RoamServer 5 for Unix

Release Notes

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v1.1

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For the latest information, please download this document from the iPass FTP site.

I. Introduction

RoamServer 5 for Unix authenticates remote users dialing into iPass Access Points. It acts as a Virtual Network Access Server (VNAS) and is compatible with all types of Authentication (AAA) servers

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II. System Requirements

Minimum Server Requirements

The iPass RoamServer software for Unix platforms must be installed on a server that meets the following requirements:

- 110 MB temporary disk space

- 70 MB permanent disk space

- Root access is required for installation

- Server must have a static IP address (no DHCP)

- If installed behind a firewall, an accessible NAT IP address

- Installer must have administrative permissions on the machine

- Solaris users need the Solaris SPARC OS Patches required for the Java 2 Standard Edition (J2SE) 1.4 from http://java.sun.com/j2se/1.4/download.html .(If the web page has moved, go to http://java.sun.com/ to find the download page.)

- A Linux host needs at least 20 threads of 30 MB each and 600 MB swap space.

Additional Requirements

- Connectivity to an authentication database

- The TCP/IP protocol is required to support the SSL encrypted connection from the iPass Transaction Centers

- If placed behind a firewall, the firewall must not block inbound connections to TCP port 577, or any other agreed-upon port. The firewall must not block outbound connections to the iPass Transaction Centers. See Installing Behind a Firewall for more details.

Preferences

In addition it is preferable, although not required, for your server to have:

- Connectivity to an accounting server to allow accounting logs to be written to an alternate location

Available Platforms

RoamServer 5 has been successfully tested on the following Unix platforms:

- Solaris 7, 8, and 9 (SPARC architecture processor)

- Linux RedHat 6.1 (Kernel 2.2.12) and 6.2 (Kernel 2.4.14) with the Workstation Package installed. This package includes libraries required by the installer and the server.

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III. Installation

Complete details about installing and configuring the iPass RoamServer software can be found in the RoamServer 5 for Unix Administrator Guide . The Guide also explains how to configure RoamServer's advanced functionality.

IV. Installing Behind a Firewall

iPass recommends that you install RoamServer behind a firewall. If you choose to follow this recommendation, you will need to allow TCP traffic to the external IP of the RoamServer on port 577 through to the RoamServer. In addition, iPass will need a valid public IP address to put into its database. You may restrict traffic on that port to only allow incoming packets from the following IP addresses:

Amsterdam, NL: 216.239.102.125   San Paulo, BZ: 216.239.101.125
Atlanta, US: 216.239.111.125   Santa Clara, US: 216.239.99.125
Frankfurt, DE: 216.239.108.125   Sydney, AU : 216.239.98.125
Hong Kong, HK: 216.239.110.125   Tokyo, JP: 216.239.109.125
London, UK: 216.239.105.125   TBD: 216.239.103.125
New York, US: 216.239.104.125   TBD: 216.239.107.125
Palo Alto, US: 208.212.202.21

However, you may be asked to open the port to other IPs as the iPass network continues to grow.The most current list of IP addresses can be found on the iPass secure web site.

> **Note:** If your firewall is performing Network Address Translation (NAT), you will need to provide the IP address of your firewall to your iPass Installation Engineer.

V. New Features

The following list provides details about the new features and enhancements included in this release.

Version	Descriptions
RoamServer 5	**General Enhancements:** • Completely rewritten in Java • New ability for IT Administrators to allow / deny access based upon both country and media type (Dialup / Wi-fi / ISDN / etc.) • RS can now retrieve and install the latest version of the software, in much the same way as the iPassConnect client • If configured, iPass Customer Care can retrieve the log files from the RS to assist in troubleshooting • If configured, iPass Customer Care can retrieve the configuration from the RS to assist in troubleshooting.

VI. Known Issues

- Multiple instances of running ipassconf.csh are not recommended. You should only run a single instance at any one time.

- Running the command RS_command -reload_config does not reload the entire configuration file, but only the following:

    o AAA Servers (AuthServer and AcctServer properties)

    o AutoUpdate flag, used to enable/disable auto software update.

    o Policy Rules, if feature is enabled.

    o RS Monitor configs for the HeartBeat Messages.

    o Log Rotation parameters.

    o DebugLevel of server

- Auto-Update does not update all files, just those shown in RS.ver. Deleting RS.ver and running auto-update will download all files on the iPass update server during the next update.
- Auto-Update starts at the time set plus balance of seconds at the time the RoamServer was started. For example, if you start the RoamServer at 09:12:25.406 and update is set at 10:00, the update will start at exactly at 10:00:25.406.
- When running under Linux 2.2.12, running rs_command.csh -restart shuts down the RoamServer but doesn't restart it. The recommended solution is to upgrade your OS to the Linux 2.4.14 kernel. If you wish to use the earlier kernel, you must create a script to auto-restart your RoamServer after this command.
- When updating to RS 5 and using RADIUS authentication, check your RADIUS logs to verify your RFC attributes. If an attribute is not shown in the list given in the Addendum to these Release Notes, then you need to re-configure your RADIUS to eliminate the attribute.

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VII. Getting Help

The iPass RoamServer installation contains full documentation in the *usr/ipass/roamserver/doc* directory. Documentation can also be downloaded from the iPass FTP site.

For further assistance with the iPass RoamServer installation or configuration, please contact iPass Customer Care at one of the following numbers:

- From US +1 877 674 7277

- From outside US +1 650 232 4300

- Within Europe +44 20 7317 4444

Alternately, you can submit an SOS ticket via the Web by visiting www.ipass.com. (Secure login is required.)

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Addendum: RADIUS Attributes

When updating to RS 5 and using RADIUS authentication, check your RADIUS logs to verify your RFC attributes. If an attribute is not shown in these tables, then you need to re-configure your RADIUS to eliminate the attribute.

RADIUS Authentication Attributes

This table shows which attributes may be found in which kinds of packets, and in what quantity. On the table:

0: This attribute must not be present in packet.

0+: Zero or more instances of this attribute may be present in packet.

0-1: Zero or one instance of this attribute may be present in packet.

1: Exactly one instance of this attribute must be present in packet.

Request	Accept	Reject	Challenge	#	Attribute
0-1	0-1	0	0	1	User-Name
0-1	0	0	0	2	User-Password [Note 1]
0-1	0	0	0	3	CHAP-Password [Note 1]
0-1	0	0	0	4	NAS-IP-Address [Note 2]
0-1	0	0	0	5	NAS-Port
0-1	0-1	0	0	6	Service-Type
0-1	0-1	0	0	7	Framed-Protocol
0-1	0-1	0	0	8	Framed-IP-Address
0-1	0-1	0	0	9	Framed-IP-Netmask
0	0-1	0	0	10	Framed-Routing
0	0+	0	0	11	Filter-Id
0-1	0-1	0	0	12	Framed-MTU
0+	0+	0	0	13	Framed-Compression
0+	0+	0	0	14	Login-IP-Host
0	0-1	0	0	15	Login-Service
0	0-1	0	0	16	Login-TCP-Port
0	0+	0+	0+	18	Reply-Message
0-1	0-1	0	0	19	Callback-Number
0	0-1	0	0	20	Callback-Id
0	0+	0	0	22	Framed-Route
0	0-1	0	0	23	Framed-IPX-Network
0-1	0-1	0	0-1	24	State [Note 1]
0	0+	0	0	25	Class
0+	0+	0	0+	26	Vendor-Specific

0	0-1	0	0-1	27	Session-Timeout
0	0-1	0	0-1	28	Idle-Timeout
0	0-1	0	0	29	Termination-Action
0-1	0	0	0	30	Called-Station-Id
0-1	0	0	0	31	Calling-Station-Id
0-1	0	0	0	32	NAS-Identifier [Note 2]
0+	0+	0+	0+	33	Proxy-State
0-1	0-1	0	0	34	Login-LAT-Service
0-1	0-1	0	0	35	Login-LAT-Node
0-1	0-1	0	0	36	Login-LAT-Group
0	0-1	0	0	37	Framed-AppleTalk-Link
0	0+	0	0	38	Framed-AppleTalk-Network
0	0-1	0	0	39	Framed-AppleTalk-Zone
0-1	0	0	0	60	CHAP-Challenge
0-1	0	0	0	61	NAS-Port-Type
0-1	0-1	0	0	62	Port-Limit
0-1	0-1	0	0	63	Login-LAT-Port

Notes

1. An Access-Request must contain either a User-Password or a CHAP-Password or State. An Access-Request must *not* contain both a User-Password and a CHAP-Password. If future extensions allow other kinds of authentication information to be conveyed, the attribute for that can be used in an Access-Request instead of User-Password or CHAP-Password.

2. An Access-Request must contain either a NAS-IP-Address or a NAS-Identifier (or both).

RADIUS Accounting Attributes

This table shows the attributes found in Accounting-Request packets. No attributes should be found in Accounting-Response packets except Proxy-State and possibly Vendor-Specific.

On the table:

0: This attribute must not be present in packet.

0+: Zero or more instances of this attribute may be present in packet.

0-1: Zero or one instance of this attribute may be present in packet.

1: Exactly one instance of this attribute must be present in packet.

#	Attribute
0-1	User-Name
0	User-Password
0	CHAP-Password
0-1	NAS-IP-Address [Note 1]
0-1	NAS-Port
0-1	Service-Type
0-1	Framed-Protocol
0-1	Framed-IP-Address

0-1	Framed-IP-Netmask
0-1	Framed-Routing
0+	Filter-Id
0-1	Framed-MTU
0+	Framed-Compression
0+	Login-IP-Host
0-1	Login-Service
0-1	Login-TCP-Port
0	Reply-Message
0-1	Callback-Number
0-1	Callback-Id
0+	Framed-Route
0-1	Framed-IPX-Network
0	State
0+	Class
0+	Vendor-Specific
0-1	Session-Timeout
0-1	Idle-Timeout
0-1	Termination-Action
0-1	Called-Station-Id
0-1	Calling-Station-Id
0-1	NAS-Identifier [Note 1]
0+	Proxy-State
0-1	Login-LAT-Service
0-1	Login-LAT-Node
0-1	Login-LAT-Group
0-1	Framed-AppleTalk-Link
0-1	Framed-AppleTalk-Network
0-1	Framed-AppleTalk-Zone
1	Acct-Status-Type
0-1	Acct-Delay-Time
0-1	Acct-Input-Octets
0-1	Acct-Output-Octets
1	Acct-Session-Id
0-1	Acct-Authentic
0-1	Acct-Session-Time
0-1	Acct-Input-Packets
0-1	Acct-Output-Packets
0-1	Acct-Terminate-Cause
0+	Acct-Multi-Session-Id
0+	Acct-Link-Count
0	CHAP-Challenge
0-1	NAS-Port-Type
0-1	Port-Limit
0-1	Login-LAT-Port

Notes

1. An Accounting-Request must contain either a NAS-IP-Address or a NAS-Identifier (or both).

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