

Radius Guide

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Radius Services

- Radius services control the speed of the radius user. The Data Package will override the data limit of the radius service.
- Go to Radius->Radius Services.
- Displayed is a list of all the radius services.

Service attributes

- **Service code**

You will need this when creating a radius package. It is advised to develop a naming system that includes the up and down speed. Check with your ISP if you have any conventions in this regard.

Radius Services

15 records per page

+ Add Service Refresh

Search: [] Copy Columns Clipboard Export Columns CSV Export Columns Excel Show / Hide Columns

Usually pops up as a description for the package.

Service Code	Service Name	Service Description	Num Users	
10GB	10GB Monthly	10 GB Monthly	6	[+][-][↺][↻][⌂]
10mbU	10Mb/s Uncapped	10 Mb/s up, 10 Mb/s down	14	[+][-][↺][↻][⌂]
1GB	1GB Monthly	1 GB Monthly	5	[+][-][↺][↻][⌂]
1GBD	1GB Daily	1 GB Daily		[+][-][↺][↻][⌂]
1up1down	1up1down	1 Kb/s up, 1 Kb/s down		[+][-][↺][↻][⌂]
20GB5MBs	20GB (5MB/s)	5 Mb/s up, 5 Mb/s down		[+][-][↺][↻][⌂]
250MBFREE	250 Daily Free	250 MB Daily	14	[+][-][↺][↻][⌂]
25GB	25 GB	25 GB Monthly, 20 Mb/s up, 20 Mb/s down	3	[+][-][↺][↻][⌂]
3GB	3GB Monthly	3 GB Monthly	1	[+][-][↺][↻][⌂]
4mbU	4Mb/s Uncapped	4 Mb/s up, 4 Mb/s down	3	[+][-][↺][↻][⌂]
500MBD	500MB Daily	500 MB Daily	1	[+][-][↺][↻][⌂]
512KU	512K Uncapped	00:00 till 00:00, 512 Kb/s up, 512 Kb/s down		[+][-][↺][↻][⌂]

• **Data Limit**

The radius package will override this limit. Giving this a value could lead to confusion

• **Time duration limit**

Only works every day

• **Service limit type (Once Off, Daily, Monthly)**

Specifies whether the service runs

- **Time band limit (from when to when will the service be disabled)**

- **Speed limit (Up/Down)**

If the speed is set to zero, the speed will be zero.

- **Authentication (Accept/Reject)**
- **Expiry date**

If no date is set the service will not expire

Add Service

- To add a service click on Add service on the top right of the page.
- Please refer to the list above for all the Radius Service attributes and there function.

Add a new Radius Service ✕

Service Details

Service Code

Service Title

Data Limit

Time Duration Limit

Service Limit Type


Time Band Limit **From:** **To:**

Speed (Rate) Limit **Up:** **Down:**

Authentication Type

Expiry Date


Radius service operations

Click on  to show assigned radius users:

Radius user accounts assigned service **10mbU - 10Mb/s Uncapped**

Username	Customer	Package
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10Mb/s Uncapped
[blurred]	[blurred]	10MB Uncapped
[blurred]	[blurred]	10Mb/s Uncapped

Edit Service

Click on  to edit the radius service.

Edit Radius Service #32

Service Details | **Radius Attributes**

Service Code

Service Title

Data Limit

Time Duration Limit

Service Limit Type


Time Band Limit From: To:

Speed (Rate) Limit Up: Down:


Authentication Type

Expiry Date

Clone Service

Click on  to make a copy of the service.

Delete Service

Click on  to delete the service. Note that these packages cannot be recovered.

Data Packages

About

Data Packages control the Cap of a Radius Service. If the customer needs a custom data expiry and data roll over settings this can be changed in the customers settings. Go to Radius->Data Packages

Package fields

- **Package code**

Check with your company if you have any naming conventions for the Package code. Here is a Package Nameing convention of some ISP.

- **Package Title**

You will need this when creating a radius user.

- **Radius Service**

Select the Radius service that the package will use. I.e. the speed of the data package.

- **Monthly Cap Size**

Sets the Cap limit for the Package. This overrides any pre-set Radius service monthly data limit. A monthly Cap Size of zero will make the product uncapped (0 = uncapped)

- **Uncapped Product**

(On/Off) This does not make the product uncapped. It merely shows the product in the appropriate category.

- **Auto Rollover**

(On/ Off) When the user reaches their Cap limit, the user will be moved onto another service. A service once capped is required. This will be until all the packages are reset at the start of the month.

- **Visible to admin**

If disabled admin users won't be able to select this product when editing radius accounts. E.g. it will not be possible to select the package when creating a radius user.

- **Visible to customer**

if disabled, then customers won't be able to select this product when signing up or switching packages.

- **Show cap on usage reports**

If hidden the Cap Size above acts as a softcap in conjunction with the Service below.

- **IP pool**

Leave blank if not using IP pooling. Spaces are not recommended

- **IP pool once capped**

Leave blank if not using IP pooling. Spaces are not recommended.

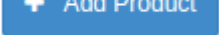
- **Service once capped**

Once the cap limit is reached the service is changed to the selected service. This can be used to switch the customer's connection off by putting them onto a service with speed of zero. Or the customer could be put on a super slow package so that they can still go online and purchase more data.

- **Monthly cost**

- **Topup cost/GB**

Add Data Package

- Click on 
- Fill in all the necessary fields
- Please refer to the data package field above for information on the fields.
- Click on Add package on the bottom of the model.

Add a new Package ✕

Primary Details **Billing**

Package Code

Package Title

Product Group ✕ ▾

Radius Service ▾

Monthly Cap Size ▾ This overrides any pre-set Radius Service Monthly Data Limit

Uncapped Product OFF Shows product in appropriate category on signup forms

Auto Rollover OFF These package will continuously rollover once capped. A service once capped is required

Add Overusage on Topup OFF When a topup is applied, overusage data will be added to the topup

Visible to Admin Users ON If disabled admin users won't be able to select this product when editing radius accounts

Visible to Customers ON If disabled customers won't be able to select this product when signing up or switching packages

Show Cap on Usage reports ON If hidden the Cap Size above acts as a softcap in conjunction with the Service below


IP Pool

IP Pool once Capped

Service once Capped ✕ ▾

Package operations

Edit Package

Click on  to edit the data package.


Please note that disabled service will not be able to be used. Disabled services will be hidden and can only be view by selecting. The option to disable a package is in the edit form.

Edit Package #6

Primary Details **Billing**

Package Code	<input type="text" value="10MBPS"/>
Package Title	<input type="text" value="10Mb/s Uncapped"/>
Product Group	<input type="text" value=""/>
Radius Service	<input type="text" value="10mbU"/>
Monthly Cap Size	<input type="text" value="100"/> <input type="text" value="GB"/> <small>This overrides any pre-set Radius Service Monthly Data Limit</small>
Uncapped Product	<input checked="" type="checkbox"/> <small>Shows product in appropriate category on signup forms</small>
Auto Rollover	<input checked="" type="checkbox"/> <small>These package will continuously rollover once capped. A service once capped is required</small>
Add Overusage on Topup	<input type="checkbox"/> OFF <small>When a topup is applied, overusage data will be added to the topup</small>
Visible to Admin Users	<input checked="" type="checkbox"/> <small>If disabled admin users won't be able to select this product when editing radius accounts</small>
Visible to Customers	<input checked="" type="checkbox"/> <small>If disabled customers won't be able to select this product when signing up or switching packages</small>
Show Cap on Usage reports	<input type="checkbox"/> OFF <small>If hidden the Cap Size above acts as a softcap in conjunction with the Service below</small>
IP Pool	<input type="text" value="IP Pool"/>
IP Pool once Capped	<input type="text" value="IP Pool once Capped"/>
Service once Capped	<input type="text" value="SYSTEMROLLOVER 10M/10M"/>

Clone

Click on  to make a copy of the package.

Data Pricing Matrix

Go to **Radius -> Pricing Matrix**. This page is part of Radius. The data pricing matrix is an easy way to create and manage related Radius data products. Each Pricing Cell represents a Radius Data Package, These data packages are treated just like the rest of the data packages.

Pricing Matrix
 Enabled ▾ Normal ▾ [+ Add Matrix](#) [Refresh](#)

Show Rows
 Search:
Copy Columns Clipboard
Export Columns CSV
Export Columns Excel
Show / Hide Columns

Matrix Title	Product Title Prefix	Product Code PPrefix	Num Columns	Num Rows	
1	1	1	4	1	✎ ✖
<input type="checkbox"/> Capped Asymmetrical	Home Uncapped	HUC	6	15	✎ ✖

Showing 1 to 2 of 2 entries
[Previous](#) [1](#) [Next](#)

Topup Groups

About

Go to **Radius -> Topup Groups**. Topup Groups are used to **Add Topup Group**. Click on **+ Add Group** to add a Topup Group.

Product Name Prefix: Home Capped Asymmetrical

Product Title Prefix: Home Uncapped

Product Code Prefix: HUC

Technology: Fibre

Target Market: All

Sales Account: another sales account

Uncapped: No Unshaped Yes

Line Speed	Slower Link	Standard Link	Fast Link	Ultra Fast Link	Superfast Link
	2 Mb/s Down 1 Mb/s Up	4 Mb/s Down 1 Mb/s Up	8 Mb/s Down 2 Mb/s Up	10 Mb/s Down 3 Mb/s Up	15 Mb/s Down 5 Mb/s Up
2	R 50.16	R 100.00	R 130.00	R 180.00	R 250.00
GB		87.72	114.04	157.89	219.30
5	R 44.00	R 105.26	R 131.58	R 192.98	R 377.19
GB					
5	R 50.16	R 150.00	R 220.00	R 320.00	R 560.00
GB					
5	R 44.00	R 131.58	R 192.98	R 280.70	R 491.23
10	R 50.16	R 270.00	R 390.00	R 580.00	R 980.00

+ Add Another Line

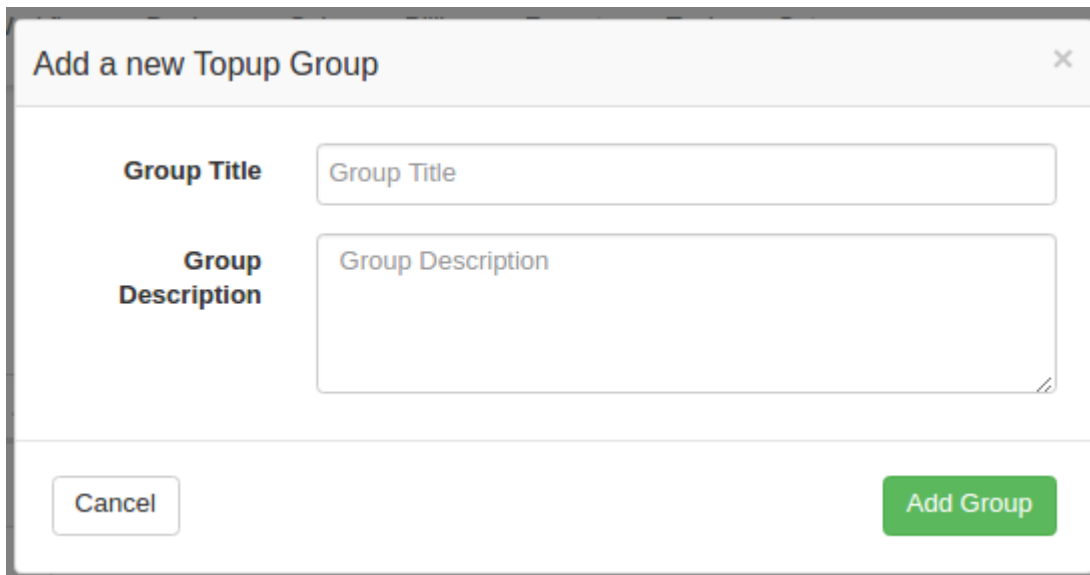
Close

+ Add Group

+ Add Column

Remove Column

Save Changes




Add a new Topup Group [X]

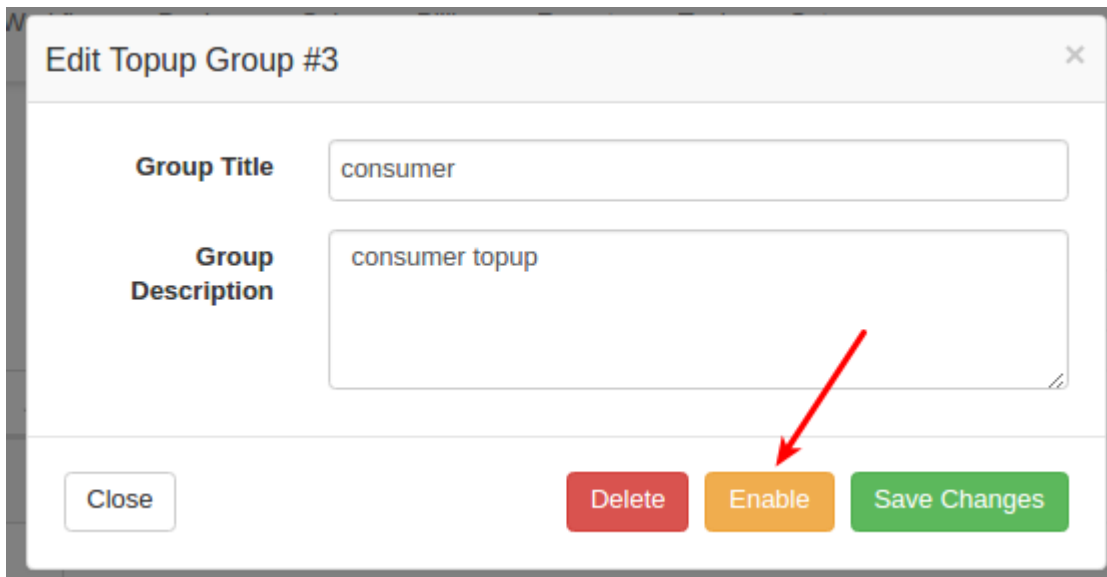
Group Title

Group Description

Edit Topup Group

You can edit the topup group by clicking on  .

Enable a topup group by clicking on the button specified below:



W Edit Topup Group #3 X

Group Title consumer

Group Description consumer topup

Close Delete Enable Save Changes

Topup Types

Topup Attributes

- **Topup Title**
- **Topup Size**

Measured in KB,MB,GB or TB

- **Topup Cost**
- **Availability**

Topup availability can be restricted to the mobile app, website and/or topup groups.

- **Enable/Disable**

When topup are disabled it will not be possible to use the topup. Disabled topups are greyed out in the topup type list. To enable a topup, open the edit window and click on enable.

Add Topup Type

Go to **Radius -> Topup Types**.

Click on  to add a topup type.

Add a new Topup Type ✕

Topup Title

Topup Size

Topup Cost

Available in Mobile App Yes

Available on Website Yes

Available for all Topup Groups Yes

Enabled Yes

SageOne ID

Edit Topup Type

Click on  to edit the topup type.

The group can be enabled and disabled here

Edit Topup Type #8

Topup Title

Topup Size

Topup Cost

Available in Mobile App Yes

Available on Website Yes

Available for all Topup Groups No

Enabled Yes

SageOne ID

Custom Radius Attributes

Custom attributes can be added to radius accounts. When added to a user it can be given a value, which can be a text and/or numbers. This can be used to give additional information to radius users.

Add Radius Attributes

Click on to add a radius attribute.


Add a new Radius Attribute

Attribute Name

Operand

Compatible NAS Type

Attribute Description

Click on  to edit the radius attribute.

Edit Radius Attribute

Attribute Name

Operand

Compatible NAS Type

Attribute Description

Here is an example of the Radius Attributes in a Radius user.

×
Edit Radius User Account #9360 - Deanprepaid

Data Account
Pricing Details
Data Limits
Radius Attributes
Audit Trail
Test

Add Custom Attribute

Attribute	Operand	Value
Cisco-AVPair	+=	imel was here
Cisco-AVPair	+=	another one
Cleartext-Password	:=	testpre
Group-Capped	:=	softcap
Group-Normal	:=	Turbo
Max-Monthly-Octets	:=	10485760
Mikrotik-Rate-Limit	:=	99M/100M
Simultaneous-Use	:=	10

Close
Save Changes

Radius Users

Radius users are created for a customer, and allow the user to connect to the network. They are dependent on customers and data packages.

Radius User Fields

- All Attributes in Bold are compulsory fiends. All fields in brackets are dependent on another field.
- Customer
- User type

- Allows the user to either logging with a user name or automatically by the MAC address of the device.
- (Login Username)
- (Password)
- (MAC)
- Account alias
- Account description
- Traffic counted via (Radius/ Netflow/ IP Accounting)
- Prepaid account (Yes/No)
- Account type (Normal/Sub Account)
- (Sub Account)
 - All the data usage will be deducted from the parent account. All data used by this user is still tracked.
 - Sub accounts are listed under their respective parent accounts in the data usage summary.
 - For example, each person could have their own account and have subaccounts for their devices this allowing them to see how much data each device uses. But all using one capped account.
- Data Package

Select the radius data package, this will give the user a cap/uncapped and set the users speed, Etc.

- Expiry data
- Concurrent connections

The maximum number of simultaneous connections to this account.

- Fixed IP address

Fixed local IP address


- Authentication (Accept/ Reject)

If authentication is rejected the user will not be able to authenticate with radius and thus will not be able to gain access to the network.

Radius user operations

Go to **Radius -> User Accounts**.

Add Radius User Account

Click on  to add a Radius User Account. Please see above for info on the [add radius user fields](#).

Add a New Radius User Account ✕

Data Account | Pricing Details | Data Limits

Customer

User Type

Login Username

Password

Account Alias

Account Description

Account Type

Data Package

Expiry Date


Concurrent Sessions

Fixed IP Address

Authentication

When disabled this account will not be able to authenticate

View usage

Click on  to view the data usage used by the user to date.

This will show a brief summary of the data usage for the radius user.

Edit Radius User

Click on  to edit the radius user.

Data Account

Edit Radius User Account #9329 - Dean

Close

Save Changes

Data Account Pricing Details Data Limits Radius Attributes Audit Trail Test

Customer DEA001-Dean

User Type User Login

Login Username dean123

Current Password Change Password

Account Alias Account / Device Alias

Account Description dean

Account Type Normal Account

Data Package 1 2M/2M

Expiry Date YYYY-MM-DD Clear

Concurrent Sessions Max Concurrent Sessions

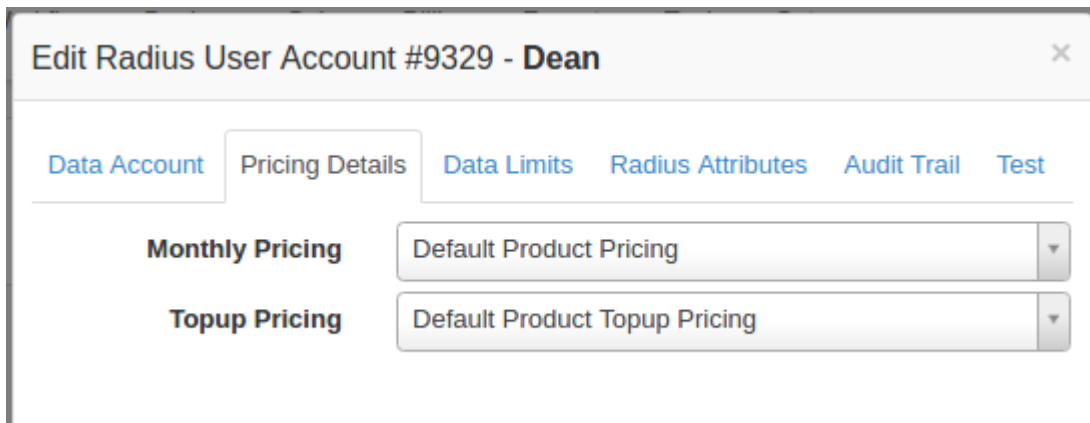
Fixed IP Address Fixed IP Address

Authentication Accept

When disabled this account will not be able to authenticate

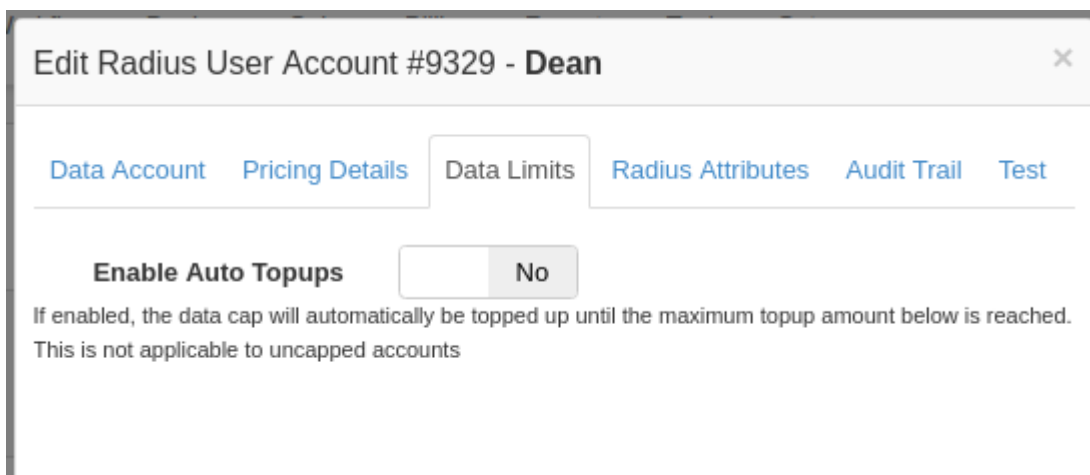
Pricing Details

Here you can set the monthly price and topup price if you do not want to use the default price.



The screenshot shows a web interface for editing a Radius User Account. The title bar reads "Edit Radius User Account #9329 - Dean". Below the title bar are several tabs: "Data Account", "Pricing Details", "Data Limits", "Radius Attributes", "Audit Trail", and "Test". The "Pricing Details" tab is currently selected. Under this tab, there are two sections: "Monthly Pricing" and "Topup Pricing". Each section has a dropdown menu. The "Monthly Pricing" dropdown is set to "Default Product Pricing", and the "Topup Pricing" dropdown is set to "Default Product Topup Pricing".

Data Limits



The screenshot shows the same web interface as above, but with the "Data Limits" tab selected. Under this tab, there is a section titled "Enable Auto Topups" with a toggle switch set to "No". Below this section, there is a note: "If enabled, the data cap will automatically be topped up until the maximum topup amount below is reached. This is not applicable to uncapped accounts".

Radius Attributes

Here you can add the custom radius attributes to the radius user that you have set up. More on Custom Radius Attributes [here](#).

Edit Radius User Account #9329 - Dean

Data Account Pricing Details Data Limits **Radius Attributes** Audit Trail Test

Add Custom Attribute

Attribute	Operand	Value
Cleartext-Password	:=	123456
Group-Normal	:=	PRICEMATRIX2M2M
Simultaneous-Use	:=	10

Delete Radius User



Block

Radius users can be blocked. Which will cause authentication to be rejected. This setting can only be changed in the edit customer menu. Please refer to the customer guide for information on how to block and unblock a radius user.



Schedule Package Changes

1. /radius/package_changes
2. Click on +Add
3. Select the account for which the data package needs to be changed.
4. Select the new data package
5. Select an activation date. This is when the package change will become effective.
6. Click on Submit Package change.



Active Radius Sessions

- /radius/sessions
- Lists all the active radius sessions.
- Disconnect Old will disconnect all the radius users who have not been updated in the last 10 min.



Radius Server Status

Gives a quick overview of Radius Authentication Requests, Active Radius Sessions and Total Radius Session Traffic /radius/status

Restart the Radius Server.

Click on Restart Radius Server as show in the picture below 