



Using the REX Accounting Script

This chapter describes how to use the REX Accounting script. The REX Accounting Script (RAS) writes RADIUS Accounting requests to a local, flat file and is included as an option for Cisco Access Registrar. It is designed to be attached to a Cisco Access Registrar IncomingScript or OutgoingScript point. When used in conjunction with the Cisco Access Registrar built-in proxy support, the server will concurrently store a local copy of an Accounting request and proxy another copy to another RADIUS server.



Note

Unless you require log rotation at an exact time or when the accounting log reaches a specific file size, Cisco recommends that you use service grouping to log and proxy accounting packets.

RAS can be attached to more than one Cisco Access Registrar extension point. For example, in a dial-up resale scenario, you might configure Cisco Access Registrar to proxy Accounting requests to many different Remote Servers (by realm). For some subset of those, you may want to keep a local copy of the Accounting requests. In this case, RAS could be installed as the IncomingScript on just the Services for which a local copy is desired.



Note

Also included is the **DropAcctOnOff** Script. This script causes Cisco Access Registrar to drop all Accounting-Requests with an **Acct-Status-Type** of **Accounting-On** or **Accounting-Off**.

Building and Installing the REX Accounting Script

To build and install RAS you must do the following:

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- Step 1 Change directory to **\$INSTALL/examples/rexacctscript**.
 - Step 2 Modify the **Makefile** to ensure the **AR_INSTALL_DIR** variable points to the directory where the Cisco Access Registrar software was installed, and then choose a compiler (**gcc** or **SUNPro CC**).
 - Step 3 From the command line prompt, type:
host% **make**
 - Step 4 Login as user **root**.
 - Step 5 From the command line prompt, type:
host# **make install**

Configuring the Rex Accounting Script

To configure RAS, do the following:

Step 1 Start the Cisco Access Registrar **aregcmd** configuration utility and login:

```
> $INSTALL/usrbin/aregcmd -C localhost -N admin -P aicuser
Access Registrar Configuration Utility Version 1.3

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Inc. All rights reserved.

Logging in to localhost
[ //localhost ]

    LicenseKey = xxxx-xxxx-xxxx-xxxx
    Radius/
    Administrators/

Server 'Radius' is Running, its health is 10 out of 10
-->
```

Step 2 Using **aregcmd**, create a new Cisco Access Registrar Script object:

```
--> cd /Radius/Scripts
[ //localhost/Radius/Scripts ]
    Entries 1 to 20 from 39 total entries
    Current filter: <all>
    ACMEOutgoingScript/
    AscendIncomingScript/

<... other output deleted...>

--> add LocalAccounting
Added LocalAccounting
```

Step 3 Using **aregcmd**, fill in the details of the new Cisco Access Registrar Script object. See [Chapter 3, “Access Registrar Server Objects,”](#) for more details.

```
--> cd LocalAccounting
[ //localhost/Radius/Scripts/LocalAccounting ]
    Name = LocalAccounting
    Description =
    Language =
    Filename =
    EntryPoint =
    InitEntryPoint =
    InitEntryPointArgs =

--> set Desc “Log Accounting requests to local file”
Set Description “Log Accounting requests to local file”

--> set lang REX
Set Language REX

--> set filename libRexAcctScript.so
Set Filename libRexAcctScript.so
```

```

--> set entry RexAccountingScript
Set EntryPoint RexAccountingScript

--> set initemptypoint InitRexAccountingScript
Set InitEntryPoint InitRexAccountingScript

--> set initemptypointargs "-f Accounting -t 1:15"
Set InitEntryPointArgs "-f Accounting -t 1:15"

--> ls
[ //localhost/Radius/Scripts/LocalAccounting ]
  Name = LocalAccounting
  Description = "Log Accounting requests to local file"
  Language = REX
  Filename = libRexAcctScript.so
  EntryPoint = RexAccountingScript
  InitEntryPoint = InitRexAccountingScript
  InitEntryPointArgs = "-f Accounting -t 1:15"

-->

```

Step 4 Using **aregcmd**, attach the new Cisco Access Registrar Script object to the appropriate Cisco Access Registrar Scripting point. See [Chapter 3, "Access Registrar Server Objects,"](#) for more details.

```

--> set /radius/IncomingScript LocalAccounting
Set /Radius/IncomingScript LocalAccounting

```

Step 5 Using **aregcmd**, save the configuration modifications:

```

--> save
Validating //localhost...
Saving //localhost...

```

Step 6 Using **aregcmd**, reload the server:

```

--> reload
Reloading Server 'Radius'...
Server 'Radius' is Running, its health is 10 out of 10

```

Specifying REX Accounting Script Options

The REX Accounting Script supports the options shown in [Table 15-1](#).

Table 15-1 REX Accounting Script Supported Options

Option	Description
-f <filename>	Required. Specify the name of the output file.
-t <HH:MM[:SS]>	Specify a time of day to roll the output file. Note, this is time on the 24-hour clock, for example, 00:05 = 12:05am, 13:30 = 1:30pm. This option can not be used with the -i option.
-i <seconds>	Specify the number of seconds between rolling the output file, beginning at start-up. This option can not be used with the -t option.

Table 15-1 REX Accounting Script Supported Options (continued)

Option	Description
-s <size>[k m g]	Specify the maximum size for an output file. When the file reaches this size, it will be rolled. When specifying the <size> option, a <unit> may be included. When a <unit> is not included, the <size> is in bytes. Note, do not use a space character between the <size> and <unit> options. <unit> can be either: k = 1K, m = 1Meg, g = 1Gig.
-g	Use GMT when writing the date/time in the Accounting output file for each record (default is local time).
-G	Use GMT when naming rolled output files (default is local time).
-A	Process all packets, not just Accounting-Requests.
-I	Ignore errors when processing packets, always return successfully.
-a <buffer-count>	Pre-allocate this many Accounting buffers to improve performance.
-T <trace-level>	Set the trace level. This trace info appears in the output file (as its written by the background thread which no longer has a packet to use for logging or tracing.)
-O <script-description>	Call another REX extension before calling the RexAcctScript .
-o <script-description>	Call another REX extension after calling the RexAcctScript .

Example Script Object

This is an example of what a Cisco Access Registrar Script object using RAS might look like when viewed in the Cisco Access Registrar configuration utility, **aregcmd**:

```
[ //localhost/Radius/Scripts/REX-Accounting-Script ]
  Name = REX-Accounting-Script
  Description =
  Language = REX
  Filename = librexacctscript.so
  EntryPoint = RexAccountingScript
  InitEntryPoint = InitRexAccountingScript
  InitEntryPointArgs = "-f Accounting -t 16:20 -s 100k -o
    libRexAcctScript.so:DropAcctOnOff"
```

This example causes RAS to write to a file called **Accounting.log** (in the **logs** directory of the installation tree). The file rolls every day at 4:20pm (local time), as well as whenever it grows larger than 100k in size. RAS also runs the **DropAcctOnOff** script against every packet, after it has processed the packet.