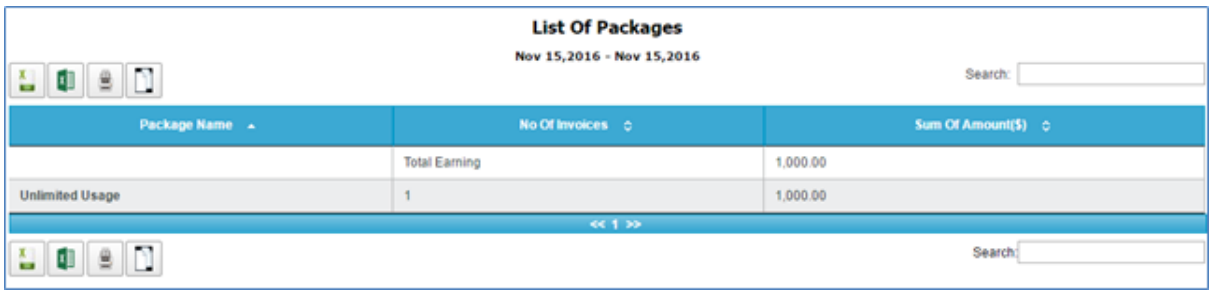
<< 1 >>

Search:

Figure: Extended User Invoice Report

The report shows all the columns of user invoice report. Additionally, all the columns for dynamic fields will also be displayed.

Invoice wise Invoice Report



List Of Packages

Nov 15,2016 - Nov 15,2016

Search:

Package Name	No Of Invoices	Sum Of Amount($)
	Total Earning	1,000.00
Unlimited Usage	1	1,000.00

<< 1 >>

Search:

Figure: Invoice wise Report

Invoice Wise Report	
Package name	Shows list of packages for which number of invoices have been generated in the specified time duration
Number of invoices	Shows no. of times invoices generated for each package
Amount	Shows the amount of each package sold to the customer

View invoice wise details of any specific package, click on the name of the package:

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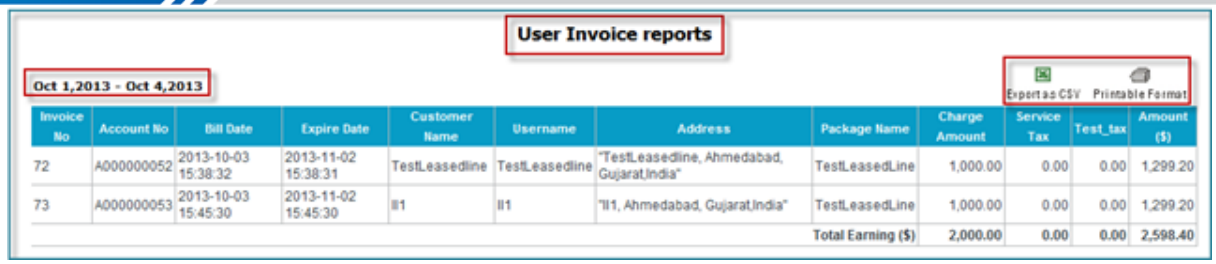

Invoice No	Account No	Bill Date	Expire Date	Customer Name	Username	Address	Package Name	Charge Amount	Service Tax	Test_tax	Amount ($)
72	A000000052	2013-10-03 15:38:32	2013-11-02 15:38:31	TestLeasedline	TestLeasedline	"TestLeasedline, Ahmedabad, Gujarat,India"	TestLeasedLine	1,000.00	0.00	0.00	1,299.20
73	A000000053	2013-10-03 15:45:30	2013-11-02 15:45:30	II1	II1	"II1, Ahmedabad, Gujarat,India"	TestLeasedLine	1,000.00	0.00	0.00	1,299.20
							Total Earning ($)	2,000.00	0.00	0.00	2,598.40

Figure: Invoice wise Report

Current Year Revenue

The report shows the total revenue for all months of the on-going year.

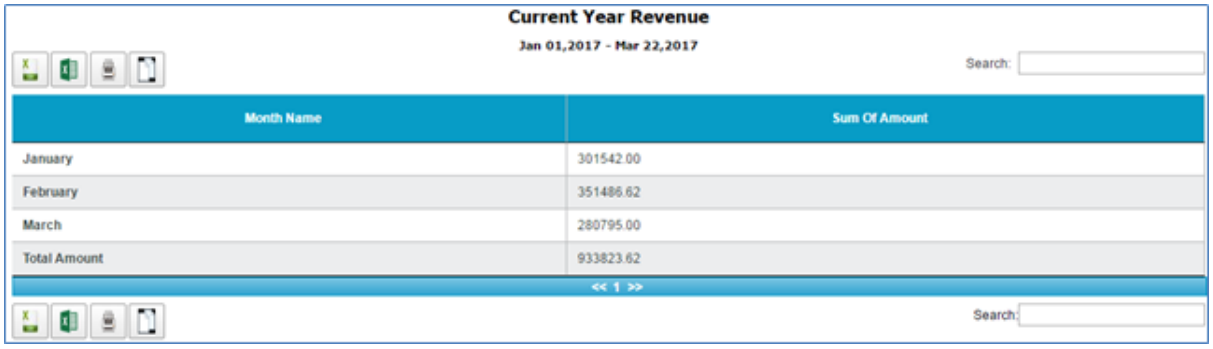

Figure: Current Year Revenue

Current Year Revenue	
Month	Shows the name of month
Sum of Amount	Shows the total revenue generated for the month

Static IP List

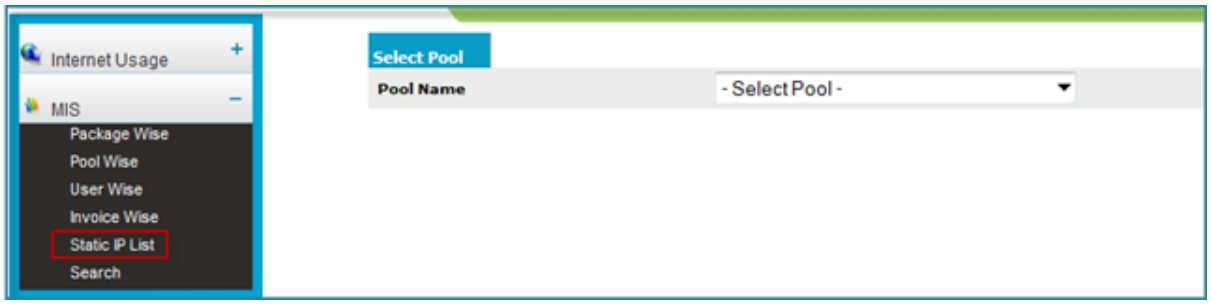

Figure: Static IP List - Pool wise

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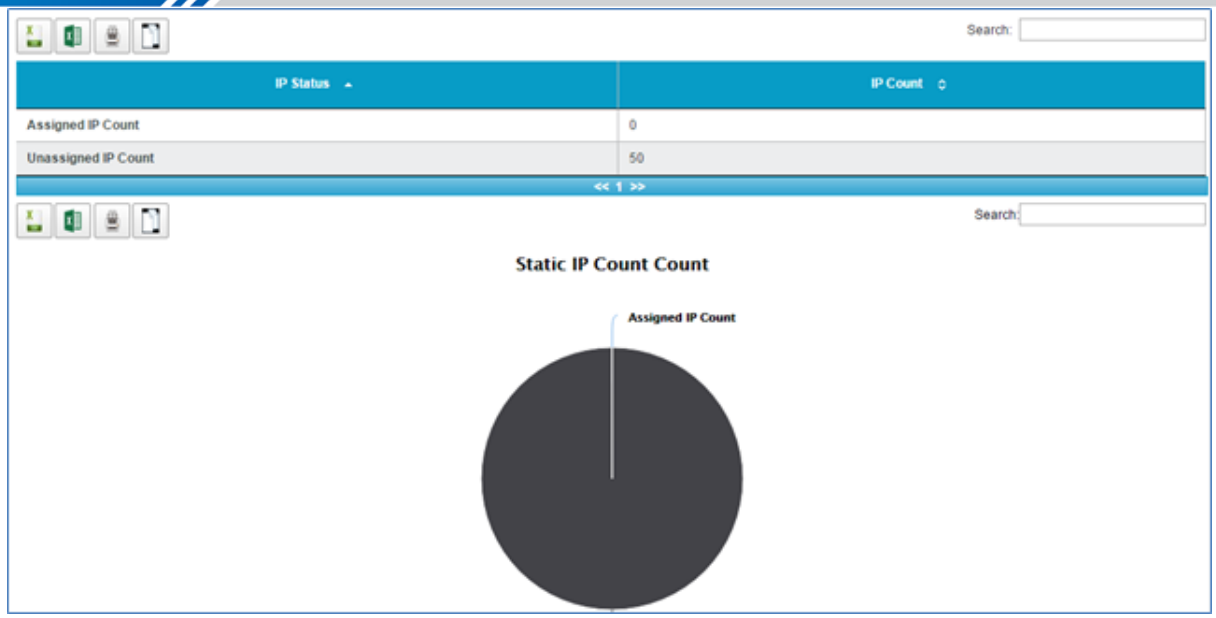

Figure: Static IP List - Pool wise

- Click the drop-down box and select the name of the pool from the list. All the pools which are created in the system will be displayed in the drop-down list.
- The system shows the number of IP address assigned and unassigned to specific pool selected from the list:
    - Click on the **unassigned IP's** option to understand the details

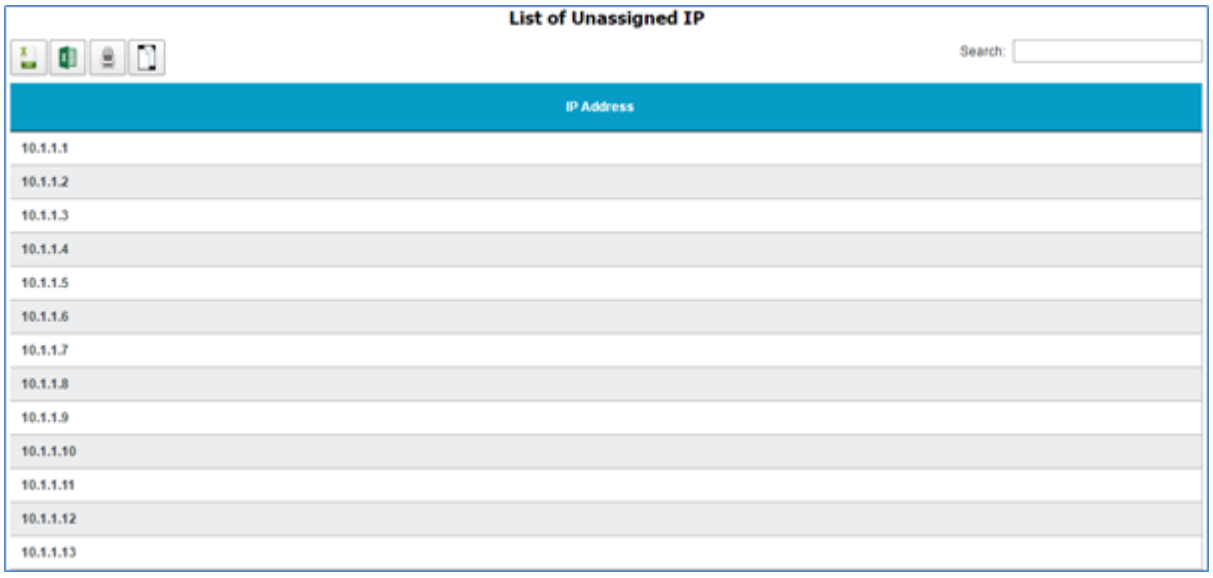

Figure: Static IP List - List of Unassigned IP Address

Similar type of list of IPs can be viewed when you click on the **assigned IP's** option.

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Search

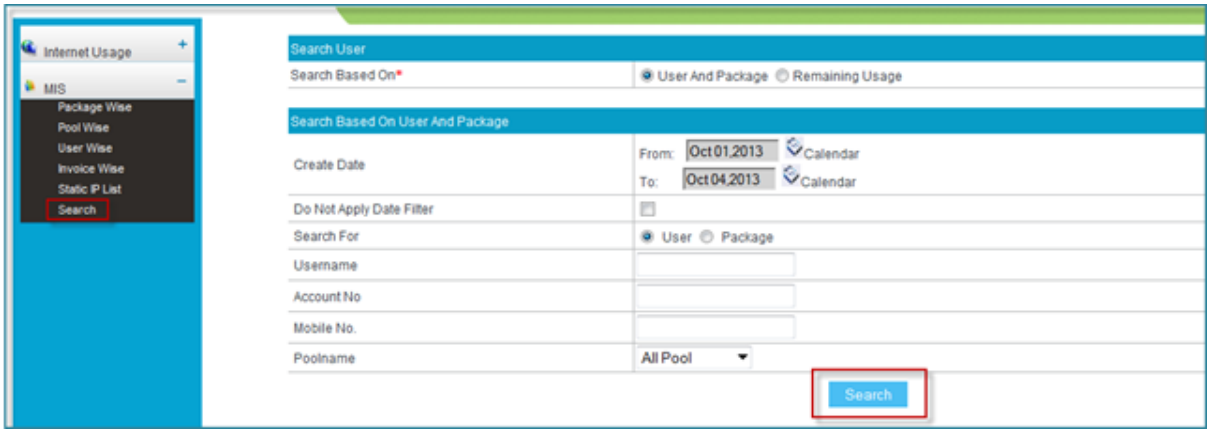

Figure: Search Reports

Search Reports	
Search Based on	Select an appropriate option to search based on user and package details or remaining usage details of the package assigned to the user
Create Date	Use the calendar option to define any specific date or the date range. Select the starting date in the first box and ending date in the next box. For any specific date, select the same date in the both the boxes
Do not apply date filter	Use the check-box to avoid the date range
Search For	Select whether you want to search according to the user or package
Username	To search using username
Mobile No.	To search using mobile number
Zone name	To search according to zone, click the drop-down box and select the name of the zone (Zone Module should be registered. It is an add-on module)
Pool name	To search according to pool, click the drop-down box and select the name of the pool

After specifying the search criteria, click the '**Search**' button

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Search Result

Figure: Search Report Result

User Status wise Count

The report shows the count of users classified according to their current status. The first column has package names for which the counts are displayed.

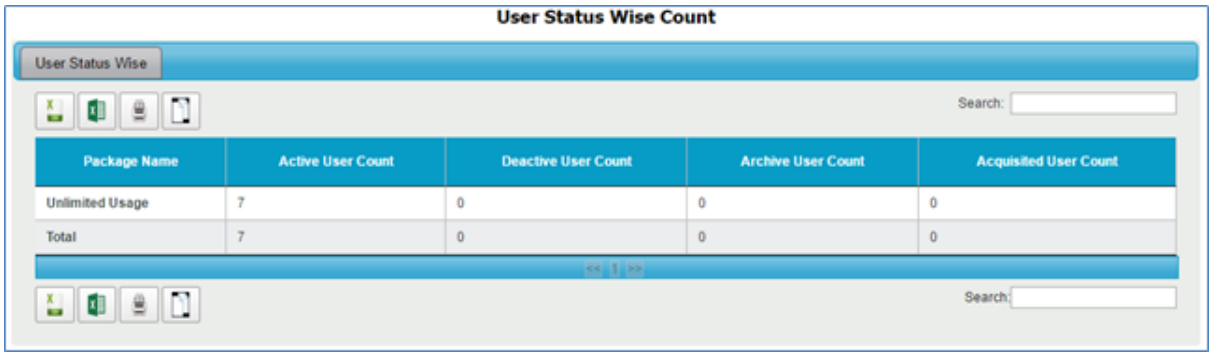

Figure: User Status wise Count

MIS Type wise

Type wise report allows the users to create the report with selective fields of their choice. The screen below displays the fields available to display in report.

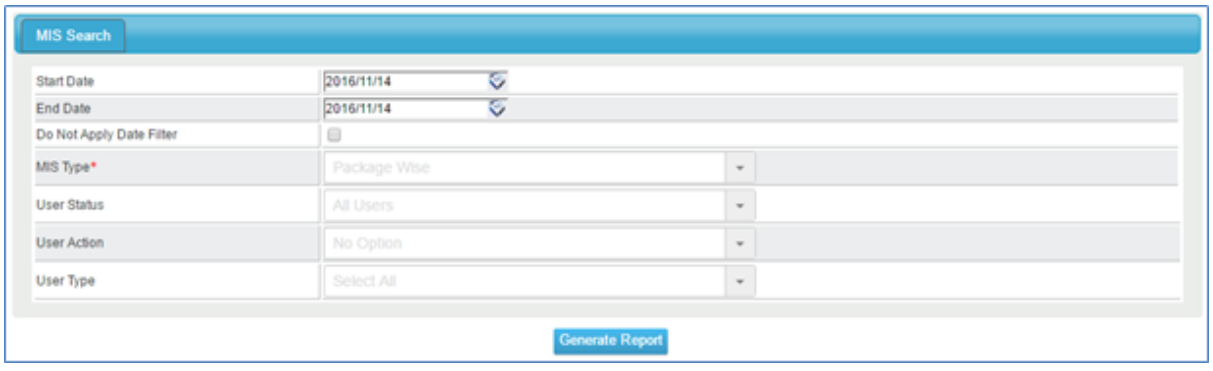

Figure: Type wise Report (1/2)

Type wise Reports

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Start Date	Select the starting date of report.
End Date	Select the end date of records
Do not apply date filter	Use the check-box to avoid the date range
MIS Type	Select the type of report you want to generate. Available options are: • User wise • Package wise • Zone wise • POP Wise • Pool wise
User Status	Include the status of user in the report. Available options are: • All Users • Active Users • Deactive Users • Acquisited Users • Archive Users • Suspended Users
User Action	Include the actions performed against users: • No Options • Registered Users • Renewed Users • Expired Users
User Type	Include the type of user. Available options are: • Administrator • User • Zone Manager • Zone Operator • Leased Line • Walk in User • Pop Manager • Manager • Operator • Social Media User

After specifying the criteria, click the '**Generate Report**' button

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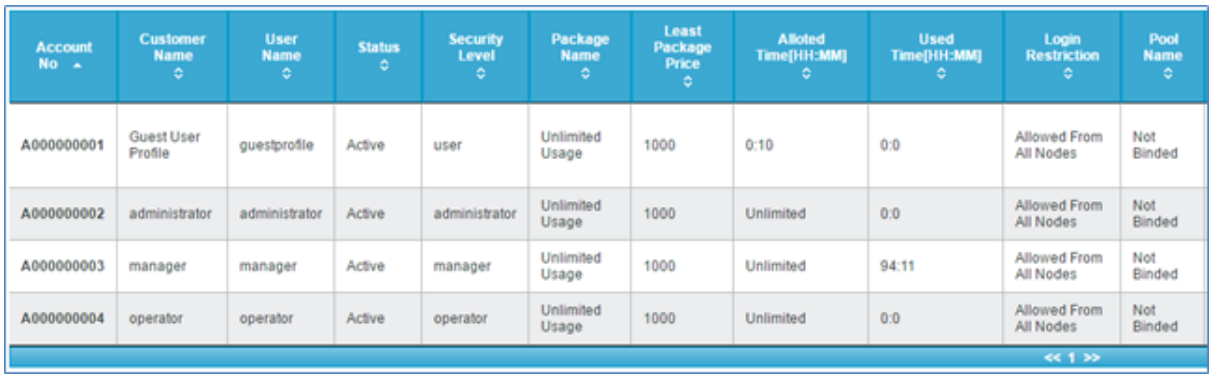

Account No	Customer Name	User Name	Status	Security Level	Package Name	Least Package Price	Alloted Time[HH:MM]	Used Time[HH:MM]	Login Restriction	Pool Name
A000000001	Guest User Profile	guestprofile	Active	user	Unlimited Usage	1000	0:10	0:0	Allowed From All Nodes	Not Binded
A000000002	administrator	administrator	Active	administrator	Unlimited Usage	1000	Unlimited	0:0	Allowed From All Nodes	Not Binded
A000000003	manager	manager	Active	manager	Unlimited Usage	1000	Unlimited	94:11	Allowed From All Nodes	Not Binded
A000000004	operator	operator	Active	operator	Unlimited Usage	1000	Unlimited	0:0	Allowed From All Nodes	Not Binded

<< 1 >>

Figure: Type User wise Report (2/2)

Type wise Reports (User Wise)	
Account No	Shows account number of the user
Customer name	Shows name of the customer in which the user has been added
Username	Shows list of users who have been renewed in the specified time duration
Status	Shows current status of each user in system
Security level	Shows entity level security defined for each user
Package name	Shows the name of the package attached with the user
Least package price	The amount of package attached with the user account
Allotted time	Shows allotted time defined for each user
Used time	Shows time used by user from the allotted time
Login Restriction	Displays login restrictions defined while adding user.
Pool name	Shows the name of the pool in which the user is attached
Bandwidth policy	Shows name of the policy attached in each package of users
Creation date	Shows date when the user was registered in the system
Renewal date	Shows date when the user has to renew his/her account
Expiry date	Shows date when the user account will expire

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Status change date	Shows the date of status change
Email	Shows the email address of users
Phone	Shows the contact number of users registered
Address	Shows the address of users
Address	Shows address of the user registered in the system
State	Shows name of the states in which users are residing
Zip	Shows area zip code against each user registered in the system

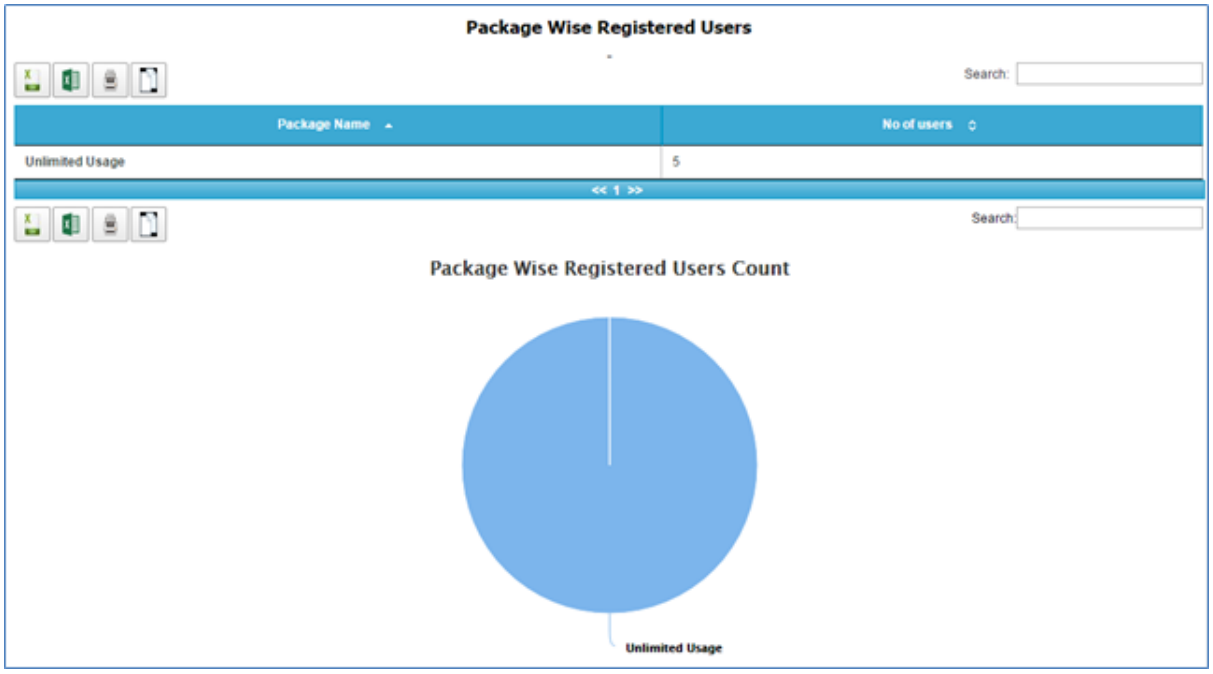

Figure: Type wise Report (Package Wise)

Type wise Reports (Package Wise Registered User)	
Package Name	Shows the name of packages
No of Users	Shows the number of users for the selected package

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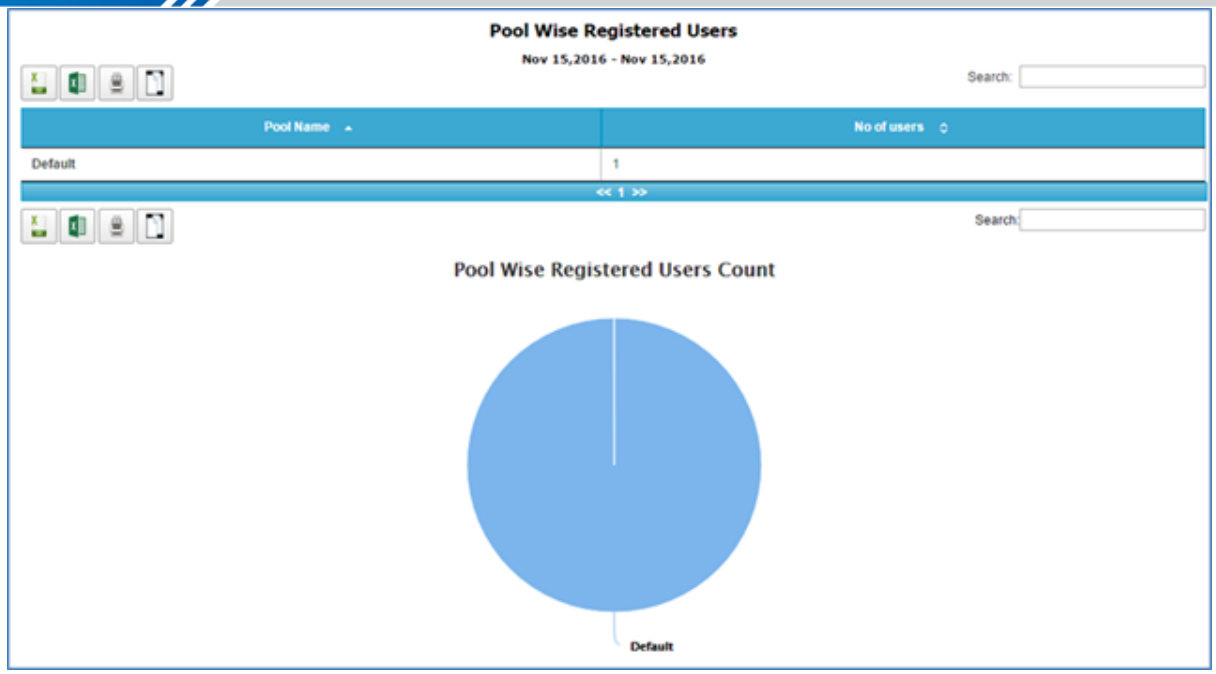

Figure: Type wise Report (Pool Wise)

Type wise Reports (Pool Wise Registered User)	
Pool Name	Shows the name of pool
No of Users	Shows the number of users for the selected package

Demographic Field Report

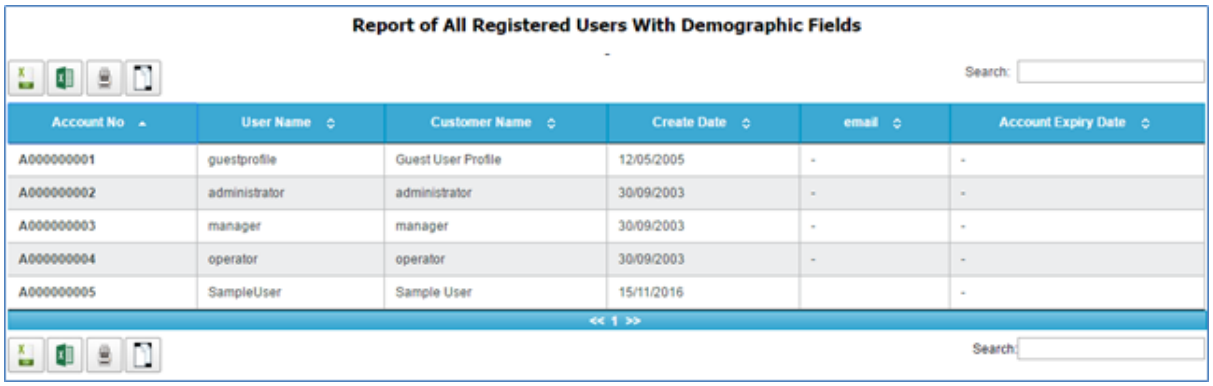

Figure: Demographic Field Reports

Reports of All Registered Users with Demographic Fields	
Account No	Shows account number of user
Username	Shows list of all expired users in the specified time duration

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Customer name	Shows name of the customer in which the user has been expired
Create Date	Shows date of user creation
E-mail	Shows email address of registered user
Account Expiry Date	Shows expiry date of registered user

Switchover FAP Usage

The report displays the FAP usage data of users after switchover.

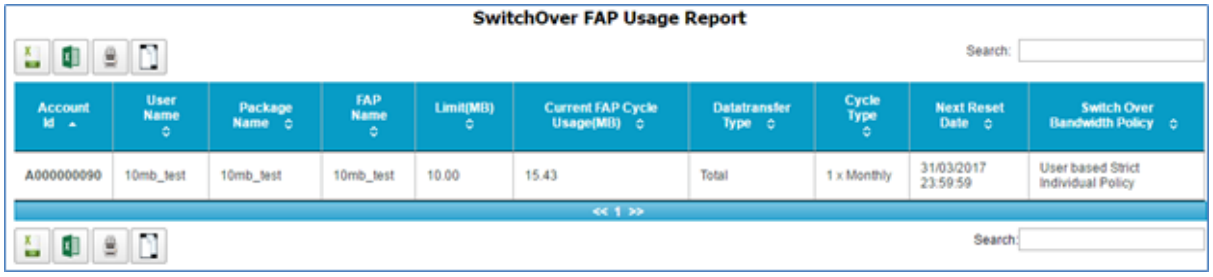

Figure: User wise Report - Demographic Fields Report

Switchover FAP Usage Report	
Account ID	Shows account number of user
Username	Shows the username of the user
Package Name	Displays the initial package from which FAP is switched
FAP Name	Displays the name of FAP package
Limit	Displays the limit of FAP usage in MB
Current FAP Cycle Usage	Displays the current usage under FAP cycle in MB
Data transfer Type	Displays the type of data transfer policy
Cycle Type	Displays the cycle type
Next Reset Date	Displays the next reset date of cycle
Switchover Bandwidth Policy	Displays the name of bandwidth policy associated with FAP

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Help

This section of the user guide includes necessary information about updating software, downloading latest version and useful documents in-order to use 24online efficiently.

Company Info

The company details show the complete information of the company to which the 24online solution has been registered

Company Information	
Company Name	24onlinetech
Contact Person*	Jason Smith
Address*	502 Silicon Tower
	Off CG Road
City*	Ahmedabad
State*	Gujrat
Country*	India
Zip*	380015
Phone*	9039304338
Email ID*	sales@24onlinetech.com
Fax	

Figure: Company Information

- Company name shows the name of the company to which the 24online software copy has been registered
- Contact person name shows is the company's personnel to whom the solution has been offered
- Address/city/state/zip/phone/email ID and Fax shows the company contact details
- You can define necessary terms and conditions in the terms and conditions box
- Click the '**Update**' button

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Upgrade 24online Version

24online team is constantly working on adding fresh features required to fulfil client's requirements. Apart from latest features and bug fixes, clients are informed of the latest version of 24online. This feature provides the facility to upload the upgraded version file in the system. Use the '**Upload Upgrade Version**' option to upgrade your 24online with latest version.

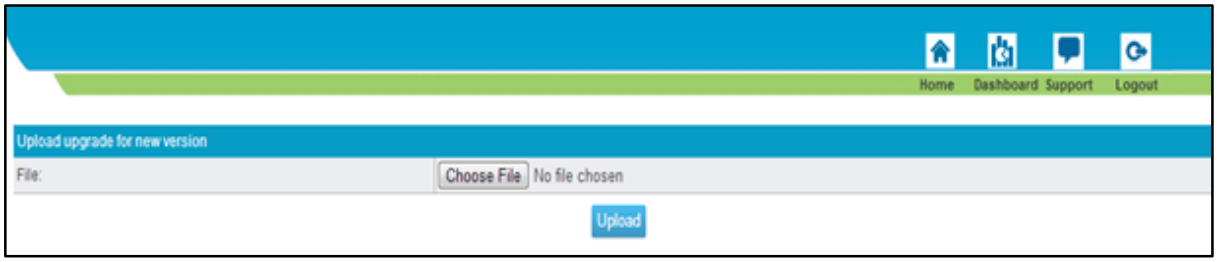

Figure: Upgrade 24online Version

- Click the 'Browse' option to select the upgrade 24online file from path you have saved it
- After selecting the file, click the upload button

Note: To download upgrade file of 24online, visit download.24onlinebilling.com

Register 24online

After purchasing 24online you need to fill in the registration form using online registration or manual registration as given in this feature. Please review the details given below, in order to understand the details of manual and online registration.

Online Registration

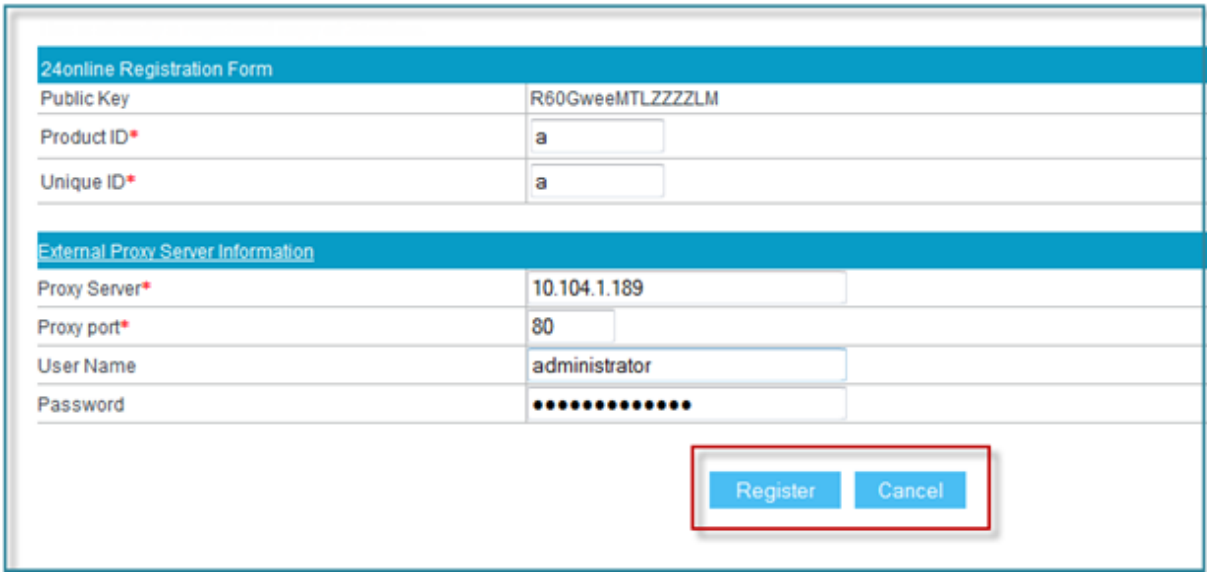

Figure: Online Registration

24online Registration Form

- Enter the public key in the text box. Public key uniquely identifies your installation machine to 24online

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- Specify the license key
- Specify the user license

External Proxy Server Information

- Enter the HTTP proxy server setting (name or IP address) to connect to 24online registration server
- Enter the Port details using which proxy server runs if different than default port (80)
- Enter the username with which to log on to proxy server (if configured)
- Provide Password (if configured)

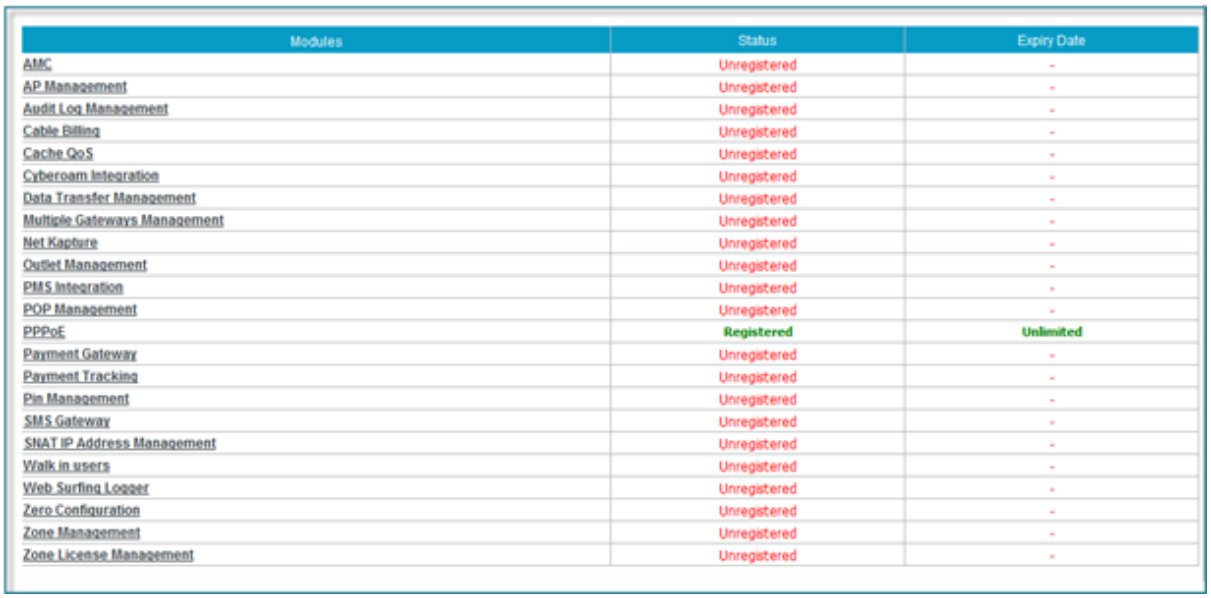
After specifying all details, click the '**Register**' button to save details and register your copy of 24online.

Note: You will require access to Internet before filling the online registration form

Module License

There are several additional features that can be added to the basic version of 24online as per the requirement of the client. These additional features are named as modules and customers have to procure different license for enabling any of these add on modules. These modules are not the part of the basic 24online version.

With the help instructions given below, you can view the list of registered and unregistered modules as well as expiry date of the module, if registered.



Modules	Status	Expiry Date
AMC	Unregistered	-
AP Management	Unregistered	-
Audit Log Management	Unregistered	-
Cable Billing	Unregistered	-
Cache QoS	Unregistered	-
Cyberoam Integration	Unregistered	-
Data Transfer Management	Unregistered	-
Multiple Gateways Management	Unregistered	-
Net Kapture	Unregistered	-
Outlet Management	Unregistered	-
PMS Integration	Unregistered	-
POP Management	Unregistered	-
PPPoE	Registered	Unlimited
Payment Gateway	Unregistered	-
Payment Tracking	Unregistered	-
Pin Management	Unregistered	-
SMS Gateway	Unregistered	-
SNAT IP Address Management	Unregistered	-
Walk in users	Unregistered	-
Web Surfing Logger	Unregistered	-
Zero Configuration	Unregistered	-
Zone Management	Unregistered	-
Zone License Management	Unregistered	-

Figure: Module License Registration

- The modules list displays registered and unregistered modules in the system
- The status column displays the status of each module in the list
  - Unregistered status shows that the module is not registered
  - Registered status shows that the module can be registered
- The expiry date shows the date and time when the module will expire
- To register any of the module, click on the name of the module and enter the necessary details as explained below:

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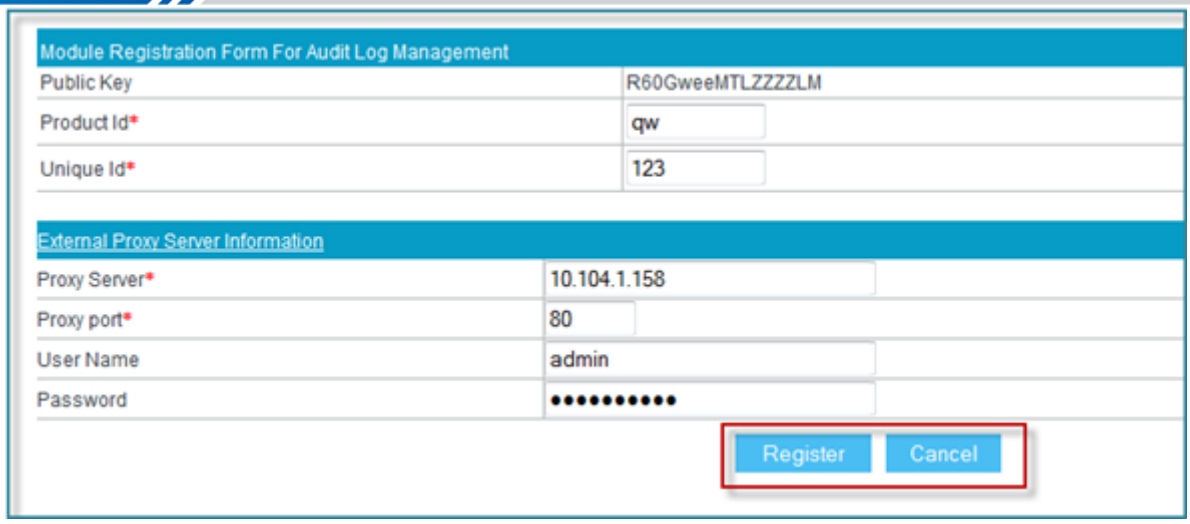

Figure: Module License Registration

Module Registration Form for <Module-Name>

- Enter the public key in the text box. Public key uniquely identifies your installation machine to 24online

External Proxy Server Information

- Enter the HTTP proxy server setting (name or IP address) to connect to 24online registration server
- Enter the Port details using which proxy server runs if different than default port (80)
- Enter the username with which to log on to proxy server (if configured)
- Provide Password (if configured)

After specifying all details, click the '**Registe**r' button to save details and register your copy of 24online. You can register all/required modules by following the same process

Manage Customization

24online provides option to enable some features that are useful for some of consumers with specific needs. These features were earlier available only through 24online support as incorrect configuration may lead to system down or data loss. It is recommended to enable/disable the features in expert supervision or with 24online's help.

Figure: Manage Customization

- Select Yes/No for each feature to enable/disable respectively.
- Click on the 'Update' button
- System will give warning message to avoid accidental update.
- Select 'Yes' to apply customization.

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The available customizations are:

Enable VLAN Support

The customization enables/disables the VLAN support for 24online. While disabling the support, it is necessary that no VLAN pools are present in system.

Authenticate user from ADS server

The customization fetches the user information from ADS server. For this customization, it is necessary that no user is live in system.

HTTP MAC Flow

If the access request from client should also fetch MAC address, the flow is required. For this customization, no live users should be present in system.

MAC Based Dynamic Users

The flow is required for 24online to act as hotspot. It allows self-registration using end-user's MAC address. For this customization, no MAC based pools should be present in system.

Redirection URL

The IP address or domain name will be redirected to the URL set here. Here the internal URL is set i.e. address after the domain name/IP address.

Documentation

With the help of this option you can download latest version of documents of 24online. Different versions of 24online contain different documentation, so keep the latest version upgraded in your solution to experience latest features and functions of 24online. The link redirects you to 24online's website page.

Select the type document from the list to download.

About

With the help this feature, 24online user can check which version of 24online is installed, and determine the Product ID and User license copy. Following information can also be availed by selecting the 24online icon at the top right hand-side corner of the page.

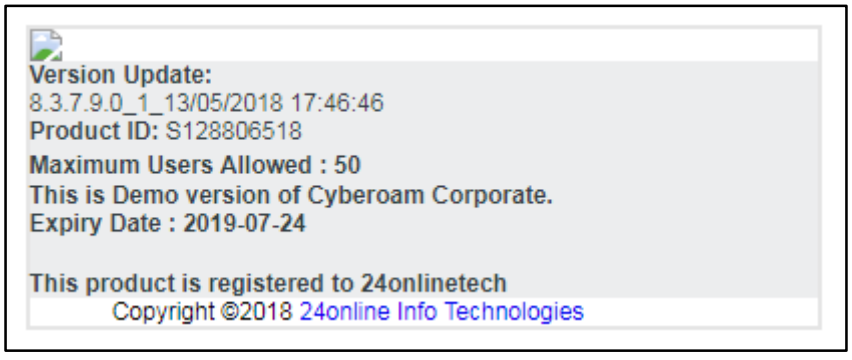

Figure: About

About 24online

***Audit Log**

Who snooped in? When? What time? For how long? Was the person authenticated?? Now keep aside the entire headache as, 24online offers an advanced feature Audit Log.

Audit Log is dedicated to store all the actions performed by the user administrating 24online. With the help of this feature you can search transactions or actions like create, manage, edit or delete actions performed in the specified time period and search actions as required. It gives complete details on all the actions performed and actions performed by, with IP address from where the action has been taken and action time. As this feature provides time and duration of action performed, it helps in tracking any unsecured login in admin GUI resulting into data loss.

***Data Transfer**

24online offers Data Transfer module by which admin can create different data transfer plans for their customers. Service provider can provide prepaid and postpaid plans based on upload and download data transfer. With the help of this module, admin can also define data transfer policies that can be used to restrict users from uploading or downloading high amount of data. With data transfer policy one can set conditions and allot data limits. User is allotted number of data transfer for browsing internet and user remains in active state till the limit of data transfer exhausts.

***Multiple Gateway Management**

24online provides security over multiple ISP links using a single appliance. It restricts high consumption of bandwidth and network congestion as well as makes optimum use of low cost links. In-case of link failover it automatically shifts traffic from a failed link to a working link, ensuring continual quality service for premium service.

***PPPoE Module**

PPPoE is a specification which allows users to connect Ethernet to the Internet through a common broadband medium, such as a single Digital Subscriber Line (DSL) line, wireless device or cable modem. PPPoE allows service providers to use their existing Radius authentication systems from their Dial-Up service on a Broadband / Ethernet based service. The PPPoE standard helps access providers manage their broadband service delivery, and it can also improve the ease of use for DSL and cable modem customers.

***Payment Gateway**

24online is integrated with secured and highly available payment gateways in the market, which allows you to easily avail online payments for packages and provide registration/renewal service to your customers. All you need to feed in the necessary details and you can accept real time payments from customers using credit cards, visa cards, debit cards etc.

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***Payment Tracker**

24online is now embedded with an additional accounting feature to manage customer payment details, named as Payment Tracker. It allows service providers to re-evaluate, generate and manage complete payment history of customers as well as detailed accounting status of receivables and payables. Avail facility to reverse-transaction with this module. Service providers can now easily feed in details of payments received from different modes, like cheque, cash, credit cards etc. Reports provides detailed information and complete history of the customer and user payments, zone collection, pop collection, credit and debit note etc. Thus, instead of using variety of accounting software for calculating customer payments, now service providers can avail an all-round solution for accounting along with invoice generation and apt reporting tool.

***PIN Management**

24online solution offers prepaid pin module which enables online registration of customer and renewal of customers accounts. Voucher offers instant access to users just by entering the login credentials like username & password (configurable). For “on-the-go” customers, pre-paid pins can be generated for various denominations, based on time, days and usage. With an inbuilt payment gateway, 24online also offers easy credit card payment option to end users. This module is highly beneficial for hoteliers, hotspots, and cybercafés for providing immediate access of Internet to customers.

***Walk-in Pins**

24online solution offers walk-in pin module which offers instant access to Internet without any customer registration or renewal. Customer avails instant access to Internet using this prepaid pin and password. Internet access would be credited as defined in the package. Customized templates can be prepared for printing these coupons.

***Web-Services Interface**

Web Service is a self containing, self describing modular application that can be published, located and invoked across the web. With the help of this feature, business functions can be made universally available using Internet. This allows the applications to interoperate in a loosely coupled environment, discovering and connecting dynamically to the services. This feature is executed using general APIs that can be easily accessed over Internet. Web service offers list of options using which administrator can send the action request and perform the functions on 24online server via Internet. This feature is highly beneficial for hoteliers, hotspots, cybercafés, ISPs, conference hall etc.

***Franchisee/ Zone Management**

Offers multiple options to generate and manage franchisee management operations. With franchisee management one can avail single user access for franchisee service as administrator. Management and detailed system MIS reports available. Service providers are free to send alerts to subscribers using 24online messaging options, for their usage and renewals on continuous basis.

***SNAT Management**

24online SNAT Management helps in source natting of IP addresses. With the help of this module admin can perform different actions like NAT to Single IP, NAT to Internet Public IP (Live IP) and drive

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local traffic to Internet. SNAT module is available with demanding features beneficial for hoteliers, ISP, café etc.

***SMS Gateway**

Now mobile phones can be used to exchange business information swiftly and in secured way. 24online offers advanced feature which can be configured to send Internet username & password directly to the guests or users on their mobile number. You can also maintain the SMS authentication process using this feature.

***Web Surfing Logger**

24online offers an advanced feature, Websurfing Log, using which you can maintain the track of websites and applications surfed by guests or users. Complete reporting of the surfing details of the users can be availed in different printable and graphical formats. This helps in ensuring the security of the network as well as in maintaining the network performance and productivity.

***NetKapture**

24online has come up with an advanced feature which acts as 'watchman' of the network, taking care of each and every protocol request sent and received by the network. The benefit of this feature is that it can easily trace all the logs and admin can generate different types of reports using this feature. It's an ideal feature which is highly in-demand for hospitality and ISP clients.

***High-Availability (Active-Passive)**

24online offers high availability – active passive by using virtual MAC address shared between the primary appliance and secondary appliance linked together. When 24online appliance is configured in Active-Passive mode, the primary appliance is responsible for forwarding the entire traffic requests and the secondary appliance is responsible for acting as an auxiliary machine which readily operates as the primary appliance as and when the primary appliance or any of the monitored links fail. Primary appliance automatically takes over the secondary appliance once it starts functioning.

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