Radmin® Radius User Administration

Administrator Help for RAdmin version 1.19

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1. Introduction

This document contains help and information for users of the RAdmin Radius User Administration System.

RAdmin provides a Web interface to a Radius user database. You can use RAdmin to add, configure and remove the users who are allowed to log into your network. You can use RAdmin to change their password, control how much time they are permitted to use, and also to set up a static IP address.

You can also use RAdmin to:

- get usage summaries for all your users
- check the login history of your users
- investigate problems in your user authentication system
- generate modem usage reports

RAdmin is not a user billing or invoicing system.

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2. How it works

RAdmin works together with your Radiator® AAA Server to control who is permitted to log in to your network. Whenever a user connects and authenticates to an access server in your network, the access server send an "access request" to Radiator. Radiator looks in your RAdmin user database to check the password. If the password is correct, Radiator tells the terminal server to let the user in. If the password is not correct, or some other precondition is not satisfied, the user is rejected. You can use RAdmin to add and remove users, and to change their password and other login preconditions.

After the user is connected, the terminal server sends an "accounting request" to Radiator with details about the new session that has been started. Radiator saves this information in the RAdmin usage database.

When the user finally disconnects, the terminal server sends another "accounting request" to Radiator with details about the completed session, including the total session time and bytes counts. Radiator also saves this information in the RAdmin usage database. You can use RAdmin to get total usage summaries for your users, and to drill down to details for each session.

If during its operation, Radiator detects any problems, or gets any errors, they will be logged in the RAdmin Message Log. You can use RAdmin to investigate the Message Log.

3. General information

Following chapters describe general RAdmin information, for example various date and time formats and functionalities like toolbar and searches.

3.1. Access control and permissions

In order to access your RAdmin web pages, your system administrator may have enabled access control to your web site. That will mean you will have to enter a username and password before you can get to any of the RAdmin web pages.

Your system administrator will tell you the username and password you will need to enter to get access. Your system administrator can also individually tailor access to specific pages and functions in RAdmin. If you are unable to access a function, or an expected menu item does not appear, its probably because your system administrator has disabled your access to that function.

3.2. The toolbar

At the top of each page in Radmin is a toolbar, which allows you to quickly get to the most commonly used pages in RAdmin. It usually contains the following links:

- List Users
- Add a User
- Log
- Usage Summary
- Current sessions
- Modem usage report

Your RAdmin administrator can customize the toolbar to suit your organization, and add links to other RAdmin pages that you wish to access frequently, or even to other administrative web pages that you commonly need to use in your organization.

3.3. Entering dates and times

RAdmin allows you to enter dates in a variety of formats, and includes many fast shorthand ways of entering dates in the past and the future. All times and dates are entered and displayed in your time zone's local time.

All dates stored and displayed in RAdmin include both the date and the time. Wherever you can enter a date, you can also enter the time. If you do not specify a time, it always defaults to midnight at the beginning of the day you specify. If you enter a time it must be in the format hh:mm(:ss). The seconds are optional. Times are in 24 hour time format. Some examples are:

- 11:55
- 16:20:30
- 08:08
- 09:5
- 00:00 (i.e. midnight)

Dates are stored and displayed in RAdmin including the full 4 digit year. When entering dates, you can enter shorthand years, such as "99" or "00", and RAdmin will make an educated guess about which year you mean.

During installation, your RAdmin administrator will have chosen the appropriate date format for your locality. This controls how dates are printed in RAdmin, and also how you must enter exact dates.

Many of the shorthand date formats allow you to use contractions. For example, instead of "1 week", meaning 1 week in the future, you can enter "1w". Instead of "today" you can enter "tod".

General date format	Meaning	Examples
now	The date and time of right now	now
today	The date of today, time defaults to midnight at the beginning of today.	tod today 10:55
tomorrow	The date of tomorrow	tom 9:20
forever	The largest possible time value, effectively the end of time	forever forev

Table 1. Permitted date/time formats

<i>n</i> minutes	The number of minutes in the future.	1mi 3 minutes 5mins
<i>n</i> minutes ago	The number of minutes in the past.	2m ag 3 minutes ago 66mins ago
<i>n</i> hours	The number of hours in the future.	1h 3hours 5h
<i>n</i> hours ago	The number of hours in the past.	2hag 3 hours ago 6h ago
<i>n</i> days	The number of days in the future. "1 day" is the same as "tomorrow"	1d 3day 5d 12:00
n days ago	The number of days in the past. "1 day ago" is yesterday	2dag 3 day ago 6d ago
n weeks	The number of weeks in the future. If today is Wednesday, then "2 weeks" would be wednesday 2 weeks from today. "1 week" is the same as "7 days"	2 w 3 weeks 15:00
n weeks ago	The number of weeks in the past. "1 week ago" is the same as "7 days ago"	3wag 6week ago 3w ag 21:30
<i>n</i> months	This day of the month a number of months in the future.	2m 3month
<i>n</i> months ago	This day of the month a number of months in the past.	1mag 4 mon ago
n years	Todays date a number of years in the future. "1 year" is the same as "12 months"	1y 2 year
n years ago	Todays date a number of years in the past. "1 year ago" is the same as "12 months ago"	2yag 3 y ago
dd/mm/yyyy	(Only if your administrator has chosen your local date format as "dd/mm/yyyy") The exact date given.	12/5/99 13:00 1/1/00 5/9/2001 08:00 30/12/1999
mm/dd/yyyy	(Only if your administrator has chosen your local date format as "mm/dd/yyyy") The exact date given.	5/12/99 13:00 1/1/00 9/5/2001 08:00 12/30/1999

20011225	yyyymmdd	The exact date given.	20000101 12:00
			20011225

3.4. Entering time intervals

Some data fields require an time interval to be entered to specify a period of time, as opposed to an exact date. time intervals can be entered in a variety of ways. Some examples are:

- 10
- 1h10m5s
- 1:10:5

Table 2. Permitted time interval formats

Time interval format (N is an integer)	Meaning	Examples
n	an exact number of seconds	10 12455
ns	Exact number of seconds	10s 12455s
nm	Exact number of minutes	5m 60m
nh	Exact number of hours	2h 155h
nhnm	Hours and minute	1h55m 10h5m
nmns	Minutes and seconds	5m55s 1m5s
n:n	Minutes and seconds	5:55 1:5
nhnmns	Hours minutes and seconds	1h55m10s 5h5m5s
n:n:n	Hours minutes and seconds	1:55:10 5:5:5

3.5. Using dates in searches

A number list pages allow you to search for items by date. You will see "date from" and "to" fields. For example, on the List Users page, you can search by the "Valid from" date. In these kind of date searches, you can limit the date range searched by entering a start date/time and/or an end date/time. If you enter neither the start nor the end date, then all the matching dates will be listed.

The dates and times you enter may be any of the supported date/time formats. See Entering dates and times on page 2.

Meaning

Table 3. Example date ranges in searches

date from

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to

		All dates
now		Any time from right now
	now	Any time up until right now
	1 week	Any time up until midnight at the beginning of the day 1 week from today
1 d ago	1d	Any time from midnight at the beginning of yesterday to midnight at the end of today
1/1/99	tod 12:00	Any time from midnight at the beginning of January 1 1999 to midday today
now	1y	Any time from right now to 1 year from now
tod 8:00	tod 10:55	Any time from 8 am today to 10:55 am today.
tod	tom	Any time today (i.e from midnight at the beginning of today to midnight at the end of today)

3.6. Using text in searches

When you enter some text into a "text like" field on a list page. RAdmin will search for all items that contain that text. So if you entered "fred" it would match not only "fred" but also "frederick", "Alfred" and "myfreddy". Text searching is case sensitive, so "fred" would not match "Fred" or "AlfredD".

RAdmin also supports wildcards when searching for text. The following wildcards are supported:

- % means any number of characters
- _ (underscore) means any single character

Table 4. Example text searches

text like	example matches
fred	fred Alfred frederick
al%ce	alice alsacelorraine balances
al%	alice alce alsacelorraine
fr_d	fred frod frud fr3d fridge
j	jim jay jabberwocky major
	anything at all

3.7. Using numbers in searches

Some pages allow you to search certain fields by a numeric value. You will see "number from" and "to" fields. For example, on the List Users page, you can search by the "Login time left" field. In these kinds of searches,

you can specify the lower and/or upper limit of the range you wish to match. If you enter neither the lower nor the upper limit, then all possible values will match.

number from	to	Meaning
10		10 or more
	100	100 or less
11	11	exactly 11
1	10	1 to 10 inclusive
		anything at all

Table 5. Example number searches

3.8. Resorting search results

After searching on a search page, you can re-search and sort by a different column by clicking on a column header.

3.9. Service Profiles and RADIUS Check and Reply items

RAdmin gives you detailed control over who can log in, under what circumstances, and to also control the characteristics of their session once they are connected.

Service Profiles allow you to group a number of users with similar login privileges together and to control their privileges easily. The RAdmin Administrator will usually set up a number of Service Profiles, one for each group of users. For example, you might set up a Service Profile for your normal subscribers, and a different Service Profile for your Operations Centre staff that has greater privileges, or can connect through a dedicated line.

When a user attempts to log in, Radiator/RAdmin will perform the following checks in this order:

- Bad Logins count has not been exceeded.
- The Valid From and Valid To dates are OK.
- The password is correct.
- If the user has a Service Profile, that any RADIUS Check Items in that Service Profile match.
- If there are any user-specific RADIUS Check Items for the user, that they match.

RAdmin allows you to easily set RADIUS Check and Reply items for users and Service Profiles.

RADIUS Check Items are checked when a user attempts to log in. All the Check items must be correct, otherwise the user will not be permitted to log in. There is a wide range of RADIUS attributes that may be used as Check Items. You should consult your NAS vendor documentation for information about which ones are supported by your NAS, and how they are used.

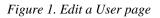
RADIUS Reply items are used to configure a user's session once they have successfully logged in. There is a wide range of RADIUS attributes that may be used as Reply Items. You should consult your NAS vendor documentation for information about which ones are supported by your NAS, and how they are used.

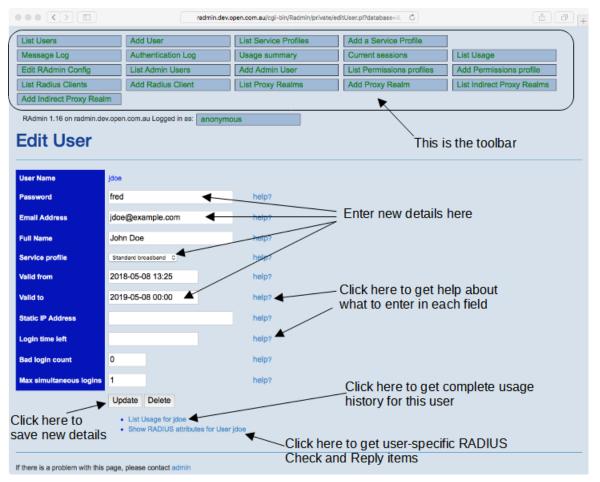
Тір

It is also possible to set Check and Reply items for all users in the Radiator configuration file.

4. Add a User, Edit a User

This page allows you to examine and change the details of a single user. You can set and change their password, and it will have immediate effect. New users can log in as soon as they are added. Users that are deleted will not be able to log in the future.





4.1. Editable fields

The following chapters describe editable fields on Edit User page.

4.1.1. User name

This is the name that the user logs into your network with. Your user will normally have to configure the name into their authentication client software. To log in, they must enter the user name exactly as shown. It is not possible to change a users User Name with the Edit a User. To change a User Name, you would have to delete the old user and add a new one with the correct name.

Your RAdmin administrator may have configured a default value for this field to provide the normal realm for your organization.

4.1.2. Password

This is the password that the user must configure into their authentication client software. To log in successfully, they must enter the user name exactly as shown. Case is important. You can change their password and click **Update**, and their password will be changed immediately.

If you are adding a new user with Add a User, a new password will be automatically generated when the page appears. You can accept that password, or enter a new one if you like. We recommend that when you enter passwords, you adhere to your organization's password policy (if any). Your RAdmin administrator can change the format for automatically generated passwords, or turn off automatic password generation.

4.1.3. Email address

This field can be optionally used to record the user's email address(es). It has no effect on whether or how your user logs in. It is used to send email about subscription access changes if your RAdmin administrator has enabled Subscription Management in your RAdmin installation. Multiple email addresses can be separated by commas or spaces.

Your RAdmin administrator may have configured a default value for this field to provide the normal email domain for your organization.

4.1.4. Full name

This optional field allows you to record the users full name. It has no effect on whether or how your user logs in.

4.1.5. Service Profile

This field allows you to choose a 'Service Profile' for this user. A Service Profile describes a common set of RADIUS attributes shared by all the users with that profile. Your RAdmin Administrator will generally set up a separate Service Profile for each category of users your organization supports. If you select a Service Profile for a user, then the attributes from the Service Profile will be used to check and configure this user when they log in. User-specific attributes entered into this Edit User page will override the attributes from the Service Profile, then there will be no Service Profile for this user, and their login attributes will be controlled by this Edit User page.

4.1.6. Valid from

This field specifies the earliest date and time the user is permitted to log in to your network. See Entering dates and times on page 2. If you enter a date/time that is in the future, the user will not be able to log in until that time.

The standard default value for this field when adding a new user is "now" (i.e. access is possible immediately), although your RAdmin administrator may have configured it differently for your organization.

4.1.7. Valid to

This field specifies the latest date and time the user is permitted to log in to your network. See Entering dates and times on page 2. If you enter a date/time that is in the past, the user will not be able to log in. You can use something like '20y' (i.e 20 years into the future) for users whose accounts are to be valid for a long time.

The standard default value for this field when adding a new user is "1 year" (i.e. it expires one year from today), although your RAdmin administrator may have configured it differently for your organization.

4.1.8. Static IP Address

This optional field allows you to specify a static IP address for that user. You should only enter something in here if you want that user to always get the same IP address when they log in. If you don't enter anything in here (i.e. leave it blank) then the user will be allocated an IP address from the normal address pool. It will usually be different each time they log in. You can see which IP address a user gets by looking at their usage page.

Static IP Address must be entered as a dotted IP address like these examples:

• 10.1.1.5

• 203.63.154.1

4.1.9. Login time left

This optional field specifies the amount of online time (in seconds) the user has left. Each time the user logs out, the time they have used is subtracted from the time they have left. If they try to log in and there is no time left, they will not be permitted to log in at all. Each time they log in, their maximum session time will be set to the amount of time they have left, so they should not be able to overrun their time left. See Entering time intervals

If you leave this field blank, there are no limits placed on their online time.

4.1.10. Bad login count

This field keeps count of how many consecutive bad logins this user has had. It is used to lock out accounts that are being attacked by password guessers. Each time they enter their password incorrectly, this number will be increased. If it get to the bad login limit (usually 5), they will not be able to log in at all until you reset their count to 0. Each time the user logs in correctly, the count will be reset to 0 automatically. This means that users will be locked out if they enter a bad password 5 times in a row.

If you leave this field blank, then no bad login limits will be applied to this user.

4.1.11. Max simultaneous logins

This field specifies the maximum number of sessions the user can be logged in at the same time. Defaults to 1, which means they can log in once at a time. If they try to log in a second time without logging out, they will be rejected. If you leave this field blank, then no simultaneous-use limits will be applied.

If you set it to 0, then they wont be able to log in at all.

4.1.12. Update

Clicking on this button will cause your edits to take effect. Any changes to the password will take effect immediately. After the user database has been updated, the Edit a User page will be redisplayed with the result of your edits. You will note that the Valid from and Valid to dates will be displayed as the full date and time.

4.1.13. Delete

Clicking on this button will cause this user to be permanently removed from the database. It does not remove any usage records for this user from the usage table. If the user is currently logged on it will not log them out, only prevent them from logging in again in the future. The User Name may be reused for another user after deleting.

This button will not appear when adding a new user.

4.1.14. Usage link

Clicking on this link will show the List Usage page showing usage for this user.

This link will not appear when adding a new user.

4.1.15. Edit RADIUS attributes link

This link takes you to the RADIUS attributes page where you can view and edit specific RADIUS attributes for this user. You can add and remove both check and reply items, which means that you can tailor the RADIUS attributes for this user.

This link will not appear when adding a new user.

4.2. Tasks using this page

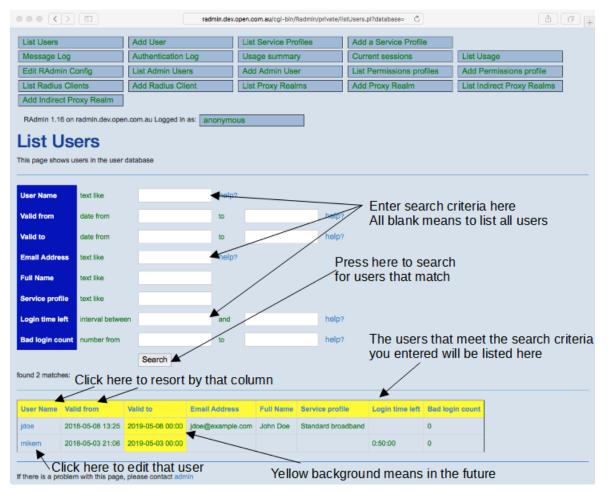
The following common tasks relate to this page:

- Adding a new user on page 48.
- Deleting a user on page 49.
- Changing a password on page 49.

5. List Users

This page allows you to search for and list users in your user database. The list shows the main information about each user, and you can drill down to detailed information for each user.

Figure 2. List Users page



5.1. Search Criteria

The top part of this page lets you enter search criteria to find particular users or groups of users. The bottom part displays the list of users that satisfy your criteria. You can limit the list of users displayed in the lower section by entering one or more restrictions on the search and clicking **Search**. If you do not enter any search criteria (i.e. if you leave all the search criteria fields in the top part blank), all the users in your user database will be listed.

5.1.1. User Name

This section restricts which users will be listed in the bottom part by specifying the User Names to match. See Using text in searches on page 5

5.1.2. Email Address

This section restricts which users will be listed in the bottom part by specifying the Email Address to match. See Using text in searches on page 5

5.1.3. Valid from

This section restricts which users will be listed in the bottom part by specifying a range of "Valid from" dates. See Using dates in searches on page 4

5.1.4. Valid to

This section restricts which users will be listed in the bottom part by specifying a range of "Valid from" dates. See Using dates in searches on page 4

5.1.5. Login time left

This section restricts which users will be listed in the bottom part by specifying a matching range of "Login time left". See Using numbers in searches on page 5

5.1.6. Bad login count

This section restricts which users will be listed in the bottom part by specifying a matching range of "Bad login count". See Using numbers in searches on page 5

5.2. User List

This section presents a list of users that match the search criteria you entered in the top section. By clicking on a User Name you can drill down to that users details displayed in the "Edit a User" page. See Add a User, Edit a User on page 7. Any "Valid from" or "Valid to" dates that are in the future are shown with a yellow background. Dates in the past are shown with a normal white background.

5.3. Tasks using this page

The following common tasks relate to this page:

• Finding a User on page 49.

6. List Usage

This page shows summaries of past login sessions for one or more users. From the usage list, you can drill down to see user details, see all the details of a single session, or see other logins to the same NAS. The list shows both session start and session stop records that match the criteria.

••• <				radmin.dev.open.co	m.au/ogi-bin/Radmir	n/private/listUsa	ige.pl?database=&L	SERNAM	ð			<u>a</u> .
List Users		Add User		List Service	e Profiles	Add a S	ervice Profile					
Message Lo	Xg	Authentic	ation Log	Usage sum	imary	Current	sessions	- T	ist Usage			
Edit RAdmir	n Config	List Admi	n Users	Add Admin	User	List Perr	nissions profiles	5 A	dd Permissio	ns profile		
List Radius	Clients	Add Radi	us Client	List Proxy F	Realms	Add Pro	xy Realm		ist Indirect Pr	oxy Realms	Add Indirec	t Proxy Realm
RAdmin 1.16	on radmin.dev.ope	n.com.au Loc	ged in as: anor	nymous	_							
List U	sage	ds in time and	A*									
	a accounting record											
User Name	text like	jdoe		Help?						riteria h		ge record
Time stamp	date from			to		help2	/ ~"	biai	ik meai	13 311010	airusa	genecoru
Session ID	text like			help?	/	/						
Session Time	interval be	tween		and		help?						
Framed IP Ad	Idress text like			help?	/							
NAS Identifier	r text like			help?								
NAS Port	number fro	m		to		help?	Matchin	ig us	age re	cords wi	ll be sh	own here
Called Numbe	er textlike			help?				/				
Status	not	eny	. 0	herp?			/					
Input octets	number fro	m		₩ to			/					
Output octets	number fro	m		to			/					
Sum octets	number fro	m		to			/					
Terminate cau	use Inot	-any		0			/		Click	here to	show o	ther
	_	Sec	arch	Click hor	o to ocor	ob for			sessi	ons on t	he san	ne NAS
found 4 matche		966		Click her						_		
10010 4 1101010				matching	usage r	ecoras						
User Name	Time stamp	Session ID	Session Time	Framed IP Addres	s NAS Identifie	r NAS Port	Galled Number	Status	Input octets	Output octets	Sum octets	Terminate cause
jdoe :	2018-05-08 13:55	00001234		10.20.30.40	203.63.154.1	1234	123456789	Start				
jdoe :	2018-05-08 13:55	00001234	0:18:40	10.20.30.40	203.63.154.1	1234	123458789	Stop	20000	30000	50000	Idle-Timeout
jdoe :	2018-05-08 13:56	00001234		10.20.30.41	203.63.154.1	1234	123456789	Start				
jdoe	2018-05-08 13:57	00001234	0:16:40	10.20.30.41	203.63.154.1	1234	123456789	Stop	20000	30000	50000	User-Request
If there is a prot	blem with this page	please conta	act admin									
1	and hallo	l			Session	time	05-1					
	here to nat user	other	\ here to session session	show is with	means the Stop reco	nis is a	sess	ions		ow other e same ress		

Figure 3. List usage page

6.1. Search Criteria

The top part of this page lets you enter search criteria to find particular sessions The bottom part displays the list of sessions that satisfy your criteria. You can limit the list of sessions displayed in the lower section by entering one or more restrictions on the search and clicking **Search**. If you do not enter any search criteria (i.e. if you leave all the search criteria fields in the top part blank), all the sessions in your accounting database will be listed.

6.1.1. User Name

The restricts the sessions to those belonging to users who match this field. See Using text in searches on page 5

6.1.2. Time stamp

This restricts the list to session that started or stopped during the date/time range given. See Using dates in searches on page 4

6.1.3. Session ID

This restricts the list to sessions that match the Session ID. See Using text in searches on page 5

6.1.4. Session Time

This restricts the list to sessions whose Session time (which is the time the session lasted in seconds) to the range given. Since only session Stop records have a Session Time, if you use this criteria, it will only list session Stops. See Using numbers in searches on page 5

6.1.5. Framed IP Address

This restricts the list to sessions that match the specified Framed IP Address (which is the IP address the user had for the duration of their session). See Using text in searches on page 5

6.1.6. NAS Identifier

This restricts the list to sessions that were authenticated by a certain NAS (i.e. Terminal Servers etc.). The NAS Identifier is an IP address like 203.63.154.1, not a DNS name. See Using text in searches on page 5

6.1.7. NAS Port

This restricts the list to sessions that had the specified NAS-Port, which identifies which interface, modem or port the session was connected to. See Using numbers in searches on page 5

6.1.8. Status

This restricts the list to sessions with the given Acct-Status-Type.

6.2. Usage List

This section presents a list of sessions that match the search criteria you entered in the top section. By default it shows both session Start and session Stop records. Session Start records can be identified by the fact that they do not have a Session Time.

The User Name column shows the exact user name they logged in with.

The Time stamp column shows the date and time that the session started or stopped (in your time zone's local time).

The Session ID is an identifying number that the NAS uses to identify a session. It allocates a new Session ID each time a new session starts. The Session ID will be the same for the Start and Stop of the same session. Session IDs are only unique until the NAS reboots. When a NAS reboots, it starts reusing Session IDs.

Session Time is the length of time the session lasted (in seconds). For session Start records, this will be blank.

Framed IP Address this is the IP address that the user was allocated for the duration of this session.

NAS Identifier is the IP address of the NAS the user was connecting to.

NAS Port is the number of the NAS's interface, modem or port that the user was connecting to.

You can click on the hotlinks in the following columns:

- User Name. This will take you to the Edit a User page for that user. See Add a User, Edit a User on page 7
- Session ID. This will take you to another List Usage page, showing sessions with the same Session ID.
- NAS Identifier. This will take you to another List Usage page, showing sessions with the same NAS Identifier. The NAS Identifier is the IP address of the NAS where the session was connected to.

6.3. Tasks using this page

The following common tasks relate to this page:

• See Checking a user's session history on page 50.

7. Usage Summary

This page shows a summary of network usage for some or all of your users. It shows the total login time (in seconds) and total number of bytes in and out for a each user in the interval covered by your accounting table.

			radmin.dev.op	en.com.au/cgi-bin/Radmin/pr	ivate/sumUsage.pl?d	ataba C		(d) (đ
List Users		Add User		List Service Profiles	Add a	Service Profile		
Message Log		Authentication L	og 🛛	Usage summary	Currer	t sessions	List U	Isage
Edit RAdmin C	onfig	List Admin User	i	Add Admin User	List Pe	rmissions profiles	Add F	Permissions profile
List Radius Clie	ents	Add Radius Clie	nt	List Proxy Realms	Add P	roxy Realm	List In	ndirect Proxy Realm
Add Indirect Pr	oxy Realm							
Usage shows si	ummaries of usag				eans show		aries	
ound 2 matches:	Gearch							
			Use	ers who match	the search	criteria		
User Name Tot	al Time Bytes	n Bytes out	and	l who have usa	age will be	shown here		
jdoe 0:3	3:20 40000	60000						
mikem0;10	8:40 20000	30000	(Click here to se	e usage de	etails for tha	t user	
		please contact admi						

Figure 4. Usage summary page

7.1. Search Criteria

The top part of this page lets you enter search criteria to limit the users whose summaries you wish to see The bottom part displays a summary for each user matched. You can limit the list of users displayed in the lower section by entering one or more restrictions on the search and clicking **Search**. If you do not enter any search criteria (i.e. if you leave all the search criteria fields in the top part blank), summaries for all the user in your database will be listed.

7.1.1. User Name

This section restricts which users will be listed in the bottom part by specifying the User Names to match. See Using text in searches on page 5

7.2. Usage Summaries

This section presents usage summaries for all the user that matched the search criteria you entered in the top section. For each user it shows:

- Total time in seconds that the user was logged in for.
- The total number of bytes in (i.e. bytes transmitted from the user to your network).

• The total number of bytes out (i.e. bytes transmitted from your network to the user).

7.3. Tasks using this page

The following common tasks relate to this page:

• Checking usage summaries on page 50.

8. Log

This page allows you to see messages in the RAdmin/Radiator log. Each time Radiator detects a problem, it logs a message to the RAdmin log. This page allows you to look at some or all of those messages.

Figure 5. Log page

				ev.open.com.au/cgi-bin/Radmin/private	/listMessages.pl?databa	t d
List U	sers	Add User		List Service Profiles	Add a Service Profile	1
Mess	age Log	Authentica	ation Log	Usage summary	Current sessions	List Usage
Edit R	Admin Co	nfig List Admir	n Users	Add Admin User	List Permissions profiles	Add Permissions profile
List R	adius Clier	Add Radiu	us Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Ir	ndirect Pro	xy Realm				
Me	ssag	admin.dev.open.com.au Logg IE LOG Issages in the message log,		Enter search cr	iteria here	
Type Time s Messa		from 1 day ago	help?	help? Click here to find	I matching log mess	ages
ound 11	9 matches: Time	Message		Mate	ching log messages	are shown here
Debug	stamp 2018-05- 08 13:50	Handling with Radius::Auth	RADMIN:			
Debug	2018-05- 08 13:50	Handling with Radius::Auth	RADMIN:			
Debug	2018-05- 08 13:50			tion id: 0-00000': 'select PASS_WO RADUSERS where USERNAME='jd	RD, STATICADDRESS, TIMELEFT, N De":	IAXLOGINS, SERVICENAME,
Debug	2018-05- 08 13:50	Query to 'dbi:mysql:radmin NAME='Standard broadbar			ENDOR_ID, IVALUE, SVALUE, ITEM	I_TYPE from RADSTCONFIG where
Debug			in order by Tricki			
	2018-05- 08 13:50	Query to 'dbi:mysql:radmin NAME='jdoe' order by ITEM	localhost Connec	tion id: 0-00000': 'select ATTR_ID, \	'ENDOR_ID, IVALUE, SVALUE, ITEM	I_TYPE from RADCONFIG where
Debug			:localhost Connec /_TYPE':		YENDOR_ID, IVALUE, SVALUE, ITEN	I_TYPE from RADCONFIG where
Debug Debug Debug	08 13:50 2018-05-	NAME='jdoe' order by ITEM	localhost Connec /_TYPE': s for match with jd		'ENDOR_ID, IVALUE, SVALUE, ITEM	I_TYPE from RADCONFIG where
Debug Debug	08 13:50 2018-05- 08 13:50 2018-05-	NAME='jdoe' order by ITEM Radius::AuthRADMIN look	localhost Connec M_TYPE': s for match with jd o: 1525775147		'ENDOR_ID, IVALUE, SVALUE, ITEM	I_TYPE from RADCONFIG where

8.1. Search Criteria

The top part of this page lets you enter search criteria to find particular log messages The bottom part displays the list of messages that satisfy your criteria. You can limit the list of log messages displayed in the lower section by entering one or more restrictions on the search and clicking **Search**. If you do not enter any search

criteria (i.e. if you leave all the search criteria fields in the top part blank), *all* the log messages in your accounting database will be listed.

8.1.1. Type

The section allows you to restrict what message types are listed. The message types for a message is one of the following numbers:

Table 6. Log Message types

Туре	Description
0	ERR. Error conditions. Serious and unexpected failures
1	WARNING. Warning conditions. Unexpected failures
2	NOTICE. Normal but significant conditions.
3	INFO. Informational messages.
4	DEBUG. Debugging messages.

See Using numbers in searches on page 5

8.1.2. Time stamp

The limits the range of date/times that are to be listed. For each message, the Time stamp is the local time that the message was logged.

See Using dates in searches on page 4

8.1.3. Message

This limits the text of the messages to be displayed.

See Using text in searches on page 5

8.2. The List

This section shows the messages that match the search criteria you entered in the top section.

Type is the message type number. See Log Message types on page 16.

Time stamp is the time the message was logged, in your time zone's local time.

Message is the text of the log message. It describes the error or event that was logged.

8.3. Tasks using this page

The following common tasks relate to this page:

• Checking the message log on page 50.

9. Current sessions

This page lists some or all of the sessions that are currently online (i.e. user sessions that have started, but not yet finished). You can drill down to see details of the user, or the history of sessions with the same NAS Identifier or the same Session ID.

••• <				r	admin.dev.open.com	m.au/ogi-bin/Radmin/priva	te/listOnline.pl?	databas: C		ů ē +
List Users			Add L	Jser	Lis	st Service Profiles	Add	a Service Profil	e	
Message L	_og		Authe	ntication Log) Us	sage summary	Curr	ent sessions	Lis	t Usage
Edit RAdm	nin Config		List A	dmin Users	Ad	dd Admin User	List	Permissions pro	files Ad	d Permissions profile
List Radius	s Clients		Add F	Radius Client	Lis	st Proxy Realms	Add	Proxy Realm	Lis	t Indirect Proxy Realms
Add Indire	ct Proxy R	ealm								
RAdmin 1.1	6 on radmin	.dev.open	com.au	Logged in as:	anonymous					
Curre	ent se	essi	ons	5		Enter your				
This page sho	ws users cu	irrently on	ine			All blanks	means s	how all cu	rrent ses	sions
						1				
User Name	te	xt like			høp?					
NAS Identifi	er te	xt like			help?					
NAS Port	n	umber from	۰ 🗌		to /		help?			
Session ID	te	xt like			help?					
Time stamp	da	ate from			to		help?			
Framed IP A	ddress te	xt like			help?	Olively have to		f	:	
Port type	te	xt like			help?	Click here to	searcn	for matchi	ng sessi	ons
Called Num	ber te	xt like			help?	Matching s	essions	will be liste	ed here	
Service type	te	xt like		/	help?	/				
found 2 match	nes:		Se	arch Delete		,		ere to see Framed-IF		
User Name	NAS Ident	tifier NA	S Port	Session ID	Time stamp	Framed IP Addres	s Port type	Called Number	Service type	
jdoe	203.63.15	4.1 12	34	00001234	2018-05-08 14:2	10.20.30.40	Async	123456789	Framed-User	
mikem	203.63.15	4.1 12	15	00001235	2018-05-08 14:2	10.20.30.41	Async	123456789	Framed-User	
If there is a pr	oblem with t	his page,	olease o	contact admin		Click h	ere to s	ee sessior	history	for this session ID
				Click	nere to se	e session his	tory for t	this NAS		
 Click he	ro to c	dit thi			1010 10 30	0.00000011110				
Click ne	ere to e	uititi	s us	er						

Figure 6. Current sessions page

9.1. Search Criteria

The top part of this page lets you enter search criteria to find particular sessions or groups of sessions. The bottom part displays the list of current sessions that satisfy your criteria. You can limit the list of sessions displayed in the lower section by entering one or more restrictions on the search and clicking **Search**. If you do not enter any search criteria (i.e. if you leave all the search criteria fields in the top part blank), *all* the current sessions will be listed.

9.1.1. User Name

The restricts the sessions to those belonging to users who match this field.

See Using text in searches on page 5

9.1.2. NAS Identifier

This restricts the list to sessions that were connected to a certain NAS (i.e. Terminal Servers etc.). The NAS Identifier is an IP address like 203.63.154.1, not a DNS name.

See Using text in searches on page 5

9.1.3. NAS Port

This restricts the list to sessions that had the specified NAS-Port, which identifies which interface, modem or port the session was connected to. See Using numbers in searches on page 5

9.1.4. Session ID

This restricts the list to sessions that match the Session ID. See Using text in searches on page 5

9.1.5. Time stamp

This restricts the list to sessions that started during the date/time range given. If Interim-Update (also known as Alive) messages are enabled, this may also be Alive message time stamp. See Using dates in searches on page 4

9.1.6. Framed IP Address

This restricts the list to sessions that match the specified Framed IP Address (which is the IP address the user had for the duration of their session). See Using text in searches on page 5

9.1.7. Port type

This restricts the list to sessions with port types that match. The port type describes what type of connection this session is using. Usually one of:

- Sync
- Async
- ISDN
- Virtual

See Using text in searches on page 5

9.1.8. Service type

This restricts the list to sessions with port types that match. The service type describes what type of session this is. Usually one of:

- Login user
- Framed user
- Administrative-User (a router administrator telnetted into the router)

9.2. The List

This section shows each current session that matches the search criteria you entered in the top section.

You can click on the hotlinks in the following columns:

- User Name. This will take you to the Edit a User page for that user. See Add a User, Edit a User on page 7.
- NAS Identifier. This will take you to another List Usage page, showing sessions with the same NAS Identifier. The NAS Identifier is the IP address of the NAS where the session was connected to.

• Session ID. This will take you to another List Usage page, showing sessions with the same Session ID.

9.3. Tasks using this page

The following common tasks relate to this page:

• Checking who is currently on-line on page 50.

10. Modem usage report

This page summarizes the usage of each modem or interface on your NASs, It is useful for finding dead or underutilized modems.

Figure 7.	Modem	usage	report	
-----------	-------	-------	--------	--

_ _ _ _

List Users		Add	User	List Serv	vice Profiles	Add a Service Profile	
Message Log		Auth	hentication Log	Usage s	ummary	Current sessions	List Usage
Edit RAdmin	Config	List	Admin Users	Add Adn	nin User	List Permissions profiles	Add Permissions profile
List Radius C	lients	Add	Radius Client	List Prox	ky Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect F	Proxy Realr	1					
RAdmin 1.16 o	n radmin.dev	open.com.a	au Logged in as: and	nymous			
Andar	~		anart				
Moder	n usa	ige r	eport				
his page shows	summaries of	f modem us	age by modem. It mig	ht be useful to find	dead or underperform	ning modems or interfaces	
			• •			•	
					Enter each	criteria for finding	nodems here
NAS Identifier	text like		help	?		J	
	number from	1	to		help?		
NAS Port						41	ale antenda
NAS POR		Search					
		Search	L ← Clic	k nere to ti	na moderns	that meet your sea	ch chiena
	:	Search	Click	k nere to 1	na moderns	that meet your sea	ch chiena
	:	Search	^h _ ← Clic	K nere to T	nu moderns	that meet your sea	ch chiena
		Search	Total Time (hours)	Total Mbytes in	Total Mbytes out	-	
ound 2 matches:						-	ng modems will
iound 2 matches: NAS Identifier	NAS Port 1234	Sessions	Total Time (hours)	Total Mbytes in	Total Mbytes out	Matchi	ng modems will

10.1. Search Criteria

The top part of this page lets you enter search criteria to find particular modems or groups of modems. The bottom part displays the list of modems that satisfy your criteria. You can limit the list of modems displayed in the lower section by entering one or more restrictions on the search and clicking **Search**. If you do not enter any search criteria (i.e. if you leave all the search criteria fields in the top part blank), usage summaries for *all* your modems will be listed.

10.1.1. NAS Identifier

The section limits the usage summary to NASs that match this pattern. See Using text in searches on page 5

10.1.2. NAS Port

This section limits the usage summary to modems that match the pattern. See Using text in searches on page 5

10.2. Modem usage list

This section presents a usage summary for each NAS and Port selected by the search criteria you entered in the top section. It summarizes session Stops that are currently in your accounting database.

Sessions is the total number of sessions that have completed in the time interval covered by your accounting database.

You can click on the hotlinks in the following columns:

• NAS Identifier. This takes you to the List Usage page showing sessions with the same NAS Identifier. See List Usage on page 11.

10.3. Tasks using this page

The following common tasks relate to this page:

• Checking modem usage on page 50.

11. Authentication Log

Your Radiator administrator may have configured Radiator to add entries to the Authentication Log when a user attempts to authenticate through Radiator. This means that whenever a user tries to log in, you can see whether they succeed or fail, and if they fail, why they failed.

The Authentication Log page can be very useful when trying to help people with login problems. If a customer reports that they cannot log in, search for all records with their user name for the last day, and you will see all the authentication attempts and the reasons for failures.

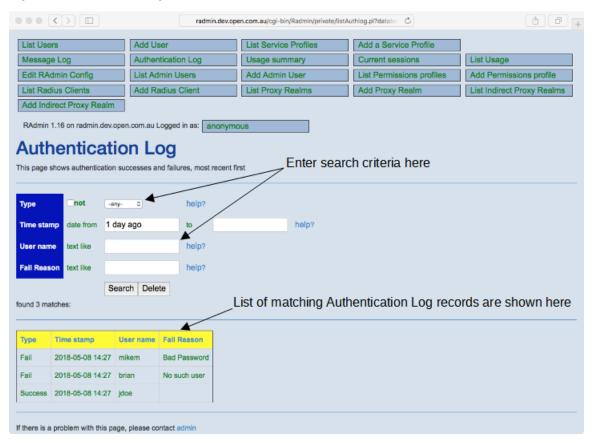


Figure 8. Authentication Log

11.1. Search Criteria

The top part of this page lets you enter search criteria to find particular Authentication Log records. The bottom part displays the list of records that satisfy your criteria. You can limit the list of records displayed in the lower section by entering one or more restrictions on the search and clicking **Search**. If you do not enter any search criteria (i.e. if you leave all the search criteria fields in the top part blank), all Authentication Log records will be listed.

11.1.1. Type

This section limits whether you want to see authentication successes, failures or both.

11.1.2. Time stamp

This section limits the range of times to display. The default is for the last day.

11.2. Authentication Log list

This section presents a list of all the Authentication Log records that match the search criteria you entered in the top section. Type indicate whether it was a successful login attempt or not. Time stamp indicates the date and time that the attempt occurred. User name is the login name that was used, and Fail reason is the reason the login was rejected if it was a Failure. Success records do not have a Reason.

11.3. Tasks using this page

The following common tasks relate to this page:

• Checking modem usage on page 50.

12. Add Service Profile, Edit Service Profile

This page allows you to add or change details of a Service Profile. A Service Profile is a group of users that all share the same RADIUS check and reply items. You can use Service Profiles to ensure all the users have the same authentication requirements, and you can easily configure or change a user's authentication requirements by changing their Service Profile on the Edit User page.

It is common to set up a small number of Service Profiles, one for each major grouping of users, for example, one Service Profile for normal users, and one for NOC staff, where the NOC staff are required to login via a certain Called-Station-ID, and who get a special NAS filter.

The Edit Service Profile page allows you to edit the name and description of the profile. The RADIUS attributes for the profile are edited with the Edit RADIUS Attributes page. See Edit RADIUS Attributes on page 23

List Users	Add User	List Service Profiles	Add a Service Profile			
Message Log	Authentication Log	Usage summary	Current sessions	List Usage		
Edit RAdmin Config	List Admin Users	Add Admin User	List Permissions profiles	Add Permissions profile		
List Radius Clients	t Radius Clients Add Radius Client List Proxy Realms Add Proxy Realm					
Add Indirect Proxy Realn						
		ious				
		lous				
Edit Service		help?				
Edit Service	adband ddress from default pool					
Edit Service Service Name Description Update	adband ddress from default pool	help?				

Figure 9. Edit Service Profile Page

12.1. Editable Fields

The following chapters describe the editable fields of Edit Service.

12.1.1. Service Name

This is the short name of the Service Profile. It will be listed in the menu of Service Profiles you select in the Edit User page.

12.1.2. Description

This is a brief description of the purpose of the Service Profile. It is for Radmin user information only and is not used anywhere else.

12.1.3. Edit RADIUS Attributes

This link takes you to the Edit RADIUS Attributes page for this Service Profile. It will allow you to add, change and remove RADIUS Check and Reply items for this Service Profile.

13. List Service Profiles

This page allows you to search for and list the Service Profiles in your user database. The list shows the main information about each Service Profile, and you can drill down to detailed information about each Service Profile.

		radmin.dev.ope	n.com.au/cgi-bin/Radmin/private/	listServices.pl?datab	(ð) (ð)
List Users	Add User		List Service Profiles	Add a Service Profile]
Message Log	Authentication	Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	g List Admin Us	ers	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius C	lient	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy I	Realm				
RAdmin 1.16 on radm	nin.dev.open.com.au Logged i	n as: anonymo	US		
_ist Servi	ice Profiles	Ent	ter search criteria	here	
Service Name text lii	ika .	balo2			
service Name text in	NG	Traip?			
Description text lik	ke	help?			
Description text lii	ike Search		chere to start sea	urching	
Description text like			chere to start sea	urching	
			chere to start sea	rching	
und 2 matches:				urching Services will be listed f	nere
ound 2 matches:	Search				nere
und 2 matches: Service Name 2h session	Search Description	Click			nere

Figure 10. List Service Profiles

14. Edit RADIUS Attributes

This page allows you to add, change or delete RADUS attributes for a User or Service Profile. See Service Profiles and RADIUS Check and Reply items on page 6 for more information about RADIUS attributes. You can reach this page by clicking on the Edit RADIUS Attributes link on an Edit User page, or the Edit RADIUS Attributes link on an Edit Service Profile page. The page will display the current RADIUS attributes for that user or Service Profile.

You can change the value of a RADIUS attribute by altering the field in the 'Value' column and then pressing the **Update** button.

You can add a new Check Item by selection the type of attribute required for the new Check Item, then pressing the **Add New Check Item** button. The Edit RADIUS Attributes page will appear with the new Check item added to the end of the list. You can then set the Value of the new attribute and press **Update**.

You can add a new Reply Item by selection the type of attribute required for the new Reply Item, then pressing the **Add New Reply Item** button. The Edit RADIUS Attributes page will appear with the new Reply item added to the end of the list. You can then set the Value of the new attribute and press **Update**.

The example page below shows the RADIUS attributes for a Service Profile. There is one Check Item, requiring that the Called-Station-Id for all logins must be *98767676*. Users that log in successfully will have their Filter-Id set to '*standard*'. See your NAS vendor for details about what RADIUS attributes are available for your NAS and how they can be used.

$\bullet \bullet \bullet \checkmark \bullet \bullet$	radmin.dev	.open.com.au/cgi-bin/Radmin/private/eo	ditRadconfig.pl?dat:	ð 🗗 +
List Users	Add User	List Service Profiles	Add a Service Profile	1
Message Log	Authentication Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Admin Users	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Realm				
This page allows you to set specific	Putes for Se RADIUS attributes for Service	mous vince 2h sessi Physical Session. If any Check Item does n se your NAS vendor documentation t	not match, the user will not be able to	log in. If they are permitted to log in,
		Add New Check Item		
Session-Timeout	•	Add New Reply Item		
Current Check Items Attribute	v	alue		
Current Reply Items				
Attribute	v	alue		
	Session-Timeout 7	200	Delete	
Update				
If there is a problem with this page,	please contact admin			

Figure 11. Edit RADIUS Attributes

15. Add Radius Client, Edit Radius Client

This page allows you to Add, Change and Delete Radius clients from your database. A Radius client specifies details about a NAS that your Radiator Radius Server will listen to and honour requests.

Most of the editable fields on this page are required for advanced use only. You will probably only need to set the name/address and the Shared secret.

Тір

Radiator only takes notice of the Radius clients configured into this page if the <ClientListSQL> clause is present in your Radiator configuration. See the Radiator reference manual [https://files.radiatorsoftware.com/radiator/ref/index.html] for more details.

Тір

After adding or changing Radius client details with this page, you will need to restart or signal your Radiator before it will use the new details.

List Users	Add User		List Ser	vice Profiles	Add a Service Profile	
Message Log	Authentication	Log	Usage a	summary	Current sessions	List Usage
Edit RAdmin Config	List Admin Use	ers	Add Ad	min User	List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius Cl	ient	List Pro	xy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Realm						
RAdmin 1.16 on radmin.dev.open.c	om.au Logged ir	as: anonym	ous			
Edit Client						
	203.63.154.1					
Name or address						
Shared secret	mysecret			help?		
Default realm				help?		
NAS Type	unknown			help?		
SNMP Community	public			help?		
Framed group base address				help?		
Rewrite Username rule				help?		
Pre-Handler hook perl code				help?		
Ignore accounting signature?				help?		
Duplicate detection interval (secs	10			help?		
Livingston port Offset	29			help?		
Livingston port hole size	2			help?		
No of ports for address allocation	255			help?		
	Update [Delete				

Figure 12. Edit RADIUS Client page

15.1. Editable Fields

The following chapters describe the editable fields of Edit Service.

15.1.1. Name or Address

This is the IP address or DNS name of the NAS that will be sending requests to your Radiator. It is required.

15.1.2. Shared Secret

This is the shared secret that will be used to encrypt passwords sent by the NAS. The shared secret is a secret word or sentence that is used to protect all information passed between the NAS and Radiator. It must be configured here and also configured into the NAS. It must be configured exactly the same the NAS. It is case-sensitive. We recommend that you use a shared secret containing mixed case letters and number of about 16 characters.

15.1.3. Default Realm

For advanced operations only.

This optional field specifies a Realm that will be added automatically to the user name of login requests from this NAS if the user name does not already contain a Realm. See the Radiator reference manual for more details.

For example, if you enter *open.com.au* as the Default Realm, and a user attempts to log in to the NAS as *mikem*, then the user name will be automatically converted to *mikem@open.com.au* before being authenticated.

15.1.4. NAS Type

For advanced operations only.

This optional field specifies the manufacturer and type of this NAS. It is only required for strong multiple-login prevention. See the Radiator reference manual for more details.

15.1.5. SNMP Community

For advanced operations only.

This optional field specifies SNMP community for SNMP access to this NAS. It is only required for strong multiple-login prevention. See the Radiator reference manual for more details.

15.1.6. Framed Group Base Address

For advanced operations only.

This optional field specifies the base IP address for automatically setting IP addresses for logins from this NAS. See the Radiator reference manual for more details.

15.1.7. Rewrite Username rule

For advanced operations only.

This optional field allows you to automatically rewrite user names before authentication. See the Radiator reference manual for more details.

15.1.8. Pre-Handler hook perl code

For advanced operations only.

This optional field allows you to enter a Perl code hook that will be invoked before authentication or accounting request from this NAS are handled. See the Radiator reference manual for more details.

15.1.9. Ignore accounting signature

For advanced operations only.

This optional field allows you to work around certain NASs with broken software, where the signature in accounting requests is set incorrectly. See the Radiator reference manual for more details.

15.1.10. Duplicate detection interval

For advanced operations only.

This optional field allows you to change the time period that Radiator uses to detect duplication of Radius request packets. See the Radiator reference manual for more details.

15.1.11. Livingston port offset

For advanced operations only.

This optional field allows you to tailor information about ports on Livingston NASs. It is not required and is ignored for most types of NAS. See the Radiator reference manual for more details.

15.1.12. Livingston port hole size

For advanced operations only.

This optional field allows you to tailor information about ports on Livingston NASs. It is not required and is ignored for most types of NAS. See the Radiator reference manual for more details.

15.1.13. No of ports for address allocation

For advanced operations only.

This optional field specifies how many ports can be allocated an IP address in a class C block. It is only required if Framed Group Base Address is used to compute IP address automatically for this NAS. See the Radiator reference manual for more details.

16. List Radius Clients

This page allows you to search for and list Radius Clients that meet certain criteria.

Figure	13.	List	Radius	Clients	page
--------	-----	------	--------	---------	------

List Users		Add User			Liet Sondo	o Drofileo		Add a Service Profile	
					List Service Profiles				
Message Log	-	Authenticati			Usage sun		_	Current sessions	List Usage
Edit RAdmin Co		List Admin			Add Admin			List Permissions profiles	Add Permissions profile
List Radius Clie		Add Radius	Client		List Proxy	Realms		Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Pro	xy Realm	J							
RAdmin 1.16 on r	admin.dev.ope	en.com.au Logge	d in as: an	onymou	5				
.ist Clie	onte								
	ins								
is page specifies	the Radius cli	ents that Radiato	r will honour	Note that	t in order for	Radiator to	honour th	ese Clients, it must be configure	ed to use <clientlistsql></clientlistsql>
lient	text like		-	nelp?			pe in	selection criteria h	nere
				inoip.					
Shared Secret	text like			help?					
Default Realm	text like			help?					
NAS Type	text like			help?					
Duplicate Interval	number from	n		to			help?		
	•	Cearsh			or L L				
		Search			Click he	ere to s	start t	he search	
und 2 matches:									
Client Sh	ared Secret	Default Realm	NAS Type	Duplic	ite Interval	◄	— N	latching clients wi	II be listed here
10.20.30.2 my	secret	example.com	unknown	10					
	secret		unknown	10					
203.63.154.1 my	000101		A DOM NO WIT	10					

17. Subscription Management

If your RAdmin system administrator has enabled Subscription Management in your RAdmin system, you will (depending on specific permissions) have access to a number of Subscription Management pages.

RAdmin Subscription Management automatically adds and removes users from password files in the same format that Apache and other applications require. This means that you can use RAdmin to administer access to various parts of a web site (for example), according to what product(s) your customer has bought. This is in addition to the normal user access management that RAdmin always performs.

The Subscription Management pages allow you to define subscription type products, to subscribe users to each product for varying periods of time, and to search for and list subscriptions. At the end of a users subscription period, their access to the product can be automatically disabled by the expire program, which your RAdmin administrator may also have set up.

17.1. Email to users

If a user has one or more email addresses, RAdmin Subscription Management will automatically send email to those addresses at various times:

• When a product State is changed to Trial or Approved from any other State. No mail is sent when changing from Trial to Approved or vice versa. Mail will contain the product's 'Message for new subs' text if defined on the Edit Product page. The text of the email will be something like this:

Subject: Paraluct Arcess	
This even in contains important information about your access to our products and services. Plasse retain and print it for future reference.	S This section is only sent if there is a htpassswd file for one
Rar access to your current products and services, A Your usemane is mikem Your pessword is fiwil72 Product name	or more of their products
Your access to 'Remium downloads' has been activated unti Access to the premium downloads area is at https://www.exemple.com/premium/downloads/	.1 2009-06-12 00:00

This enail message was automatically generated by RAdmin

Note

Many part of the email text are configurable by the RAdmin administrator, so the exact content may be different in your installation.

- When a product State is changed from Trial or Approved from any other State. Mail will contain the product's 'Message for stopped subs' text if defined on the Edit Product page
- When a product in Trial or Approved State has its Valid To date extended prior to the expiry date. Mail will contain the product's 'Message for extended subs' text if defined on the Edit Product page.
- When a product in Trial or Approved State is automatically expired by the expire program.

If multiple products are enabled or disabled at the same time, only a one email will be sent to the user containing details of each product enabled or disabled.

The following sections describe the Subscription Management pages.

18. User subscriptions

If your RAdmin administrator has enable Subscription Management, the Add and Edit User pages will look slightly different than described in Add and Edit User pages on page 7. IN addition, you will see a list of available products (defined with the 'Add a Subscription Product' page), and details of the user's subscription for each product.

	radmin.dev.op	en.com.au/cgi-bin/Radmin/private/e	ditUser,pl?database 🖒	(† 17)
List Users	Add User	List Service Profiles	Add a Service Profile	1
Message Log	Authentication Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Admin Users	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Realm				
List Subs Products	Add a Subscription Product	List Subscriptions	Add a subscription	1
RAdmin 1.16 on radmin.dev.op	pen.com.au Logged in as: anonym	ous		
User Name jdd	De	This	section controls login	or wireless access
Password fr	ed	help?		
Email Address jd	loe@example.com	help?		
Full Name Jo	ohn Doe	help?		
Service profile S	itandard broadband	help?		
Valid from 20	018-05-08 13:25	help?		
Valid to 20	019-05-08 00:00	help?		
Static IP Address		help?		
Login time left		help?	This section contr	ole access
Bad login count 0		help?	to special web pa	
Max simultaneous logins 1		help?		
l	Jpdate Delete			
Subscribed Prod	List Usage for jdoe Show RADIUS attributes for User ucts		Access start and end	dates
Product Name Stat	e Valid From	Valid To		
Premium downloads	oroved 0 2018-05-08 15:3	2019-05-08 00:0	0	
V will	renew		<──Notes ab	out this subscriptior
Silver class downloads	o now	1 y		
there is a problem with this pag	ge, please contact admin	of available product	ts	

Figure 14. Edit User with Subscription Management

18.1. Editable Fields

The following chapters describe the editable fields of Edit Service.

18.1.1. State

This field describes the current subscription state for this product. In the standard Radmin system, the available states are:

• -blank-

User has no subscription and has never expressed an interest in it.

• Enquiry

User has made some enquiries about the product.

• Wait for approval

User has ordered but not paid for the product. Record the order details in the Notes

Trial

Temporary and short-term access to the product has been granted. Will be automatically Expired at the end of the Valid To period.

• Approved

Access to the product has been granted. Will be automatically Expired at the end of the Valid To period.

Expired

The Valid To date has passed, and the product has been automatically expired

Disabled

Access has been temporarily disabled. Record the reason why in the Notes.

Transferred

The access privileges have been transferred to another user. Record the user in the Notes

Closed

Access has been permanently closed. Record the reason why in the Notes.

When you add enable a subscription (i.e. in Trial or Approved states), the user will be able to access the protected web pages between the 'Valid From' and 'Valid To' dates. At the end of their subscription period the expire program will change their State to Expired, automatically remove them from the access password file, and they wont be able to access the protected web pages any more.

The other states (Enquiry, Wait for approval etc.) are place-holders that allow you to record where you are in the sales cycle for this product to this customer. Access to the protected area is only possible in Trial and Approved states.

Тір

if multiple subscription products are configured with the same non-empty Product Group name, then only one of those products can be enabled at any time. If you attempt to enable more than one such product, you will receive an error message and the user will not be updated.

18.1.2. Valid From

This is the first date which access will be granted. Any of the date formats described in Entering dates and times on page 2 are permitted. The default value is set by the 'Default valid from time' field in the 'Edit Product' page.

18.1.3. Valid To

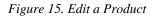
This is the last which access will be granted. Any of the date formats described in Entering dates and times on page 2 are permitted. The default value is set by the 'Default valid to time' field in the 'Edit Product' page.

18.1.4. Notes

This section contains notes about the users subscription to this product.

19. Add a Product, Edit a Product

This page allows you to define and alter subscription products. For each product, you can define the location of the access password file, the default values for the from and to dates, and optional messages to be sent by email to a user when their access to the product changes.



$\bullet \bullet \bullet \checkmark \Box$	radmin.dev.ope	m.com.au/cgi-bin/Radmin/pri	vate/editP	roduct.pl?datab C	ð 🗗 🕇
List Users	Add User	List Service Profiles		Add a Service Profile	1
Message Log	Authentication Log	Usage summary		Current sessions	List Usage
Edit RAdmin Config	List Admin Users	Add Admin User		List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius Client	List Proxy Realms		Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Realm					
List Subs Products	Add a Subscription Product	List Subscriptions		Add a subscription]
RAdmin 1.16 on radmin.dev.o	pen.com.au Logged in as: anonymo	us			
Edit Produc	t				
Product Name	Premium downloads				
Description	Access to the premium download	ds web page	help?		
htpasswd files	/var/www/passwordfile/premium		help?		
Default valid from time	now		help?		
Default valid to time	1 у		help?		
Message for new subs	Access to the premium downloads an https://www.example.com/premium/do		help?		
Message for extended subs			help?		
Message for stopped subs			help?		
Message for expired subs			help?		
Product Group			help?		
	Update Delete				
If there is a problem with this pa	ge, please contact admin				

19.1. Editable Fields

The following chapters describe the editable fields of Edit Service.

19.1.1. Product Name

This is a short product name. It will appear on the Edit User page, and also in emails sent to the user.

19.1.2. Description

This is a brief description of the product for reference only. It is not displayed anywhere but here.

19.1.3. htpasswd files

This is a list of password files that will be automatically managed when users are subscribed or unsubscribed to this product. The file is in htpasswd format as required by Apache and other systems, one line per valid user. Multiple file names can be specified separated by colons. If multiple file names are specified, subscribed users will be added to all the files named.

19.1.4. Default valid from time

This is the default Valid From for new subscriptions. Any text is permitted, but a relative date in one of the date formats described in Entering dates and times on page 2 are recommended, such as 'now', 'tomorrow', '1 year' etc. The date will appear on the Edit User page, but can be changed to another value there.

19.1.5. Default valid to time

This is the default Valid To for new subscriptions. Any text is permitted, but a relative date in one of the date formats described in Entering dates and times on page 2 are recommended, such as 'now', 'tomorrow', '1 year' etc. The date will appear on the Edit User page, but can be changed to another value there.

19.1.6. Message for new subs

This message will be added to the email sent when a user is subscribed to a product (i.e is changed to Trial or Approved State). You might use it to describe how to access the product.

19.1.7. Message for extended subs

This message will be added to the email sent when a user's existing subscription is extended before it expires. You might use it to thank them or provide information about product changes.

19.1.8. Message for stopped subs

This message will be added to the email sent when a user is unsubscribed from a product (i.e is changed from Trial or Approved State to any other State). You might use it to describe how to resubscribe the product.

19.1.9. Message for expired subs

This message will be added to the email sent when a user is automatically expired from a product (i.e is changed from Trial or Approved State to Expired State by the expire program). You might use it to describe how to resubscribe the product.

19.1.10. Product Group

This optional field allows you to group subscription products so that at most one of the group can be enabled at a time. If multiple products exists with the same non-empty Product Group name, then only at most on such product can be enabled on the Edit User page.

20. List Products

This page allows you to search for and list the currently defined subscription products.

List Users	Add User		List Service Profiles	Add a Service Profile	
Message Log	Authenticatio	on Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Admin L	Jsers	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius	Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy F	Realm				
List Subs Products	Add a Subse	cription Product	List Subscriptions	Add a subscription	
		t in as: anonymo			
List Product Product Name Description text like	ie 				
Product Name text lik	é	help?			
Product Name text lik	ie 	help?			
Product Name text lik Description text lik und 2 matches:	e Search	help? help?			

Figure 16. List Products

21. Vasco Digipass support

RAdmin can optionally support Vasco Digipass tokens (http://www.vasco.com). Digipass tokens are small handheld devices that generate one-time-passwords that change every minute. They can be purchased from Vasco and issued to your users. Such tokens provide much higher levels of security than static passwords. Additionally, with some types of token, users can set up individual PINs, which provides even higher levels of security with two-factor authentication. Some types of Digipass token can operate in a Challenge-Response mode. Vasco Digipass is supported by RAdmin on Solaris, Linux and Windows. Your organization may require the issue of Vasco Digipass tokens to some or all users. If so, you should follow these instructions for administering Digipass tokens, and for assigning tokens to RAdmin users.

When you purchase a Digipass token or tokens from Vasco, you will also be supplied with a DPX file that contains important data about the token(s). This DPX file must be imported into the AuthBy DIGIPASS database before the tokens can be assigned to a user and authenticated by Radiator. A DPX file may contain data for one or more tokens, and for one or more applications. A Digipass application is a particular method of using a token. Your tokens will usually only be configured for one application.

21.1. Import Digipass Tokens

Before you can administer a token or assign it to a user, you must import the token data into the RAdmin database. This page allows you to import data for one or more tokens from a token DPX file.

List Users		Add User		List Digipass tokens	Import D	igipass tokens	List Service Profiles
Add a Service	Profile						
Message Log		Authentication Lo	g	Usage summary	Current s	essions	List Usage
Edit RAdmin (Config	List Admin Users		Add Admin User	List Pern	nissions profiles	Add Permissions profile
List Radius Cl	lients	Add Radius Clier	t	List Proxy Realms	Add Prox	y Realm	List Indirect Proxy Realms
Add Indirect P	roxy Realm						
	a na dasta dassana						
RAdmin 1.16 or	n radmin.dev.ope	n.com.au Logged in as	anonym	ous			
mport	Digipa	ass Toke	ns				
mport	Digipa	ass Toke	ns				
	· · ·			about one or more Diginass t	kens from the DP	(file to your RAdmir	n database. After importing tokens, w
e this page to i	mport Digipass D	PX files, which will add		about one or more Digipass t	kens from the DP	C file to your RAdmir	n database. After importing tokens, y
e this page to i	· · ·	PX files, which will add		about one or more Digipass t	kens from the DP)	K file to your RAdmir	n database. After importing tokens, y
e this page to i	mport Digipass D	PX files, which will add		about one or more Digipass t	kens from the DP)	K file to your RAdmir	n database. After importing tokens, y
e this page to in n allocate a tok	mport Digipass D en to an individue	PX files, which will ad Il user		about one or more Digipass t	kens from the DP)	K file to your RAdmir	n database. After importing tokens, y
e this page to in n allocate a tok	mport Digipass D en to an individue	PX files, which will add		about one or more Digipass t	kens from the DPJ	K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File	PX files, which will add al user	i information	about one or more Digipass t	kens from the DPJ	K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individua Choose File r Overwrite exi	PX files, which will add al user no file selected sting tokens with the s	I information	about one or more Digipass t	kens from the DPJ	K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individua Choose File r Overwrite exi	PX files, which will add al user	I information	about one or more Digipass t	kens from the DP)	K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File r Overwrite exi Auto create u	PX files, which will add il user to file selected sting tokens with the s sers and allocate toke	I Information		kens from the DP)	C file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File r Overwrite exi Auto create u Master import k	PX files, which will add il user to file selected sting tokens with the s sers and allocate toke ey 11111111111111	I information ame serial 15 1111111111	1111111		K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File r Overwrite exi Auto create u Master import k	PX files, which will add il user to file selected sting tokens with the s sers and allocate toke ey 11111111111111	I information ame serial 15 1111111111			K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File r Overwrite exi Auto create u Master import k (If the DPX file h	PX files, which will add il user no file selected sting tokens with the s sers and allocate toke ay 1111111111111 as a non-standard Mast	I information ame serial 15 1111111111	1111111		K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File f Overwrite exi Auto create u Master import k (If the DPX file h Application nam	PX files, which will add i user to file selected sting tokens with the s sers and allocate toke ev 111111111111111 as a non-standard Meat re	I information ame serial 15 11111111111 r Key to be u	1111111 sed to import the data, specify the	at key here)	K file to your RAdmir	n database. After importing tokens, y
se this page to i	mport Digipass D en to an individue Choose File f Overwrite exi Auto create u Master import k (If the DPX file h Application nam	PX files, which will add i user to file selected sting tokens with the s sers and allocate toke ev 111111111111111 as a non-standard Meat re	I information ame serial 15 11111111111 r Key to be u	1111111	at key here)	K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File) r Overwrite exi Auto create u Master import k (If the DPX file h Application nam (This selects whi	PX files, which will add i user to file selected sting tokens with the s sers and allocate toke ev 111111111111111 as a non-standard Meat re	I information ame serial 15 11111111111 r Key to be u	1111111 sed to import the data, specify the	at key here)	K file to your RAdmir	n database. After importing tokens, y
n allocate a tok	mport Digipass D en to an individue Choose File f Overwrite exi Auto create u Master import k (If the DPX file h Application nam	PX files, which will add i user to file selected sting tokens with the s sers and allocate toke ev 111111111111111 as a non-standard Meat re	I information ame serial 15 11111111111 r Key to be u	1111111 sed to import the data, specify the	at key here)	K file to your RAdmir	n database. After importing tokens, y

Figure 17. Import Digipass Tokens

21.1.1. Import DPX File

Enter the name of the DPX file to import. This must exist on the machine where your browser is running. Most browsers provide a browse button to the right of this field allowing you to select the DPX file from a file dialog.

21.1.2. Overwrite existing tokens with same serial

If this option is set, then the import will overwrite and erase any previously imported data for the same tokens as included in the DPX file. If you receive the error message 'failed: Duplicate entry' or similar, it means that token has already been imported, and you may need to set the 'Overwrite existing tokens with same serial' in order to import it.

21.1.3. Auto create users and allocate tokens

If this option is set, for each token imported, a matching user is automatically created and allocated to the token. The name of the user is derived from the token serial number: leading zeroes are stripped and any trailing spaces and alpha characters (such as APPL1) are removed. The new user will be created with validity dates from the current time to the same date and time next year.

21.1.4. Master import key

21.1.5. Application name

This specifies the name of the Digipass application data to import from the DPX file. If there is only one application. Defaults to 'APPL1', which is a common Digipass application name. If the application data is not present in the DPX file when you import it, you will see an error message and a list of the application names

available in that file. If there are several applications present in your import file and you don't know which one to choose, consult your system administrator.

21.1.6. Import

When you click on Import, the DPX file you selected will be transmitted to the RAdmin web server, where the DPX data will be imported into the RAdmin database. If this is successful, the 'Import Digipass Tokens' page will be displayed again with one or more messages in green saying something like 'imported token 0097123456APPL 1' where 0097123456APPL 1 is the token's serial and application name it imported.

21.2. List Digipass Tokens

This page allows you to see which Digipass tokens have been imported into RAdmin, and which ones are available for allocation to a user. A user can't use their token for authentication until it has been allocated to them in RAdmin.

List Users	Add U	ser	List Digipass tokens	Import Digipass tokens	List Service Profiles
Add a Service Profile	8		_		
Message Log	Auther	tication Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Ad	min Users	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients		adius Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy R	Realm				
RAdmin 1.16 on radmir	n.dev.open.com.au	ogged in as: anonyn	nous		
₋ist Digip	ase Tok	ene			
list Digip	a33 10n	CIIS			
la naga abawa ayallabi	la Dialagas takana				
nis page shows availabl	ie Digipass tokens				
	_				
Tokan Sarial number	text like	hel	ma These	users have been au	to-created:
Token Serial number	text like	hel		users have been au	to orothoan
Token Serial number			their us	ser name is derived	to orothoan
Token Serial number Allocated to User Nam		hel	their us	ser name is derived	to orothoan
Allocated to User Nam	text like	hel	pr their us token s	ser name is derived	to orothoan
			pr their us token s	ser name is derived	to orothoan
Allocated to User Nam	text like	hei	pr their us token s	ser name is derived	to orothoan
Allocated to User Nam	text like	hei	pr their us token s	ser name is derived	to orothoan
Allocated to User Nam Token type	text like	hei	pr their us token s	ser name is derived	to orothoan
Allocated to User Nam	text like	hei	pr their us token s	ser name is derived	to orothoan
Allocated to User Nam Token type	text like	hei	pr their us token s	ser name is derived	to orothoan
Allocated to User Nam Token type bund 3 matches:	text like text like Sea	hel hel	pr their us token s	ser name is derived	to orothoan
Allocated to User Nam Token type	text like	hel hel	p? token s	ser name is derived t serial	from the
Allocated to User Nam Token type bund 3 matches: Token Serial number	text like text like Sea	hel hel	p? token s	ser name is derived t serial	from the
Allocated to User Nam Token type bund 3 matches:	text like text like Sea	hel hel	p? token s	ser name is derived t serial n has been allocated	I to the user 'jdoe'
Allocated to User Nam Token type bund 3 matches: Token Serial number 0097000001APPL 1	text like text like Sea	rch DP260	p? token s	ser name is derived t serial	I to the user 'jdoe'
Allocated to User Nam Token type bund 3 matches: Token Serial number	text like text like Sea	hel hel	p? token s	ser name is derived t serial n has been allocated	I to the user 'jdoe'
Allocated to User Nam Token type bund 3 matches: Token Serial number 0097000001APPL 1	text like text like Sea	rch DP260	p? token s	ser name is derived t serial n has been allocated	I to the user 'jdoe'
Allocated to User Nam Token type bund 3 matches: Token Serial number 0097000001APPL 1 0097000002APPL 1	Allocated to User 97000002	Token type DP260 DP260	p? token s	ser name is derived t serial n has been allocated	I to the user 'jdoe'

Figure 18. List Digipass Tokens

21.2.1. Token Serial number

This specifies the unique token number for a token. The token number includes the application name: the application name is part of the complete serial number.

21.2.2. Allocated to User Name

This indicates whether the token has been allocated to a given user.

21.2.3. Token type

This indicates the type of Digipass token. Possibilities are: AKII, AUTCD, DP100, DP300, DP500, DP600, DP700 etc.

21.3. Show Digipass Token details

This page shows important details about a single Digipass token. These details are encoded in the RAdmin database for each token. Importing a token with the 'Overwrite existing tokens with same serial' option set will reset all these details..

List Users A	vdd User	List Digipass tokens	Import Digipass tokens	List Service Profiles
Add a Service Profile				
	Authentication Log	Usage summary	Current sessions	List Usage
	ist Admin Users	Add Admin User	List Permissions profiles Add Proxy Realm	Add Permissions profile List Indirect Proxy Realms
Add Indirect Proxy Realm	du Radius Cilent	List Proxy Realitis	Add Proxy Realm	List mareat Proxy Realins
Rådmin 1.18 on radmin.dev.open.co				
Show Digipass	s Token de	tails		
his page shows all the information in I	the database about a single	Digipass token. The links at the b	ottom allow you to administer the token.	
Token Serial	0091234568APPL	J1 🔨		
Allocated to User Name	jdoe			
Algorithm	RO	The seri	al number uniquely i	dentifies this toke
Token Model	DPGO3			
Use Count	000000			
Last Time Used	Thu Jan 1 00:00:0	0 1970		
Last Time Shift	000000			
Error Count	000000			
Codeword	00005200			
Triple DES	NO			
Max Input Fields	0	- → Im	portant data about th	ne token
Response Length	10			
Response Type	DEC			
Response Checksum	NO			
Time Step Used	000036			
Static Password Supported	YES			
Unlock Supported	NO			
PIN Enabled	YES			
PIN Change Enabled	YES		Actions you can take	for this tokon
PIN Length	04		The available action	
PIN Minimum Length	04	/	RAdmin users permi	
PIN Change Forced At Next Lo	gin NO			· · · · · ·
	 Reset this to 			
		password (PIN) for this token ssword (PIN) for this token		
	 Unlock this to 			
	 Delete this to 			
	 Anocato tris 	when to a upor		

Figure 19. Show Digipass Token details

21.3.1. Token Serial

The unique serial number for this token. It includes the application name. There can be multiple tokens with the same digits and different applications.

21.3.2. Allocated to User Name

If this token has been allocated to a user, the user name will appear here. A user cannot user their token to authenticate unless it has been allocated to them.

21.3.3. Algorithm

This identifies what sort of mode the Digipass token operates in. Possibilities are:

- RO: Response Only. The token generates a response each time it is activated. This Response is used as the password for the user to log in.
- CR: Challenge/Response. For each authentication, Radiator sends a challenge to the user. The user enters the challenge into the token using its keypad, and the token generates a matching Response, which is used as the password for the user to log in.
- SG: Signature. The token can be used to generate a digital signature, and is usually not used for logging in via Radiator.

Radiator supports authentication by both RO and CR tokens.

21.3.4. Token Model

Indicate what type of Digipass token this is. Possibilities are: AKII, AUTCD, DP100, DP300, DP500, DP600, DP700 etc.

21.3.5. Use Count

Indicates how many times this token has been authenticated since being imported.

21.3.6. Last Time Used

Indicates the last time this token was used. If the token has never been used, it will show 'Thu Jan 1 00:00:00 1970'.

21.3.7. Last Time Shift

Indicates the time shift in seconds the last time the token was used.

21.3.8. Error Count

Indicates how many consecutive authentication errors have been detected. If this exceeds a certain threshold (check with your Radiator administrator) this user will not be able to authenticate.

21.3.9. Codeword

Describes the crypto algorithm used by this token.

21.3.10. Triple DES

Indicates if this token uses triple-DES. YES or NO.

21.3.11. Max Input Fields

If this token can be used for signatures, indicates the maximum number of fields that can be signed.

21.3.12. Response Length

Indicates how many characters in the tokens response.

21.3.13. Response Type

Indicates whether the tokens response is hexadecimal or decimal. HEX or DEC.

21.3.14. Response Checksum

Indicates whether the response has a checksum digit.

21.3.15. Time Step Used

Indicates the size of the timestep this token uses.

21.3.16. Reset this token

This link resets a number of Digipass counters, including Last Time Used, Last Time Shift and Error Count. Digipass provides automatic clock synchronization between Radiator and the Digipass token, but if a token has not been used for a long time, its clock may be out of synchronization. Resetting the token will allow new clock synchronization at the next authentication. Also if authentication has been locked because of too many incorrect authentications, Resetting will clear the error count.

21.3.17. Reset static password for this token

This can be used with a Digipass that has a static password (e.g Digipass GO 1). After clicking on 'Reset static password for this token', the user will have to define a new static password at their next authentication.

21.3.18. Set static password for this token

This can be used with a Digipass that has a static password (e.g Digipass GO 1). After clicking on 'Set static password for this token', RAdmin prompts you for a new static password that the user will have to use at their next authentication.

21.3.19. Unlock this token

Some types of Digipass require the user to enter a PIN into the Digipass before it can be used to generate a response. If the wrong PIN is entered into the Digipass too many times, it will be come locked, and you will have to use this function to unlock the token. When the token becomes locked, it will display a random number, which you must enter into the unlock token field. When you click on the /Unlock this token' link, a new page will appear with a field where you enter the number displayed by the token, and click 'Unlock'. The resulting Unlock Code must be entered by the user into their Digipass in order to unlock it.

21.3.20. Deallocate user from this token

This link deallocates the currently allocated user from this token, allowing it to be allocated to another user. After Deallocating a user, they will not be able to authenticate with that Digipass token.

21.3.21. Delete this token

This link deletes the Digipass token from the Radmin database.

21.3.22. Allocate this token to user xxxxx

This link will only appear during the process of allocating a token to a user. In order to allocate a token to a user, you must first go to the 'Edit User' page, click on the 'Allocate a Digipass token to xxxx', then search for and select a token and then click on the 'Allocate this token to user xxxx' link.

22. TOTP and HOTP (OATH) support

RAdmin can optionally support TOTP and HOTP tokens developed by OATH [https://openauthentication.org/ [https://openauthentication.org/]]. TOTP and HOTP are defined by RFCs 6238 and 4226, respectively. Such tokens provide much higher levels of security than static passwords. These tokens are created by RAdmin OATH tokens are supported on all RAdmin platforms. These tokens are typically provisioned to a mobile device app, such as Google Authenticator or Microsoft Authenticator.

22.1. Create and assign a TOTP or HOTP Token

To create a new token and assign it to a user, start by searching for the user with 'List User' page. If the user doesn't exist yet, create a new user with 'Add User' page. New token is created from the 'Edit User' page.

List Users	Add User	List OATH tokens	List Service Profiles	Add a Service Profile
Message Log	Authentication Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Admin Users	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Real	m			
RAdmin 1.19 on radmin.de	v.open.com.au Logged in as: an	onymous		
Edit User				
uit User				
User Name	mikem			
Password	********	help?		
Email Address		help?		
Full Name		help?		
Service profile	0	help?		
Valid from	2022-10-07 14:12	help?		
Valid to	2023-10-07 00:00	help?		
Static IP Address		help?		
Login time left		help?		
Bad login count	0	help?		
Max simultaneous logins	1	help?		
	Update Delete	_	-TOTP and HOTP to	ken operations
	 List Usage for mikem Show RADIUS attributes for 	or User mikem		
	 Create an OATH token to r 	nikem		
	 List OATH token(s) allocate 	ed to mikem		

Figure 20. Add or view user's TOTP or HOTP token

When you click 'Create an OATH token to ...' link, the 'Create OATH Token' page allows you to define additional token settings, such as 'Issuer' which defaults to 'RAdmin'. Parameter 'TimeStep in seconds' is not

applicable to HOTP tokens. In most cases only the 'Issuer' should be set and the other parameters can be left to their default values.

Figure 21. Adding a new TOTP token

List Users		Add User		List OATH tokens	List Service Profiles	Add a Servi	ice Profile
Message Log		Authentication	log	Usage summary	Current sessions	List Usage	
Edit RAdmin Conf	ig	List Admin Use	rs	Add Admin User	List Permissions pr	ofiles Add Permis	sions profile
List Radius Client	3	Add Radius Cli	ent	List Proxy Realms	Add Proxy Realm	List Indirect	Proxy Realms
Add Indirect Proxy	Realm						
RAdmin 1.19 on rad	min dev open	com au Looged in	as:	0110			
s same in the ortified	and a stroppen.						
			as. Lanonym	ous			
			as. Lanonym	ous			
reate C	АТН			ous			
reate C	ATH			005			
		Token		005			
		Token		005			
		Token	ao. Lanonym	005			
		Token		005			
e this page to create	e OATH loken	Token data		UUS			
e this page to create	e OATH loken	Token					
e this page to creat	Example c	Token data		008			
e this page to creat	e OATH loken	Token data					
e this page to create sauer: oken type:	Example c	Token data					
e this page to create sauer: oken type:	Example c	Token data					
ie this page to creat sauer: oken type: ligita:	Example c	Token data		008			
se this page to creat sauer: oken type: Ngita:	Example c	Token data					
ie this page to creat seuer: oken type: ligita: IMAC Algorithm:	Example c TOTP c SHA-1 C	Token data					
se this page to creak ssuer: loken type: lights:	Example c	Token data					
se this page to creak ssuer: loken type: lights:	Example c TOTP c SHA-1 C	Token data					
ie this page to creat seuer: oken type: ligita: IMAC Algorithm:	Example c TOTP c SHA-1 C	Token data					
Create C se this page to create sauer: foken type: Digits: HMAC Algorithm: TimeStep in second:	Example c TOTP C 6 SHA-1 C 30	Token data					

22.1.1. Issuer

Typically the name of organisation, organisation unit or service the token relates to. The client apps display this information to help the user to select the correct token. The issuer values does not affect how the token values are calculated. Default to 'Radmin'.

22.1.2. Token type

Type of OATH token, its value is **totp** or **hotp**. TOTP tokens are the most common type.

22.1.3. Digits

Number of digits the client app calculates and server requires for authentication. Defaults to 6. Other values are permissible but may not be supported by all client apps.

22.1.4. HMAC Algorithm

Typically SHA1. Other values are permissible but may not be supported by all client apps.

22.1.5. Timestep in seconds

Time interval in seconds when client app and server calculate a new token. Defaults to 30 seconds. Other values are permissible but may not be supported by all client apps.

When you click 'Create', RAdmin creates the token, writes its details into the RAdmin database and displays token provisioning information in text and QR code image format. The QR code is in Windows BMP format. If you save the image, name it with **.bmp** suffix.

The code displayed above QR code image is the token seed in Base32 format. This format is accepted by most, if not all, applications as an alternative for QR code based provisioning.

	~		@ radmin.dev.opc	:n.com.au/cgi-bin/Radmin/priva	te/create0ATH.pl?databa	<u>å</u>
List Users		Add User		List OATH tokens	List Service Profiles	Add a Service Profile
Message Log		Authenticatio	n Log	Usage summary	Current sessions	List Usage
Edit RAdmin Confi	g	List Admin Us	iers	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients	;	Add Radius C	Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy	Realm					
RAdmin 1.19 on radr	min.dev.open	.com.au Logged	in as: anonym	ous		
Create O	ATH	Token				
Use this page to create						
lasuer:						
Token type:	TOTE 0					
Digits:	6					
HMAC Algorithm:	SHA-1 0					
TimeStep in second:	30					
	Create			Token se	eed value encoded in	the QR code
Created OATH token fo	r user 'mker	m', issuer 'Examp	le organisation';			-
KE3Y CSBG LEQH TE	2A AE6Z PJI	LU UYC5 KJMH				
i i∎tære¢	s and					
िल्लि	2010					
1081237	144					
1.122.0	6. F	2	All token	parameters en	coded	
7173	÷			ormat QR code		
1 TE 1999	125	6 ⁹			inage	
24.00	2.63	195 - E				
ni 20	-90 X	H2				
El Sager	* 2 ¥					
If there is a problem wit	th this pace	please contact w	ebmaster			
and a second firm						

Figure 22. Newly created TOTP token provisioning information

22.2. List, re-assign and delete TOTP and HOTP Tokens

Use 'List OATH tokens' page to search and locate one or more tokens by token IDs or usernames. The search results show token ID which is a random string created by RAdmin. The token ID is not the token seed. The token seed is not displayed after the token is created.

	Add User	List OATH tokens	List Service Profiles	Add a Service Profile
Message Log	Authentication Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Admin Users	Add Admin User	List Permissions profiles	Add Permissions profile
ist Radius Clients	Add Radius Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Realn	n			
and the local data and the states				
RAdmin 1.19 on radmin.dev	open.com.au Logged in as: a	nonymous		
ist OATH 1.	okens			
is page shows available OA	TH tokens			
alian ID	and films	holp?		
oken ID to	ext like	help?		
	ext like ext like mikem	help? help?		
	ext like mikem			
llocated to User Name te				
	ext like mikem			
llocated to User Name te	ext like mikem			
llocated to User Name te	ext like mikem			
Ilocated to User Name	ext like mikem Search			
Ilocated to User Name	ext like mikem			
Ilocated to User Name	ext like mikem Search ocated to User Name			

Figure 23. OATH token search results

22.3. Show OATH Token details

When you click a 'Token ID' on the 'List OATH Tokens' page, you can see the token details. The date and time values use RAdmin server's settings and are local to the server RAdmin runs on.

The token detail page allows changing the token assignment and provides the possibility to completely delete a token.

Figure 24.	OATH token	details
------------	------------	---------

	0 @ radmin.dev	open.com.au/cgi-bin/Radmin/private/sh	ow0ATH.pl?databas 🔿	Ċ 333
List Users	Add User	List OATH tokens	List Service Profiles	Add a Service Profile
Message Log	Authentication Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Admin Users	Add Admin User	List Permissions profiles	Add Permissions profile
List Radius Clients	Add Radius Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Realm RAdmin 1.19 on redmin.dewope	n.com.au Logged in as: anony Token details			
Current local time is: Fri Oct 7 14:				
Token ID	f7690e0f9240662bc14	1		
Allocated to User Name	mikem			
Token Type	totp			
Algorithm	SHA1			
HOTP Counter Low	0			
HOTP Counter High	0			
Last Time Used	Authentication server lo	ocal time: Fri Oct 7 14:32:04 20		
Consecutive Bad Login Co	unt 4		Available toke	n operations
	 Deallocate user f Delete this token Allocate this toke 			
If there is a problem with this page	, please contact webmaster			

22.3.1. Token ID

Random unique ID for the OATH token. This is not the token seed.

22.3.2. Allocated to User Name

This indicates whether the token has been allocated to a given user.

22.3.3. Token type

Type of OATH token. Its value is **totp** or **hotp**. The value is set when the token is created.

22.3.4. Algorithm

Typically SHA1. Other values are permissible but may not be supported by all client apps. The value is set when the token is created.

22.3.5. HOTP Counter Low and HOTP Counter High

Current values for counters HOTP uses. Not used with TOTP tokens.

22.3.6. Last time used

This timestamp tells when the token information in the DB was last used to verify a token. It's the timestamp of last successful or failed token verification.

22.3.7. Consecutive Bad Login Count

How many times token verification has failed after the last successful verification.

23. Yubikey support

RAdmin can optionally support Yubikey tokens from Yubico (http://www.yubico.com [http:// www.yubico.com]). Yubico tokens are small USB devices that act like a keyboard and which type in a onetime-password when the button is pressed. They can be purchased from Yubico and issued to your users. Such tokens provide much higher levels of security than static passwords. Yubikey is supported on all RAdmin platforms.

Each Yubikey token has a unique Token ID (also called the public identity in Yubico documentation), and a secret AES cryptographic key. In order to authenticate a Yubikey token, the RAdmin database must contain a Yubikey record containing both the Token ID and the AES secret for that key. You can add new tokens into the RAdmin database with the RAdmin 'Import Yubikey Tokens' page. After a token is imported, it must be allocated to a user before that user can use the token to authenticate.

23.1. Import Yubikey Tokens

Before you can administer a token or assign it to a user, you must import the token data into the RAdmin database. This page allows you to import data for one or more tokens.

It is necessary to use the Yubico Personalization Tool (https://www.yubico.com/products/services-software/ personalization-tools/use/ [https://www.yubico.com/products/services-software/personalization-tools/use/]) to manually initialise each Yubikey with a new Token ID and AES Secret, and then cut-and-paste them into the RAdmin 'Import Yubikey Tokens' page.

Note

Support for Windows COM/ActiveX browser plugin for intialising Yubikeys was removed in RAdmin 1.16.

The following chapters describe the fields available on the Import Yubikey Tokens page.

23.1.1. Token ID

Enter the unique Token ID (also called the public identity in Yubico documentation). This is a 12 character Hex string, with optional spaces.

Note

If you would like to use private identity as Token ID, do not enable 'Auto create user and allocate token' and allocate tokens separately. You may also need to modify Radiator configuration. AuthSelect in AuthBy SQLYUBIKEY clause must return TOKEN_ID that is needed for CheckSecretId configuration parameter to work. See AuthBy SQLYUBIKEY in Radiator reference manual for more information.

23.1.2. Token AES Secret

Enter the token AES secret. This is a 32 character Hex string, with optional spaces.

23.1.3. Overwrite existing tokens with the same Token ID

If there is already a Yubikey token with this Token ID is already in the RAdmin database, this flag will cause it key to be overwritten. If this flag is not set, the import operation will fail.

23.1.4. Auto create user and allocate token

If this option is set, the Import will both add the token to the RAdmin database and also create a new user whose user name is the same as the Token ID, and will allocate the token to that user. The new user will be created with validity dates from the current time to the same date and time next year.

23.2. Initialising Tokens with Yubico Personalization Tool

You must use the Yubico Personalization Tool to manually initialise the Yubikey, and then cut-and-paste the new token details into the Import form. The Yubico Personalization Tool can be downloaded from http://www.yubico.com/developers/personalization/ [http://www.yubico.com/developers/personalization/].

Yubico OTP OATH-HOTP Stat		Personalization Tool	Tools About	Exit	Vubice OTP	OATH-HOTP Static Password	YubiKey Personalization Tool Challenge-Response Setting	s Tools Abou	rt Exit
		geneepona secongo		YubiKey is inserted	Tubles off		ibico OTP mode		YubiKey is inserted
Yub	iKey Personaliza	ition Tool			Quick Quickly progr	am a Yubikey for use with Yubice Validation S	Renver Quick	k mode	
Personalize your YubiKey in: Yubico OTF Mode OATH-HOTP Mode Static Password Mode Under Settings For help and discussion, head to https://wwb.co/forum		Application Version: 3.1.25 Ubray Version: 1.10.1	Ne Pili 2. 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	tornhund status: t configured rmware Versions: 4-2 terial Number m: 1942453 0 configured total status terial Supported aboo OTP v Configurations v Configurations v table Researced v table Re	Advanc Allows you to	zdprogram and ar more Yubilays with greater	cantrel over the configuration values		Programming status: Net configured Firmware Version: 2.4.2 Serial Number Den: 1942453 Hon: 16305 Modher: bio Valob: 01 Pestures Supported Valob: Valob: 01 2 Ceffayations 2 Caffu-HOT Static Research V
Copyright @ 2011-2016 Yubico. All R	ights Reserved.		U N U	hallenge-Response 🗸 pdatable 🗸 def 🗶 niversal 2nd Factor 🗶					Challenge-Response V Updatable V Ndef X Universal 2nd Factor X
			}	ubico					yubico
Yubico OTP OATH-HOTP Sta	YubiKey P	Aersonalization Tool	Tools About	Exit	Yubico OTP	OATH-HOTP Static Password	YubiKey Personalization Tool	e Toole Abor	t Exit
✓ YubiKey (Public ID: vvulhhfgrgft) has	been successfully configure	ed	Tools About	YubiKey is inserted	Tubleo OTP	OATH-HOTP Static Password	Chanenge-Response Setting	s roois Abou	YubiKey is inserted
Program	n in Yubico OTP i	mode - Quick Iblic identity rar	dom			Number	Converter		
Configuration Slot Select the configuration slot to be program		blic identity fai	luom		Hexadecimal	(12 chars) If e7 66,45 c5 4d			
Configuration Slot 1	Configuration Slot 2		0		Modhex	(12 chars) If e7 66 45 c5 4d (12 chars) vv ui nh fg rg ft		Сору	
Yubico OTP Parameters (auto generate Public Identity (6 bytes Modhex)	ed) ev ui hh fg rg ft		Đ		Decimal	291360318376781		Сору	
Hide values				ogramming status: ot 1 configured	Actions				Programming status: Slot 1 configured
	'1 e8 56 71 c6 09 If fb 76 4b b9 74 c9 Cd db 65	d4 8d 0a a9 cf 12	2.	rmware Version: 4.2 Serial Number	Convert	Reset Back			Firmware Version: 2.4.2 Serial Number
Actions Press Write Configuration button to progra	m your YubiKey's selected con			ec: 1942453		/			Dec: 1942453
		generate Back		iox: 1da3b5 📋 Iodhex: btleng 📋	/	/			Hex: 1da3b5
†				Features Supported					Features Supported
Ke	y, random		2	Configurations V ATH-HOTP V					2 Configurations V OATH-HOTP V
Click to complete in	itialisation		5	tatic Password v can Code Mode v					Static Password V Scan Code Mode V
			c	hallenge-Response 🗸	/				Challenge-Response ✓ Updatable ✓
			N	def X	/				Ndef 🛛 🗙 Universal 2nd Factor 💥
Cut-and-paste identity into To Key into Toke	oken ID and	t	١	ubico					yubico
	000()		radmin.dev.	open.com.au/cgi-bin/Re	admin/private/imp	ortYubikey.pl?data	(†) (†) [+	
	List Users	Add Use		List Yubikey to	kong	Import Yubikey tokens	List Service Profiles		
	Add a Service Pr			List Tubikey it	ACTI3	Import rubikey tokens	List Service Fromes		
	Message Log	Authenti	ation Log	Usage summa	ary	Current sessions	List Usage		
	Edit RAdmin Con			Add Admin Us		List Permissions profiles	Add Permissions profile		
	List Radius Clien		ius Client	List Proxy Rea	alms	Add Proxy Realm	List Indirect Proxy Realms		
	Add Indirect Prox				_				
		admin.dev.open.com.au Lo	/	mous	_				
	Import \	Yubikey To	ken						
						min database. After importing token (public identity) and a random AES			
		ID and AES Secret below in							
		↓ ↓							
	Token ID:	f1 e8 56 71 c6 09							
	Token AES Secret:	8f fb 76 4b b9 74 c9 0	ld db 66 d4 8d 0a	a9 cf 12					
	Options:	Overwrite existing toke	ns with the same To	ken ID					
		Auto create user and a	llocate token						
		Import							
	If there is a problem v	with this page, please cont	act admin						

Figure 25. Initialising and Importing Yubikey token using Yubico Personalization Tool

23.3. List Yubikey Tokens

This page allows you to see which Yubikey tokens have been imported into RAdmin, and which ones are available for allocation to a user. A user can't use their token for authentication until it has been allocated to them in RAdmin.

Add a Service Profile	Add User	List Yubikey tokens	Import Yubikey tokens	List Service Profiles
Add a Service Profile]			
Message Log	Authentication Log	Usage summary	Current sessions	List Usage
Edit RAdmin Config	List Admin Users	Add Admin User	List Permissions profiles	Add Permissions profile
ist Radius Clients	Add Radius Client	List Proxy Realms	Add Proxy Realm	List Indirect Proxy Realms
Add Indirect Proxy Realm]			
ist Subs Products	Add a Subscription Product	List Subscriptions	Add a subscription	
is page shows available Yubike oken ID text I Ilocated to User Name text I	ke help			
	Search			
ind 3 matches:				
Ind 3 matches:		o see that token c	letails	

Figure 26. List Yubikey Tokens

23.3.1. Token ID

This specifies the unique Token ID number for a token.

23.3.2. Allocated to User Name

This indicates whether the token has been allocated to a given user.

23.4. Show Yubikey Token details

This page shows important details about a single Yubikey token. These details are encoded in the RAdmin database for each token. Importing a token with the 'Overwrite existing tokens with same Token ID' option set will reset all these details.

List Users	Add	User		List Yubikey tokens	Import Yu	bikey tokens	List Service Profiles
Add a Service Profile							
Message Log	Auth	entication Log		Usage summary	Current se	essions	List Usage
Edit RAdmin Config	List /	Admin Users		Add Admin User	List Permi	ssions profiles	Add Permissions profile
List Radius Clients	Add	Radius Client		List Proxy Realms	Add Proxy	/ Realm	List Indirect Proxy Realms
Add Indirect Proxy Rea	lm						
RAdmin 1.16 on radmin.d	wooen.com.a	I logged in as:	nonymou	IP.			
how Vubi		akan d	atail	-			
Show Yubi	key To	oken d	etail	s			
				S tey token. The links at the be	tom allow you to a	locate and deallocate	ate this token
					tom allow you to a	locate and deallocate	ate this token
					tom allow you to a	locate and deallocate	ate this token
his page shows all the info		latabase about a s			tom allow you to a	locate and dealloca	ate this token
nis page shows all the info	f1e8567	latabase about a s			tom allow you to a	locate and deallocate	ate this token
nis page shows all the info	f1e8567	latabase about a s			tom allow you to a	locate and dealloca	ate this token
nis page shows all the info Foken ID Allocated to User Nam	f1e8567	latabase about a s			tom allow you to a	locate and dealloc:	ate this token
his page shows all the info Token ID Allocated to User Nam Counter	f1e8567 jdoe 3	latabase about a s			tom allow you to a	locate and dealloc:	ate this token
his page shows all the info Token ID Allocated to User Nam Counter	f1e8567	latabase about a s			tom allow you to a	locate and dealloca	ate this token
his page shows all the info Token ID Allocated to User Nam Counter Low	f1e8567 jdoe 3	latabase about a s			tom allow you to a	locate and dealloca	ate this token
his page shows all the info Token ID Allocated to User Nam Counter Low	f1e8567 jdoe 3 24 0	latabase about a i	single Yubik	tey token. The links at the b	tom allow you to a	locate and dealloca	ate this token
his page shows all the info Token ID Allocated to User Nam Counter Low	fle8567 jdoe 3 24 0 • De	latabase about a i	single Yubik	tey token. The links at the b	tom allow you to a	locate and deallocate	ate this token
his page shows all the info Token ID Allocated to User Nam Counter Low	f1e8567 jdoe 3 24 0 • De • De	latabase about a s 1c609 allocate user fro	ingle Yubik m this tok	tey token. The links at the b	tom allow you to a	locate and dealloca	ate this token
his page shows all the info Token ID Allocated to User Nam Counter Low	f1e8567 jdoe 3 24 0 • De • De	latabase about a i	ingle Yubik m this tok	tey token. The links at the b	tom allow you to a	locate and dealloca	ate this token
Show Yubi his page shows all the info Token ID Allocated to User Nan Counter Low High	f1e8567 jdoe 3 24 0 • De • De	latabase about a s 1c609 allocate user fro	ingle Yubik m this tok	tey token. The links at the b	tom allow you to a	locate and dealloca	ate this token

Figure 27. Show Yubikey Token details

23.4.1. Token ID

The tokens unique Token ID.

23.4.2. Allocated To User Name

The user this token is allocated to (if any).

23.4.3. Counter

If the token has been authenticated by Radiator at least once, this field will contain the Yubikey session counter of the last authentication.

23.4.4. Low

If the token has been authenticated by Radiator at least once, this field will contain the key use counter for this Yubikey session.

23.4.5. High

This parameter is not currently used. Low and High fields were used differently with old Radiator versions. See Radiator revision history for the details.

24. Some common tasks

The following chapters describe some of the common tasks.

24.1. Adding a new user

1. Click on [Add a User] in the toolbar. You will get the Add a User page. See Add a User, Edit a User on page 7.

- 2. Enter a user name. This will be the name the user must use to log in with.
- 3. Make sure the automatically generated password is suitable.
- 4. Choose a suitable Service Profile from the set of Service Profiles configured into your RAdmin system.
- 5. Enter a suitable Valid to date. This will be the last date/time the user will be allowed to log in. Don't forget that the default time is midnight at the beginning of that day.
- 6. If the user needs a static IP address, enter it as an IP address, in the format 203.63.154.1
- 7. If the user is to be limited to a maximum amount of usage, enter the number of seconds in Login time left field. If there is no limit, leave it blank.
- 8. Click on the **Add** button.
- 9. The user should now be able to log in, using the user name and password you entered.

24.2. Changing a password

- 1. Find the user you are interested in, perhaps by using the List Users page. See Finding a User on page 49. See List Users on page 10
- 2. Click on the user name to get the Edit a User page. See Add a User, Edit a User on page 7
- 3. Delete the old password and enter a new one.
- 4. Click on the **Update** button.
- 5. The new password is now in effect. The user will have to use the new password next time they log in. Any current sessions are unaffected.

24.3. Finding a User

- 1. Click on [List Users] in the toolbar. You will get the List Users page, including a list of all your current users. See List Users on page 10.
- 2. Enter your search criteria in the top section.
- 3. Click on the **Search** button.
- 4. When the page reappears, look in list in the bottom section for the user you are interested in. If you still cant see them, change your search criteria and press the **Search** button again.
- 5. When you find the user you are interested in, click on the User Name, this will take you to the Edit a User page for that user. See Add a User, Edit a User on page 7.

24.4. Deleting a user

- 1. Find the user you are interested in, perhaps by using the List Users page. See Finding a User on page 49. See List Users on page 10
- 2. Click on the user name to get the Edit a User page. See Add a User, Edit a User on page 7.
- 3. Click on the **Delete** button.
- 4. The user has now been removed from the database and they will not be able to login in again. Note that this has no effect on any current sessions they may have: if they are already logged in, this will not force them to disconnect.

24.5. Checking who is currently on-line

- 1. Click on [Current sessions] in the toolbar. You will get the Current sessions page. See Current sessions on page 16
- 2. At the bottom of the page is a list of all the current sessions.
- 3. If you have lots of sessions and can't find the one you are interested in, enter some search criteria in the top section and click on the **Search** button.

24.6. Checking a user's session history

- 1. Find the user you are interested in, perhaps by using the List Users page. See Finding a User on page 49. See List Users on page 10.
- 2. Click on the user name to get the Edit a User page. See Add a User, Edit a User on page 7.
- 3. Click on the "Usage for …" hotlink at the bottom right. You will get a List Usage page showing all sessions for that user in the database. See List Usage on page 11.

24.7. Checking usage summaries

- 1. Click on [Usage summary] in the toolbar. You will get the Usage summary page. See Usage Summary on page 14.
- 2. At the bottom of the page is a list of all users that have sessions in your accounting table. For each table you will see the total time online (in seconds), plus the total bytes transferred in and out (in means into your network, out means out to the user).
- 3. If you have lots of users and can't find the one you are interested in, enter some search criteria in the top section and click on the **Search** button.

24.8. Checking the message log

- 1. Click on [Log] in the toolbar. You will get the Log page. See Log on page 15.
- 2. Log messages will be shown in the bottom part of the page. The most recent messages will be shown near the top of that section.
- 3. If you cant find the message(s) you are interested in, you can limit the search be entering search criteria in the top part of the page and pressing the **Search** button.

24.9. Checking modem usage

- 1. Click on [Modem usage report] in the toolbar. You will get the "Modem usage report" page. See Modem usage report on page 19.
- 2. Usage summaries by NAS and Port will be shown in the bottom part of the page. If you see any ports with an unusually low "Session" count, it may be because the associated modem is dead.

24.10. Help a user with login problems

- 1. Click on [Authentication Log] in the toolbar. You will get the "Authentication Log" page. See Authentication Log on page 20.
- 2. Enter the user name into the User name field.
- 3. Click on the **Search** button. You will see a list of recent authentication successes and failures. The Failure messages will have a Failure reason that will help identify the user's problem.

24.11. Import Digipass tokens from a DPX file

- 1. Ensure the DPX file is on your workstation: the computer where your web browser is running.
- Click on [Import Digipass tokens] in the toolbar. You will get the "Import Digipass Tokens" page. See Import Digipass Tokens on page 33.
- 3. Enter the name of the DPX file into 'Import DPX File: field or clicking on the file browser button.
- 4. Click on the **Import** button.

24.12. Allocating a Digipass token to a user

- 1. Ensure the tokens data has been imported. See Import Digipass tokens from a DPX file on page 51.
- 2. Ensure the user has been created. See Adding a new user on page 48.
- 3. Using the List Users page, find the user you wish to allocate a token to. Click on the User Name. You will get the "Edit User" page. See Add a User, Edit a User on page 7.
- 4. Click on the 'Allocate a Digipass token to xxxx' link near the bottom of the Edit User page. You will get the 'List Digipass Tokens' page. See List Digipass Tokens on page 35.
- 5. Click on the **Search** button. The "List Digipass Tokens" page will appear again, showing the tokens that matched your search criteria. You will be able to see which tokens do not have a user allocated to them.
- 6. Select the token you wish to allocate to the user by clicking on the token serial number. You will get the "Show Digipass Token Details" page. See Show Digipass Token details on page 36.
- 7. Click on the "Allocate this token to user xxxx" link near the bottom of the page. You will get the "Show Digipass Token Details" page again showing the user's name in the "Allocated to User Name" field.
- 8. Ensure the user is given the physical token matching the one you allocated.

24.13. Import a Yubikey token

- 1. Ensure the YubiKey Personalisation Tool is installed on your browser host.
- 2. Open the Import Yubikey Token page.
- 3. Insert a Yubikey token into a USB port on your browser host. Launch the Personalisation Tool. Initialise the token. See Initialising Tokens with Yubico Personalization Tool on page 45. When the token is initialised, enter new TokenID and AES Secret into the Import form.
- 4. Click on Import. This will add the token details to the RAdmin database.

24.14. Allocating a Yubikey token to a user

- 1. Ensure the token data has been imported. See Import a Yubikey token on page 51.
- 2. Ensure the user has been created. See Adding a new user on page 48.
- 3. Using the List Users page, find the user you wish to allocate a token to. Click on the User Name. You will get the "Edit User" page. See Add a User, Edit a User on page 7.
- 4. Click on the 'Allocate a Yubikey token to xxxx' link near the bottom of the Edit User page. You will get the 'List Yubikey Tokens' page. See List Yubikey Tokens on page 46.
- 5. Click on the **Search** button. The "List Yubikey Tokens" page will appear again, showing the tokens that matched your search criteria. You will be able to see which tokens do not have a user allocated to them.
- 6. Select the token you wish to allocate to the user by clicking on the token serial number. You will get the "Show Yubikey Token Details" page. See Show Yubikey Token details on page 47.

- 7. Click on the "Allocate this token to user xxxx" link near the bottom of the page. You will get the "Show Yubikey Token Details" page again showing the user's name in the "Allocated to User Name" field.
- 8. Ensure the user is given the physical token matching the one you allocated.