USER MANUAL
Of
XBand

Created By
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INTRODUCTION

The world has etched a dramatic growth, vertically, horizontally, and technologically too. The technological arena has been bursting of wonders and wonderings. Internet has emerged as the vein stream of business life-cycle.

The inauguration of X-band echoes like a rumble in the technology sector. It provides a mechanism which allows users on a closed network to gain rights to use network services as defined in the profile created for the particular user. It authenticates and empowers the users with a unique user ID and administrator. It also formulates the bandwidth control. This module basically features on controlling the bandwidth requirements of the Network/Users. X-band also restricts the traffic on the basis of URLs, Source & Destination Port, etc.

FEATURES

Xband provides following exclusive features
- Authentication. Authorization and Accounting Gateway
- Bandwidth Control
- Network Security
- Network Connectivity
- Interface for Users
- Accounting
- Messaging and Brand Image
- Network Trouble Shooting and Monitoring Wizard
- Package Management
- User Data Backup and Restore facility
- Local Support/Entertainment Portal
- Migration tool for 24 online subscribers
- System Services Modules
- User Management
- Search Module
- Prioritization Module
- Extensive reporting (Graph and Tabular)
- Modular Integration and facility to hold plug-ins

HARDWARE REQUIREMENT

- Intel Pentium P-III Processor 700 MHZ or P-4 1.5 GHZ or higher
- Intel Server Range Motherboard with on board SCSI Adapter of
- ADAPTEC or SYMBIOS
- 1.5 GB RAM
- 18 GB SCSI Hard Disk
- 2 Intel Ether Express 100 Pro Network Cards

LOGIN TO THE X-BAND ADMIN AREA

Open the Admin Area in your Browser. Type the internal IP address of the X-Band server to access the Admin area http://IP_ADDRESS/admin/

1.   Enter the username, password and select the user type then click the login button.

INTERMEDIATE SCREEN

Purpose: It shows the details of all the online subscribers

Procedure:
1. After login, list of all the subscribers comes
2. To view the details of the any subscriber click on the details link. This will show the session details of particular user which includes login and logout time, IP and MAC address and received and transferred data unit

Subscriber Search View

Search Results

You have Searched For :ksn

[Update] [Delete]　　　Subscriber is Currently Online

Bandwidth
Upload Bandwidth:128 kbps
Download Bandwidth:128 kbps
Upload Burst:128 kbps,
Download Burst:128 kbps

Authentication
password
username

Accounting
Package Type : Pre Paid
Payment Mode : chaque
Limit : 24 Days
Total : 0Hrs.Remaining : 0Hrs.

Session Details

S.No.	Login Time	Logout Time	IP	MAC	Rx	Tx

Services
✔ HTTP
✔ IMAP
✔ MSN1
✔ POP3
✔ SMTP
✔ SSH
✔ TELNET

Click on the subscriber's link to open the page.

SUBSCRIBERS

Create Subscriber
Purpose: To create new subscriber of particular service area

Procedure:
1. Click on the create subscriber link to open the form.
2. Enter all the details in the given form, as all the fields are mandatory.
3. Click on the submit button to save the information.
4. Click on the reset button to clear the form, so that new entries can be entered.

MANAGE SUBSCRIBER

Purpose: To update or view the subscribers details.

Procedure:
1. To view or update enter the details of the particular subscriber and click on the submit button. This will open up the page corresponding to details entered.

To view the session details click on the view link, this will give the session details, as below .

Administrator can update the details by clicking the update button, and can delete the whole details.

SERVICES

Manage services

Purpose: There are various services available to us ie. DHCP, Proxy, DNS server, MyXband, network server
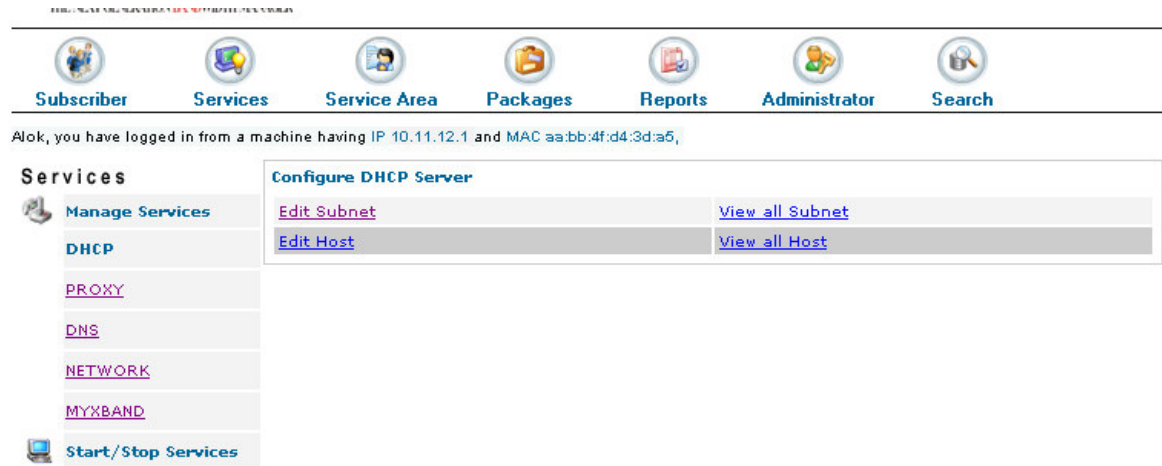
Procedure:
To manage all services this link is provided.As soon as the user clicks the manage services link sublinks appears for each of the services.

1. DHCP: when this link is chosen following page appears, where more links are provided in order to edit subnet mask, edit host, view subnet mask, view host.
2. DNS
3. PROXY
4. MYXBAND
5. NETWORK

START/STOP OF SERVICES

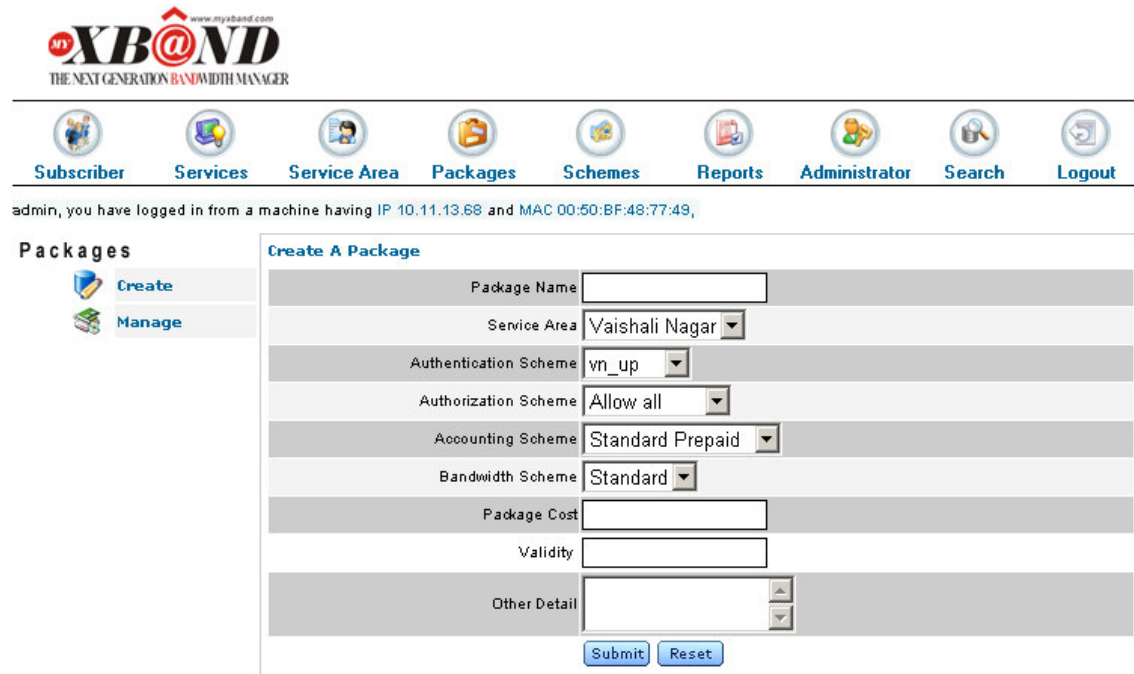Purpose: This is to start and stop of the services

Procedure:
1. Click the start/stop services to open.
2. Click the respective button for each service.

Service Area

PACKAGE

Create Package
Purpose: To create new package, this includes authentication scheme, authorization scheme, accounting scheme, bandwidth scheme.

Procedure:
1. Click create to open the create package form
2. Fill all the details.

3. Submit the form to create and view the package.

SCHEMES

Authentication Scheme
Purpose: To authenticate the user according to different criteria

Procedure:
1. Click the manage link under the authentication scheme
2. Name is given to every scheme
3. Click add button to submit the details.
4. After that u can view authentication scheme page by submitting the form or by clicking the view link below the manage link.

Click the update button to update the details. It returns back to the Manage Authentication Scheme page

AUTHORIZATION SCHEME

Create Authorization Scheme

Purpose: To create the authorization scheme for any service area, click on the create link of the authorization scheme. By doing this the user will get the page like the one shown below:

Procedure:

1. The page shown above needs the details filled by the user, such as service area name and authorization scheme name.

2. Apart from a number of various services are provided in the authorization scheme such as HTTP, TELNET, POP3 and others as specified in the form above. The user has to select the services for any authorization scheme by clicking the check box.

3. In order to select all the services click the check box named as 'All'

4. Click the submit button to save the details.

5. View page appears after the details are submitted.

Click the update button to update the details; this will again open up the Create Authorization Scheme page, with all the details filled initially.

MANAGE AUTHORIZATION SCHEME

Purpose: To manage the all the authorization scheme which are created for all the service areas.

Procedure:
This window shows the list of all the created authorization schemes.
By clicking the view link, the details of the related scheme is displayed on the view page
From there updation can be done by clicking update button

ACCOUNTING SCHEME

Create Accounting Scheme

Purpose: To create the particular accounting scheme for a service area that includes, type of payment, mode of payment, schedules, expiry time.

Procedure:
1. Click the create link of accounting scheme to open the form.
2. Select the service area name and enter the accounting scheme name
3. Select the type of payment prepaid or postpaid
4. Select the schedules from the given criteria.
5. Specify the details related to duration of prepaid limit in hours and expiry time in days
6. Choose the mode of payment.
7. Select the no. of hours subscribe to the particular service area.
8. Click the submit button to save the details, which will open the Accounting Scheme View page
   .

Click the update button to update the details, it will open the create accounting page, with all the details filled initially.

MANAGE ACCOUNTING SCHEME

Purpose: To manage the all the accounting scheme which are created for all the service areas.

Procedure:

This window shows the list of all the created accounting schemes.
By clicking the view link, the details of the related scheme is displayed on the view page
From there updation can be done by clicking update button

BANDWIDTH SCHEME

Create accounting scheme
Purpose: To create the bandwidth scheme for a service area

Procedure:
1. Click the create link of bandwidth scheme to open the form
2. select the service area and enter the bandwidth scheme name
3. Select the bandwidth type
    a. Dedicated : keeping the isolated bandwidth for that service area
    b. Dedicated with burst:
    c. Shared: single bandwidth can be shared among various service areas.
4. Enter the upload and download bandwidth values specified to that area.
5. Click the submit button to save the details.
6. After submitting the details bandwidth scheme view page appears.

Click the update button to update the details, it will open the create bandwidth scheme page, with all the details filled initially.

MANAGE BANDWIDTH SCHEME

Purpose: To manage the all the Bandwidth scheme which are created for all the service areas.

Procedure:

This window shows the list of all the created bandwidth schemes.

By clicking the view link, the details of the related scheme is displayed on the view page
From there updation can be done by clicking update button

REPORTS:

Purpose: Reports option or link is there so that whenver administrator can view the information regarding the online users, TCP traffic, UDP traffic. So Therefore when the administrator will click on the report link, three links will be seen.

1. Online users
2. TCP session
3. UDP session

ONLINE SUBSCRIBER:

Purpose: To view the list of all the users of a service area who are online at that time. The report will generate as follows.

Procedure:

The above page consists of list of all the users who are online for a particular service area. Further in this page one can see the details link for each user. In order to view the details of any of the users in the above link, one has to just click on the '**Details'** link provided for each of the listed user. As the user click on Details of any of the user, following page is displayed.
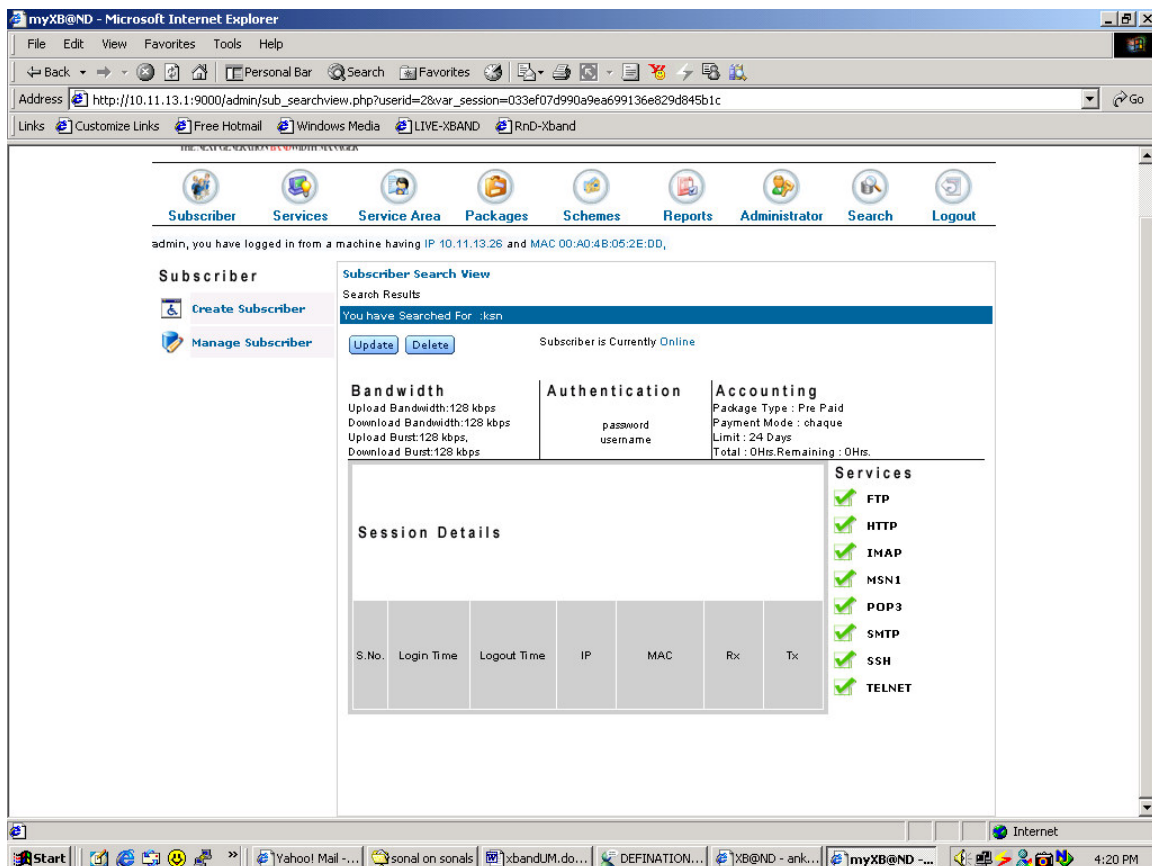
Further the above page the details of the selected user can manipulated and updated. For this links are provided here for deleting and updating the user details.

If the update link is checked then **Subscriber Manage Edit Profile** page will be retrieved, like the one shown below. From here we can update the user's complete profile.
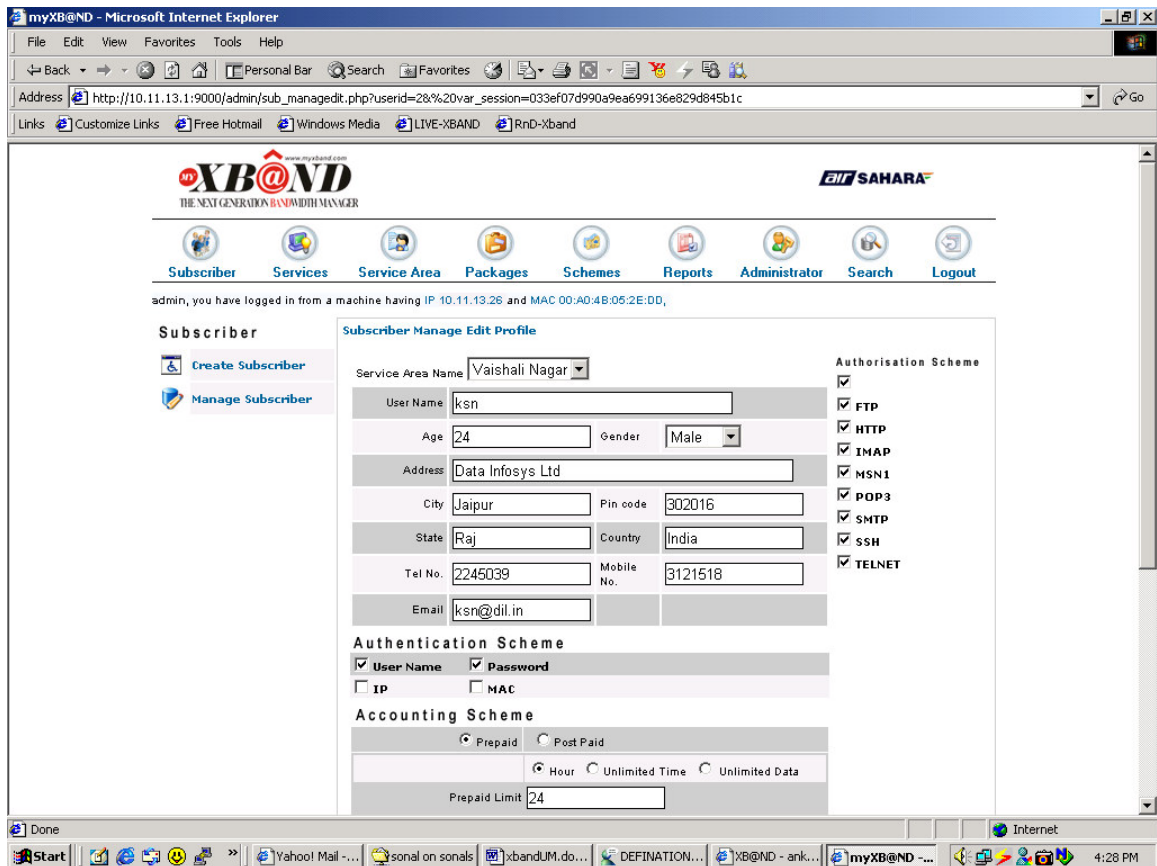
TCP Session:
Purpose: To view the TCP session related information

Procedure:
Click on the TCP session link provided in reports link domain. We will get the page as shown i.e. **Current TCP Session**

This page will show the connection status, source IP , destination IP, source port , destination port of the packets traveling through the TCP traffic.

UDP Session:
Purpose: To view the UDP session related information

Procedure:
Click on the UDP session link provided in reports link domain. We will get the page as shown i.e. **Current UDP Session:**

This page will show the connection status, source IP , destination IP, source port , destination port of the packets traveling through the UDP traffic. Also This report will specify if the packets are replied or unreplied.

ADMINISTRATOR

Authentication

Purpose: To change the password of the administrator.

Procedure:

1. Enter your administrator old password
2. Enter the new password and retype it
3. Click the submit button to save the details.

Network Connection Diagram
Diagram to Give LIVE IPs to clients

Internet

External Lan Card Connected
towards Router & Internet
Live IP 202.2.2.3
Netmask: 255.255.255.248
Ethernet 2

Client Machine - 2
Live IP: 202.2.2.34
Netmask: 255.255.255.224
Gateway : 202.2.2.33
DNS: 202.2.2.33

24online server

HUB/Switch

Client Machine -1
IP:172.16.0.2
Netmask: 255.255.0.0
Gateway: 172.16.0.1
DNS: 172.16.0.1

Router
Live IP: 202.2.2.2
Subnet: 255.255.255.248

HUB/Switch

Ethernet -1
Internal Lan Card connected towards
Client Machines
IP Address : 172.16.0.1/255.255.0.0
Alias Binded on Ethernet -1
IP Address: 202.2.2.33
netmask : 255.255.255.224

Steps to Assign Public Live IP address to clients
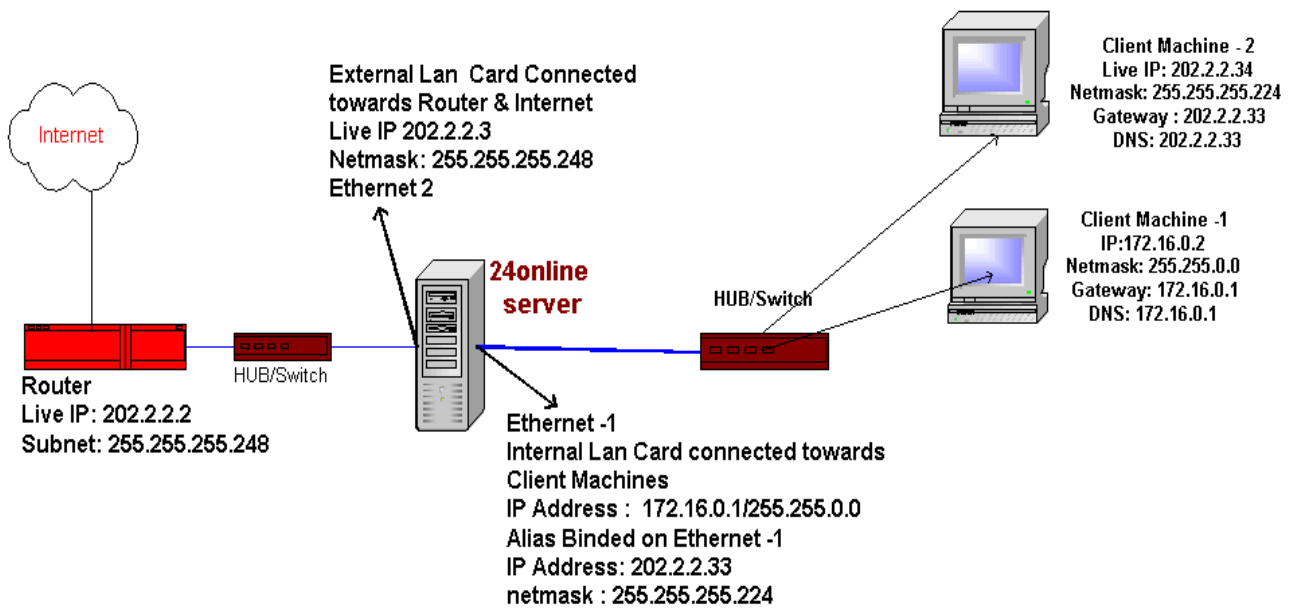
1. Get a seperate pool of IPs from ISP witth different class /subnet. This pool of IPs should be differnet that assigned to router and 24online external Card.

2.For example Pool taken from ISP to give to clients: 202.2.2.32/255.255.255.240

3. Bind one Alias IP from that pool to Internal LAN Card of 24online Server (Ethernet -1). For example bind Alias IP 202.2.2.33 to Ethernet -1

4. Need to set route in Router to route these class of IPs towards 24online server
5. Set route in Router to forward the above pool 202.2.2.32/255.255.255.224 to Ethernet -2 Ip address of 24online server (towards 202.2.2.3)

6. Give clients IP Addresses starting from 202.2.2.34 with netmask 255.255.255.224 and also define this pool in 24online Node Management GUI and mark it LIVE.