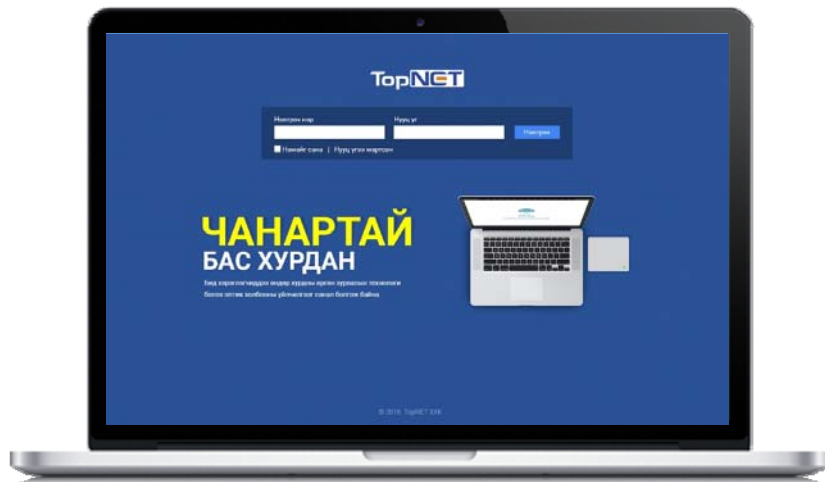




BILLING SYSTEM FOR INTERNET SERVICE PROVIDERS USING MIKROTIK DEVICES

INTERNET BILLING SYSTEM



This Internet Billing System is specially made for Internet Service Providers (ISP). The system runs on MIKROTIK ROUTERS only and is used for managing PRE-PAID customers.

Highlights include creating multiple user/admin accounts, Dynamic Access Levels for users, assigning customers into service plans for easier set up, receiving reports, activating or deactivating service plans remotely and automatically.

Our mission



Our goal is to create a flexible, easy to use, automated billing system for ISPs using MIKROTIK ROUTERBOARDS to manage pre-paid customers. The system has successfully been tested and implemented by an ISP in Mongolia.

Who uses the system?

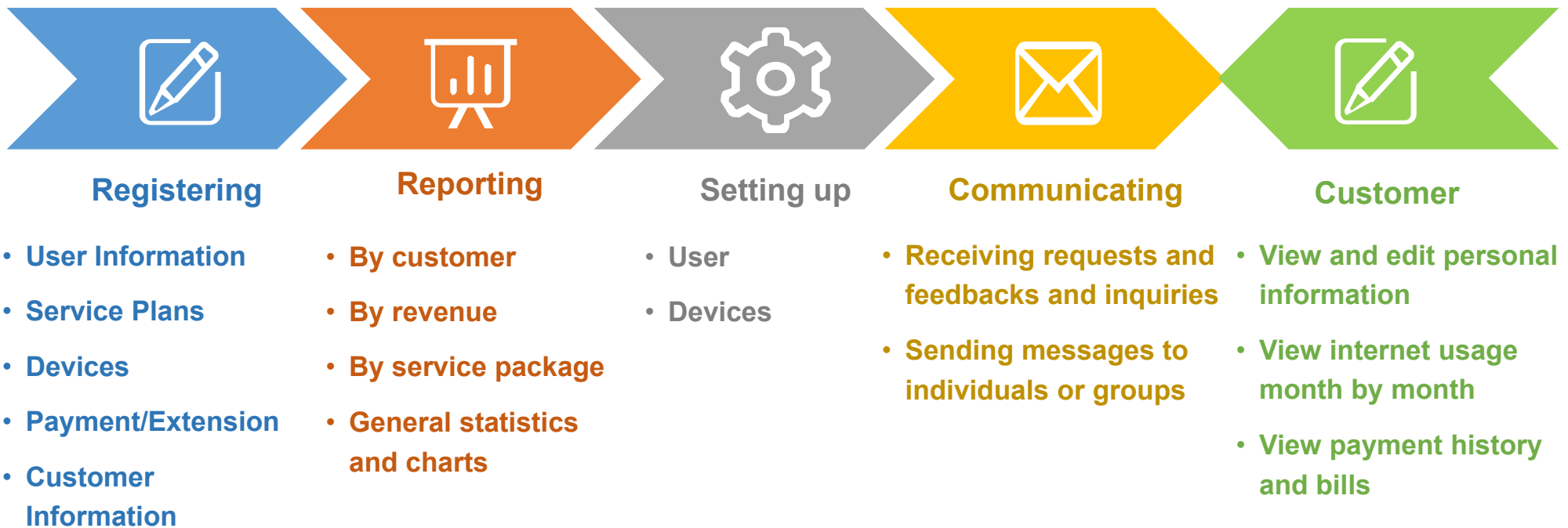


User: Internet Service Providers (ISPs)



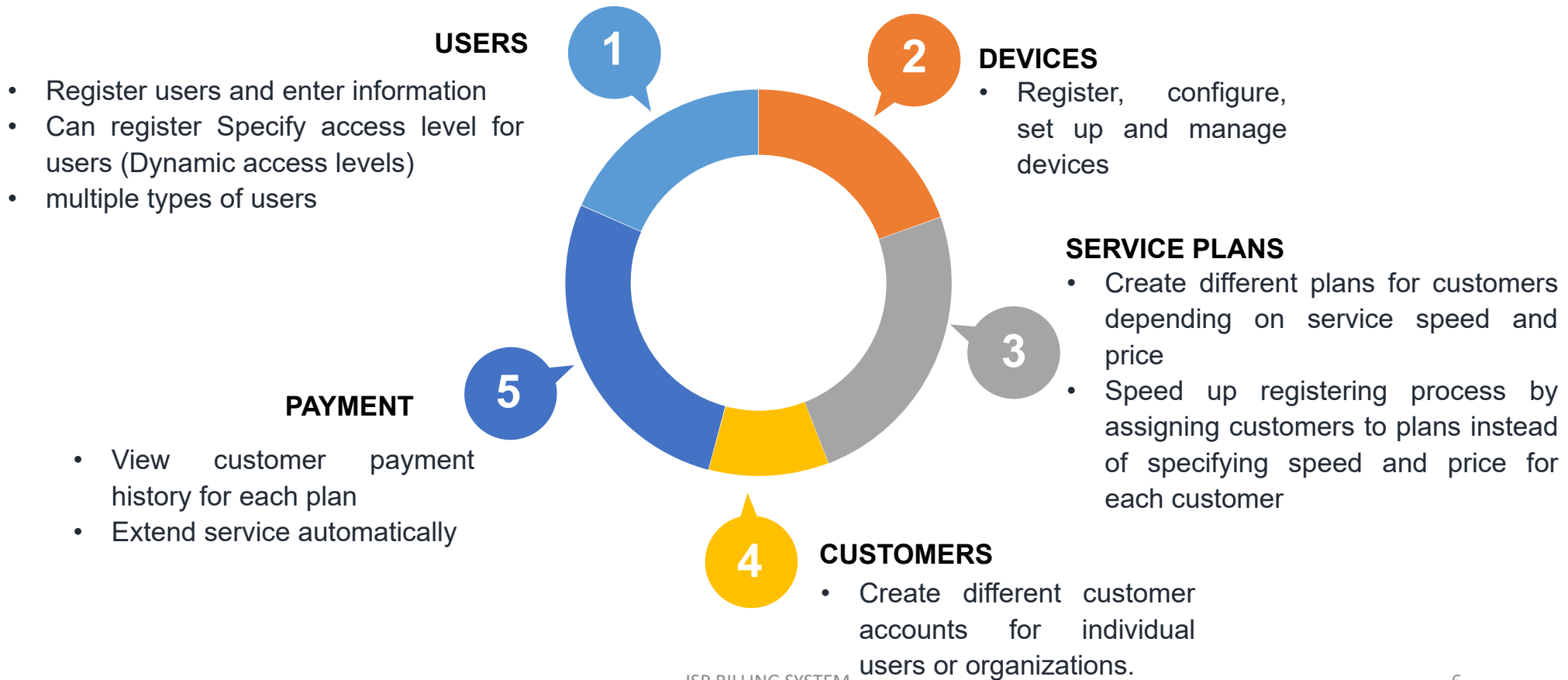
Customers: End-users

1. SYSTEM MAIN PROCESS



REGISTERING

Creating, editing, deleting and managing accounts for everybody involved. Available for view and print.



REPORTING

Filtered or comprehensive account information and lists are available for printing and converting to other formats



REVENUE REPORT

View customer payment history, bills and others

Filter by payment method, date, customer type

Convert data to Excel file



CUSTOMER REPORT

Categorize and view by customer type (individual or organization), service package, status, devices registered on.

Convert data to Excel file



SERVICE PLAN REPORT

Create and monitor different service plans

Extend service by days or for free

View extension history

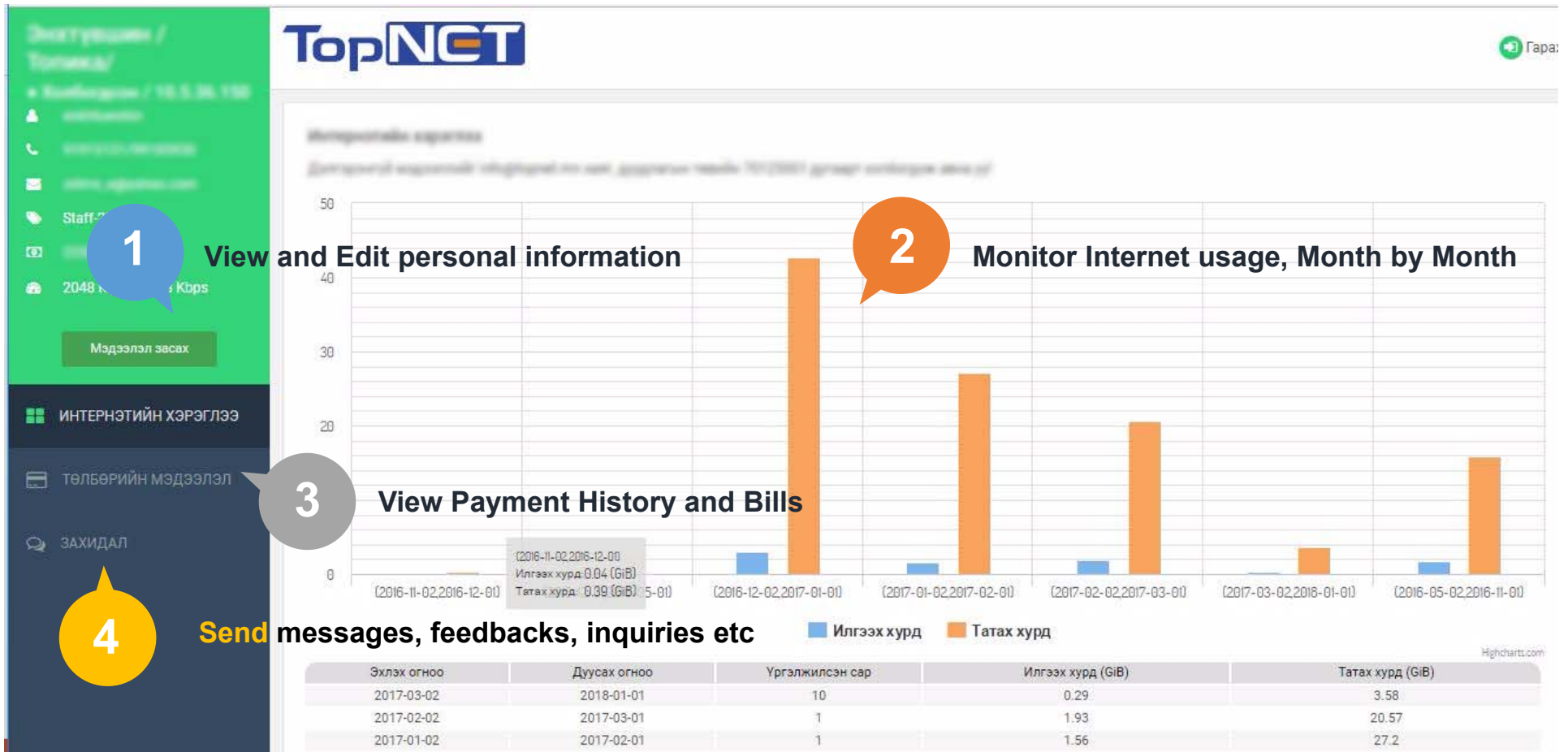
Print and convert to Excel file

SETTING UP

Configuration options are available for all registrations, accounts and lists

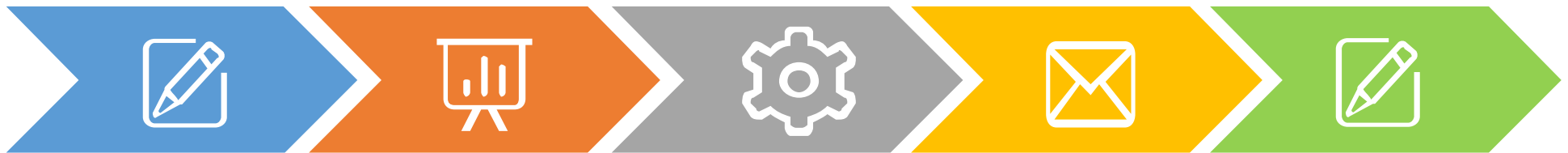


CUSTOMERS



2. CONNECTION

How to connect to MIKROTIK ROUTERS?



Getting ready to connect the Billing system and MIKROTIK devices:
Billing system and MIKROTIK devices are all on same network.

Create an API user on device

Activate API controller port on device

On Billing system:
Choose interfaces available for hotspot

Create service plans and add users

3. SYSTEM MENU



The billing system menu offers following options:

- Network and Device manager
- Payment information
- Service package
- Extension
- Customer manager
- Message
- Bank account information
- Banner
- User manager
- Set up

DASHBOARD

Statistics and Charts on front page



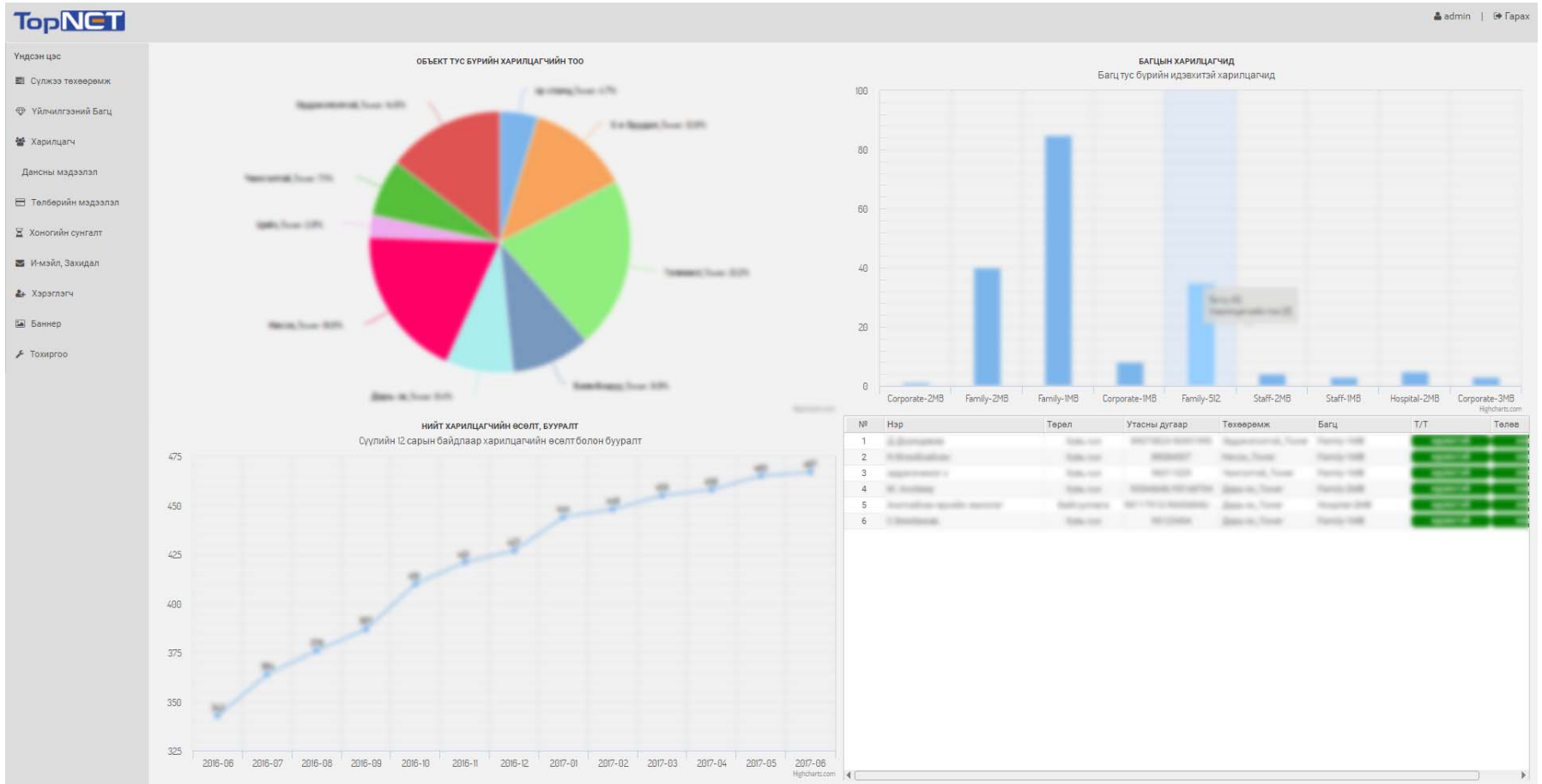
Number of customers registered on each equipment

Monthly changes in number of customers

Number of active customers in each service package

Daily list of expired customer accounts, pending and non-paid bills

DASHBOARD



NETWORK AND DEVICE MANAGER

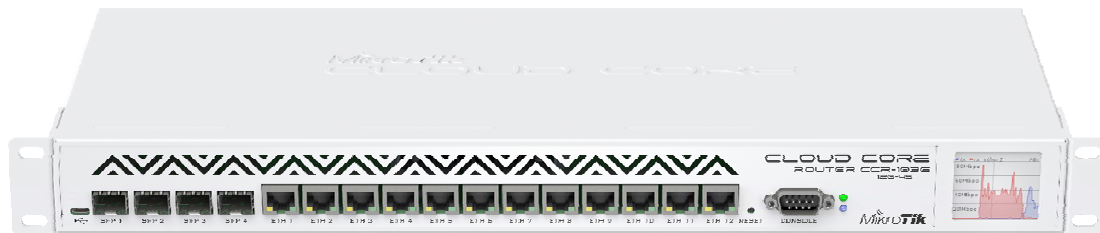
Connects user automatically to each MIKROTIK ROUTES, allowing remote control.

Can also report router status.

Current version:

MIKROTIK ROUTEROS Version: V6.33

ISP Billing System Version: 1.0.1



ISP BILLING SYSTEM

NETWORK AND DEVICE MANAGER

The screenshot displays the TopNET Network and Device Manager interface. The top header includes the logo and user information (admin | Гаргах). A sidebar on the left lists navigation options: Сулжээ төхөөрөмж, Үйлчилгээний Багц, Харилцагч, Дансны мэдээлэл, Төлбөрийн мэдээлэл, Хоногийн сунгалт, И-мэйл, Захидал, Хэрэглэгч, Баннер, and Тохиргоо. The main content area features a table with columns: №, Нэр, IP Хаяг, Нэвтрэх нэр, Нууц үг, Төлөв, Үүсгэсэн огноо, and Тайлбар. The table contains 8 rows of data, all with a green status indicator. Below the table are buttons for adding, refreshing, deleting, and updating records. A message at the top of the table states: "Бүлэглэх баганаа энд зөвж авчирна уу."

№	Нэр	IP Хаяг	Нэвтрэх нэр	Нууц үг	Төлөв	Үүсгэсэн огноо	Тайлбар
1	192.168.1.1	192.168.1.1	admin	admin	Online	2023-09-01	
2	192.168.1.2	192.168.1.2	admin	admin	Online	2023-09-01	
3	192.168.1.3	192.168.1.3	admin	admin	Online	2023-09-01	
4	192.168.1.4	192.168.1.4	admin	admin	Online	2023-09-01	
5	192.168.1.5	192.168.1.5	admin	admin	Online	2023-09-01	
6	192.168.1.6	192.168.1.6	admin	admin	Online	2023-09-01	
7	192.168.1.7	192.168.1.7	admin	admin	Online	2023-09-01	
8	192.168.1.8	192.168.1.8	admin	admin	Online	2023-09-01	

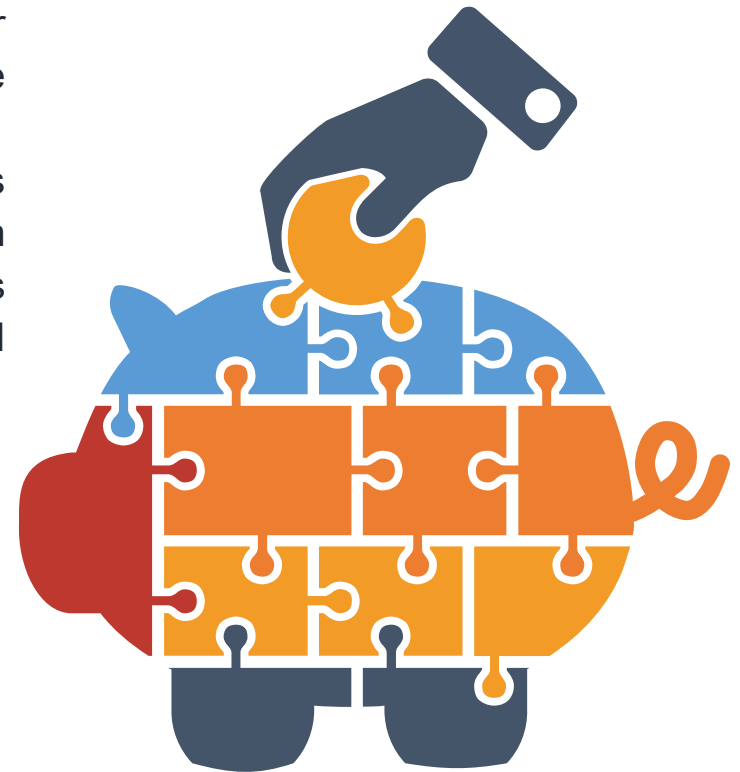
PAYMENT INFORMATION

Allows user to manage customer bills and payments to automatically activate and deactivate service. Contains data on revenue and customer status.

This menu includes options allowing users to manage customer payments and automatically activate or deactivate their service plans.

Payment information include customers' payment method, bills due, historical data on payment dates, dates of service activation or deactivation, associated MIKROTIK DEVICES and users responsible. Users can also filter by the above categories and print or convert lists into other formats.

- ✓ Record Revenue
- ✓ Automatically activate service plan after confirming payment
- ✓ Monitor revenue and service plan performance



EXTENSION

Extend service by days



Allows user to extend service not by a month, but by any number of days.

- ✓ It can be used for offering trials or rewards to customers free of charge. Any service package can be extended by days if necessary.
- ✓ Management and control is made easier by a comprehensive list of all extensions made in days. Users can view which users made extensions, and for how many days.

EXTENSION BY DAYS

The screenshot displays the TopNET ISP Billing System interface. On the left is a sidebar with navigation options: **Үндсэн цэс**, **Сулжээ төхөөрөмж**, **Үйлчилгээний Багц**, **Харилцагч**, **Дансны мэдээлэл**, **Төлбөрийн мэдээлэл**, **Хоногийн сунгалт**, **И-мэйл, Захидал**, **Харгалгач**, **Баннер**, and **Тохиргоо**. The main area shows a table of subscribers with columns: **№**, **Харилцагч**, **Багц**, **Эхлэх огноо**, **Дуусах огноо**, **Сунгасан хоног**, **Төхөөрөмж**, **Үүсгэсэн харгалгач**, **Үүсгэсэн огноо**, and **Тайлбар**. A modal window titled "Нэмэх" is open, allowing for the addition of a new record. It contains the following fields:

- Харилцагчийн нэр:** A dropdown menu with the selected value "Сонгоно уу..."
- Үргэлжлэх хугацаа (хоногээр):** A text input field containing the value "0"
- Тайлбар:** A text area for additional notes

At the bottom of the modal are two buttons: **Хадгалах** (Save) and **Гарах** (Cancel). The bottom right corner of the interface shows the page number "1-128 / 128".

USER MANAGER

For registering and managing users

Register each user on the network and specify their access rights. Each user can have access to different menu options.

The system offers DYNAMIC ACCESS CONTROL and any number of users can be registered.

All necessary user information can be stored in their accounts and is available for editing, viewing, printing and converting.



USER MANAGER

The screenshot displays the TopNCT User Manager interface. The top left corner features the 'TopNCT' logo. The top right corner shows the user 'admin' and a 'Гаргах' (Logout) button. A left sidebar contains a navigation menu with items like 'Сүлжээ төхөөрөмж', 'Үйлчилгээний Багц', 'Харилцагч', 'Дансны мэдээлэл', 'Төлбөрийн мэдээлэл', 'Хоногийн сунгалт', 'И-мэйл, Захидал', 'Хэрэглэгч', 'Баннер', and 'Тохиргоо'. The main area has a toolbar with 'Нэмэх', 'Хөрвүүлэх', 'Хавлах', and 'Шинэчлэх' buttons. Below the toolbar is a table with columns: '№', 'Хэрэглэгчийн нэр', 'Навтрэх нэр', 'Нууц үг', 'И-мэйл', 'Утасны дугаар', and 'Үүсгэсэн огноо'. A 'Нэмэх' (Add) dialog box is open in the foreground, containing the following fields: 'Харагдах нэр:' (empty), 'Хэрэглэгчийн нэр:' (admin), 'Хэрэглэгчийн нууц үг:' (masked with dots), 'Цахим шуудангийн хаяг:' (abc@domain.com), and 'Хэрэглэгчийн утасны дугаар:' (empty). At the bottom of the dialog are 'Хадгалах' (Save) and 'Гаргах' (Cancel) buttons.

OTHERS

Bank account information

Enter bank account details to create payment information



Customer Manager

To enter and manage all information related to customers



Service Packages

Create different service packages with different prices and speed



Messages

Send messages to customers, or receive feedbacks, requests, complaints and inquiries



Banner

Place desired banners on the admin panel log page



Your contributions

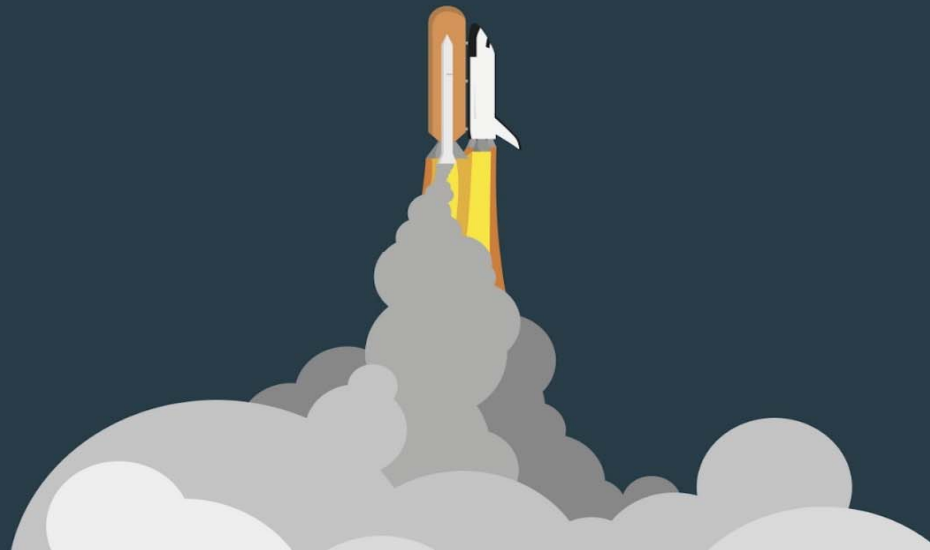
Current version:

MIKROTIK ROUTEROS Version: V6.33
ISP Billing System Version: 1.0

If you need our help, contact us

We need your help too so send us feedback

Upgraded version, better system, more capabilities and functions coming soon





БАЯРЛАЛАА!





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