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Release Notes for Cisco Access Registrar, Release 1.3

Introduction

This document contains important information about the 1.3 Cisco Access Registrar software. Cisco Access Registrar is a RADIUS (Remote Authentication Dial-In User Service) server that allows multiple dial-in Network Access Server (NAS) devices to share a common authentication, authorization, and accounting database.

This document is divided into the following sections:

- “Related Documentation”
- “System Requirements” section on page 2
- “Upgrade Information” section on page 4
- “Cisco Access Registrar New Features” section on page 5
- “Cisco Access Registrar Fixed Bugs” section on page 5
- “Cisco Access Registrar Bugs” section on page 7
- “Cisco Access Registrar Documentation Addendum” section on page 8
- “Compatibility” section on page 9
- “Bill of Materials” section on page 9

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- “Cisco Connection Online” section on page 10
- “Documentation CD-ROM” section on page 11

Related Documentation

The following documents are available on the Cisco Documentation CD-ROM and are companion documents to this document:

- *Cisco Access Registrar Getting Started Guide*—this book describes how to install and configure the Cisco Access Registrar 1.3 software, how to customize your site, and provides sample C and Tel scripts you can use as a basis for your own scripts.
- *Cisco Access Registrar User Guide*—this book describes Cisco Access Registrar components and how to use them.

The following list of documents contains additional information which may help you more fully understand the material described in this manual:

- *Internetworking Technology Overview*
- *Internetworking Terms and Acronyms*

System Requirements

This section describes the system requirements for installing the 1.3 Cisco Access Registrar software.

Cisco Access Registrar Full Installation

Table 1 lists the system requirements for a full installation of Cisco Access Registrar.

Table 1 Cisco Access Registrar Full Installation Requirements

Component	Requirement
CPU Architecture	SPARC
OS Version	Solaris 2.5.1
Minimum RAM	64 MB
Recommended RAM	128 MB
Recommended Disk Space	80 MB

Cisco Access Registrar Server-only Installation

Table 2 lists the system requirements for installing the server-only component of Cisco Access Registrar.

Table 2 Cisco Access Registrar Server-only Requirements

Component	Requirement
CPU Architecture	SPARC
OS Version	Solaris 2.5.1
Minimum RAM	64 MB
Recommended RAM	128 MB
Recommended Disk Space	60 MB

Cisco Access Registrar Configuration-only Installation

Table 3 lists the system requirements for installing the configuration-only component of Cisco Access Registrar.

Table 3 Cisco Access Registrar Configuration-only Requirements

Component	Requirement
CPU Architecture	SPARC
OS Version	Solaris 2.5.1
Minimum RAM	32 MB
Recommended RAM	64 MB
Recommended Disk Space	25 MB



Caution The recommended disk space does not include the amount of space needed for accounting records which can grow rapidly depending on how frequently you process and remove them from the Cisco Access Registrar disk. If Cisco Access Registrar runs out of disk space, it could cause the loss of accounting information and session management information to become corrupted.

Upgrade Information

If you are upgrading from a previous Cisco Access Registrar 1.2 release, you need not overwrite your configuration database.

Note If you upgrade and use an existing 1.2 configuration database, the first time the **aregcmd** is run (if **save** is not done by the administrator) it will ask if you want to save your changes, even if you have not changed anything. This occurs because **aregcmd** is automatically adding the **LogFileSize**, **LogFileCount**, and **AllowAccountingStartToCreateSession** parameters.

If you are running the pre-release version of Cisco Access Registrar, you should upgrade the database by reinstalling Cisco Access Registrar, and choosing to overwrite your database during installation. Follow the instructions in the installation procedure.

Modifying Your Environment

Depending on the shell you are using, modify your PATH statement so you use the correct Cisco Access Registrar executables.

Note It is occasionally difficult to determine which Cisco Access Registrar executable to use because the same executable is found in both the **\$INSTALL/bin** and **\$INSTALL/usrbin** directories.

Most executables run from the wrong directory abort with an error. When in doubt, always use the executable found in the **\$INSTALL/usrbin** directory, if present. Otherwise, use the executable in the **\$INSTALL/bin** directory. By modifying each administrator's profile or login script, you can eliminate this condition.

Using Bourne Shell, Korn, Bash or zsh

If you are using a Bourne shell (sh), Korn shell (ksh), bash, or zsh, add the following lines to each administrator's **.profile** file.

```
PATH=<install path>/usrbin:<install path/bin:$PATH
```

Using csh or tcsh

If you are using a csh or tcsh, add the following lines to each administrator's `.cshrc` file.

```
set path = ( <install path>/usrbin <install path>/bin $path )
```

Cisco Access Registrar New Features

The 1.3 Cisco Access Registrar release includes the following new features:

- 1 Concurrent local and proxy accounting streams.
- 2 Multi-valued RADIUS attribute support.
- 3 Enhanced duplicate request filtering.
- 4 Server log file roll over.
- 5 Statistics output redirection.

Cisco Access Registrar Fixed Bugs

Table 4 describes the bugs fixed in the 1.3 Cisco Access Registrar release.

Table 4 **Bugs Fixed in the 1.3 Cisco Access Registrar Release**

Bug Number	Description
CSCai02371	The two new example scripts add-example-configuration.rc and delete-example-configuration.rc do not automatically reload the server. After running either script, you must manually reload the server to update the database with your changes.
CSCai02626 CSCai03790	Enhancement: <code>aregcmd</code> can now be used to set the maximum size of the Cisco Access Registrar log files, and the number of log files kept.
CSCai03094	Can't eject the CD ROM after pkgadd if it is performed within the cdrom directory.
CSCai03185	Cisco Access Registrar does not assign an IP address (or allocate any other resources) when the reply from a remote RADIUS server contains a State attribute.

Table 4 **Bugs Fixed in the 1.3 Cisco Access Registrar Release (continued)**

Bug Number	Description
CSCai03346 CSCai03446	The AddProfile method does not come back with an error code if the Profile is not found.
CSCai03376	Enhancement: the SessionManager for an Accounting-Request is automatically determined by the SessionManager chosen for the previous Access-Request for the same NAS and NAS-Port.
CSCai03389	Enhancement: The OutagePolicy on a Service now applies to Accounting-Requests, as well as Access-Requests.
CSCai03392	The Adaptive Round Trip Time (RTT) algorithm can cause the dynamic timeout value to become too small and cause invalid timeouts on a RemoteServer.
CSCai03501	If a NAS fails to return the State Attribute in Accounting-Requests, SessionManagement does not operate properly.
CSCai03579	The RemoteServer name should be displayed with an IP address in aregcmd stats output.
CSCai03580 CSCai03816	Enhancement: aregcmd now supports the \$PAGER environment variable. Currently, this is only used when presenting statistics, and it is only used in interactive mode.
CSCai03584	Adding attributes in the standard attribute space with the same name as an existing vendor-specific attribute causes aregcmd to fail.
CSCai03719	Enhancement: “Static” IP Addresses (from Profiles or Proxies) are now visible in Session data. See “Session Notes” feature for more information.
CSCai03789	Incorrect error message displayed when NULL (zero) is passed as a string value to any of the REX API put functions.
CSCai03800 CSCai03817	Cisco Access Registrar crashes when a Client is configured with type Proxy , and a request either contains a NAS-Identifier attribute that matches that Client’s name, or the request contains a NAS-IP-Address attribute with that Client’s IP address.
CSCai03814	Cisco Access Registrar should identify the name <i>and</i> IP address of a RemoteServer in any failure log message.
CSCai04088	Iterating through Vendor-Specific attributes with a REX or TCL script/service may find the wrong attributes in the Request/Response dictionary.

Table 4 Bugs Fixed in the 1.3 Cisco Access Registrar Release (continued)

Bug Number	Description
CSCai04101	After initially installing the product, if the examples are installed, aregcmd may ask the admin to save (upon exit) even if no changes were made.
CSCdk83312	Trailing NULL characters included at the end of passwords returned from LDAP may cause PAP/CHAP authentication to fail.
CSCdk86146	Out of sequence Accounting “Start” requests can create orphaned sessions, possibly leaking dynamic resources. (See “Session Creation” for solution details).

Cisco Access Registrar Bugs

Table 5 describes the known bugs in the 1.3 Cisco Access Registrar release.

Table 5 Known Bugs in the 1.3 Cisco Access Registrar Release

Bug Number	Description
CSCai02130	When accounting files are rolled, they are renamed to a file that includes the date range of the entries inside. Unfortunately, the creation and modification times of the file are in UTC, while the time stamp on each accounting record is in local time. Thus, there is a time skew between the times used for the name of the rolled accounting file and the time stamp for the first and last record in the file.
CSCai02242	Cisco Access Registrar displays the message, “Database lock attempt failed” if you stop the server while it is still in the process of starting. If this occurs, you will not lose any data.
CSCai02273	Validation succeeds when multiple administrators enter the same user in the UserList. Instead of reporting a conflict, both administrators will be modifying the same user records.
CSCai02319	Validation doesn't check whether a deleted RemoteServer or a deleted ResourceManager is referred to by a Service or a SessionManager, respectively.

Bug Number	Description
CSCai02320	After a save, the aregcmd command displays the value of a new Networks range in an IPX-dynamic ResourceManager in decimal. To restore the display, log in to the cluster again.
CSCai02432	Cisco Access Registrar does not check the Response-Type which may be set by a Script immediately after running the Server, or Vendor Scripts. It is checked after the Client Script point.
CSCdk82488	aregcmd will let the administrator add a VSA with the same name as an existing standard attribute, or a VSA for another vendor.
CSCai02946	Requests authenticated with a TACACS service do not get reflected in the Cisco Access Registrar server statistics.

Cisco Access Registrar Documentation Addendum

This section provides information that was missing from the 1.3 Cisco Access Registrar documentation.

Accounting-On and Accounting-Off Requests

If you have the situation where a Cisco Access Registrar RADIUS server is acting as a forwarding server and proxying requests to one or more remote RADIUS servers, the Accounting-On and Accounting-Off requests are only proxied to remote servers when the request is directly from a NAS.

Note, Cisco Access Registrar only forwards the Accounting-On or Accounting-Off requests when they come directly from a NAS. It does not forward requests when they are from a proxy. Therefore, if you have a chain of forwarding servers, the Accounting-On or Accounting-Off request will not be forwarded for more than one hop.

Accounting Records and No Disk Space

When Cisco Access Registrar is unable to write accounting records to disk, this information may be lost. Cisco Access Registrar continues to run, however, it does not acknowledge accounting requests. After you have made disk space available, you must reload Cisco Access Registrar to cause the Accounting Services to resume writing to disk.

Note, because Cisco Access Registrar does not buffer the requests it could not write to disk, this information is lost unless the client (NAS or proxy) resends the accounting requests. Fortunately, most NASs retry accounting requests until they are acknowledged.

USR Accounting Signatures

Some versions of USR NASs do not generate correct signatures for accounting requests. When an accounting request packet has an incorrect signature, Cisco Access Registrar drops the packet. A workaround for this problem is to set the Vendor of the client to be **USR-IgnoreAccountingSignatures**. This causes Cisco Access Registrar to *not* attempt to verify that the signature is correct.

Compatibility

- Cisco Access Registrar 1.3 runs on Solaris 2.5.1 and Solaris 2.6 for SPARC
- Cisco Access Registrar supports Network Access Servers from Ascend, Cisco, U.S. Robotics (now part of 3COM), and other RFC 2138 and 2139-compliant components
- Cisco Access Registrar supports Proxy RADIUS to Ascend, MERIT, U.S. Robotics, and other Cisco Access Registrar servers
- Cisco Access Registrar supports Proxy TACACS to Cisco TACACS servers
- Cisco Access Registrar supports the Netscape Directory Server LDAP Server and the Sun Directory Services 1.0.

Bill of Materials

This section lists the components of the Cisco Access Registrar 1.3 product:

- 1 Cisco Access Registrar 1.3 product CD.
- 2 *Release Notes for Cisco Access Registrar, Release 1.3* (part number 78-7189-01 (this document)).
- 3 *Cisco Access Registrar Getting Started Guide* (part number 78-6600-01)
- 4 *Cisco Access Registrar User Guide* (part number 78-6601-01)

Cisco Connection Online

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You can access CCO in the following ways:

- WWW: <http://www.cisco.com>
- WWW: <http://www-europe.cisco.com>
- WWW: <http://www-china.cisco.com>
- Telnet: cco.cisco.com
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and connection rates up to 28.8 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

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Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

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This document is to be used in conjunction with the documents listed in the “Related Documentation” section.

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