



Juniper Networks
Steel-Belted Radius/High Availability

Release Notes

Release 5.5
June 2007

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Revision History

Date	Description
1 June 2007	Initial product release.

M071024

Table of Contents

Features and Enhancements	1
Session Control Features	1
LDAP/SQL Bridge (Experimental Feature)	2
Known Problems and Limitations	2
Documentation Errata.....	4
Online Help	4
Upgrade Instructions.....	4
List of Technical Publications	5
Steel-Belted Radius/High Availability Documentation.....	5
MySQL Cluster Documentation.....	5
Documentation Feedback	5
Contacting Technical Support.....	6

Release Notes

These release notes accompany Release 5.5 of the Steel-Belted Radius/High Availability software. Before you install or use your new software, you should read these release notes in their entirety, especially the “Known Problems and Limitations” section on page 2.

If the information in these release notes differs from the information found in the product documentation, follow these release notes.

You can find these release notes in Adobe Acrobat (PDF) format on the Juniper Networks Technical Publications Web page, which is located at <http://www.juniper.net/techpubs>.

Features and Enhancements

The following features have been added to the software in Steel-Belted Radius/High Availability Release 5.5.

Session Control Features

- User Concurrency—Enables you to limit the number of active connections, on a per-user, per-cluster basis, allowing you to enforce concurrency across your entire network. You can set a limit on the maximum number of concurrent connections that a user can have. Subsequently, when the user requests a new connection, Steel-Belted Radius/High Availability compares the current number of connections to the maximum limit. If a new connection exceeds the limit, Steel-Belted Radius/High Availability can reject the additional connection or allow the connection, but logs the event in the server log.
- Change of Authorization (CoA)/Disconnect Message (DM)—Allows you to change the state of authenticated sessions dynamically. Dynamic authorization, which is described in RFC 3576, enables you to:
 - Deploy prepaid scenarios in WLAN integration for GSM/UMTS networks.
 - Place users in legal intercept for security review.
 - Enable online service and billing profile changes.
 - Disconnect/quarantine users for abusing the network.



NOTE: Change of Authorization (CoA) is an optional license enabled module.

LDAP/SQL Bridge (Experimental Feature)

This feature is for customers who have standardized on LDAP tools (instead of SQL tools) in their environments for AAA session management and who want to move to a high-availability AAA architecture. This LDAP/SQL bridging feature enables you to use LDAP to read-only the Steel-Belted Radius/High Availability Current Sessions Table (CST).

Known Problems and Limitations

The following issues have been identified in the Steel-Belted Radius/High Availability Release 5.5 software. The identifier following the description is the tracking number in our bug database.

- When Steel-Belted Radius cannot communicate with the database cluster, accounting requests will always succeed, such as in the case of a network partition or database cluster failure—The network access device will be notified that the accounting request succeeded even though the Current Session Table (CST) could not be updated. Accounting files and proxy functionality operate normally. [8827]
- The Steel-Belted Radius/High Availability permits installation without a license—The customer must enter a valid license key. The installer incorrectly indicates that a user can install Steel-Belted Radius/High Availability with a 30 day license. Steel-Belted Radius/High Availability does not allow a 30 day trial evaluation.[8851]
- The Steel-Belted Radius/High Availability configuration script does not configure replication correctly on primary or replica servers—The workaround is to manually configure replication after installation: [8857]



NOTE: You must perform these steps on all primary and replica servers.

1. After installation, change directory to: **<radius_dir>/sys/ha**
2. Enter:
rm sbr_id.xml
3. Enter:
ln -s <radius_dir>/sbr_id.xml sbr_id.xml

For example:

```
lrwxrwxrwx 1 root other 30 May 22 15:19 sbr_id.xml -> /opt/JNPRsbr/radius/sbr_id.xml
```

4. Restart Steel-Belted Radius/High Availability.

- The SBR Administrator's user interface does not handle the Framed-IP-Address attribute correctly—If a user configures a Return List consisting of a Framed-IP-Address and with the Echo option selected, then it cannot be changed back to an address pool selection. An incorrect error message "Unable to resolve hostname 'GOLD'" appears. [8695]
- The Steel-Belted Radius/High Availability server fails to restart if an individual log file is very large—The workaround is to either change the log level to a lower detail level, or to set more frequent log rollover to prevent the log file size from exceeding 2GB. To recover from a failed start, the user must delete the log file. [8816]
- The Steel-Belted Radius/High Availability installation procedure does not check if the `mysqld` and `ndb_mgmd` daemons are running—As a result, failed installation attempts may not be detected. The installer will be updated in a future release. [8836]
- SNMP Traps 110 (`funkSbrTrapIPAddrPoolNormal`) and 5027 (`funkSbrTrapIPAddrPoolLow`) relating to the IP address pool are not being generated—This will be updated in a future release. [8837]
- Steel-Belted Radius node connections to database cluster nodes (through the `dbclusterndb.gen` file) in different subnets result in longer delays than configured—The Steel-Belted Radius node does not correctly delay between connection retry attempts when invalid management node IP addresses exist in the database cluster node parameter in the `dbclusterndb.gen` file. If invalid database cluster nodes are configured, the delay between retries is between 4 to 8 minutes and not 5 seconds as configured. [8840]
- Steel-Belted Radius fails to connect to the databases—JDBC errors display in the Radius log indicating that no suitable drivers were found. To prevent these errors, in addition to configuring the `radsqjjdbc.aut` or `radsqjjdbc.acc` files with connect lines in the `[Server/S1]` and `[Server/S2]` sections, the user must enter a single connect line in the `[Settings]` section. [8874]
- SQL has timeout problems when it encounters an Oracle error regarding a unique constraint violation—Steel-Belted Radius usually recovers by itself, however users may need to restart Steel-Belted Radius. This will be addressed in a future release. [8906]
- The actual number of TCP connections may be different given the same Connect line settings for the Oracle client and JDBC—The JDBC plugin only supports a single server connection. [8907]
- Steel-Belted Radius crashes when the `MaxConcurrent` setting in the `ldapauth` configuration files is greater than 3000—Set the `MaxConcurrent` setting to less than 3000. This will be addressed in a future release. [8910]
- Invalid filters in the `filter.ini` file will result in failed replication—For successful replication, use proper syntax when creating filters. [8911]
- The `Max-Auth-Threads` field in the `radius.ini` file does not get updated when the `UpdateThreadsAndFlood` field is set to 1 in the `[HUP]` section of the `update.ini` file—This will be addressed in a future release. [8915]

- Incomplete Steel-Belted Radius log messages appear when a user enters a version 5.3 to version 5.4 upgrade key with an optional EAP expansion module key, but does not enter the full version license key—The incomplete log messages only appear when upgrade keys are entered. They do not appear when full license keys are entered. [8916]
- If the Unix user authentication is one of the user's configured authentication methods, then the user must install the Solaris 9 patch 112874-37—This patch will be included in the recommended patch list for Solaris 9. [8917]
- During the installation of the Steel-Belted Radius server, the user cannot enter a CoA/DM license key that has an expiration period built into it, such as a license that begins with 6101 strings. The Steel-Belted Radius installation script reads it as an invalid license string—The workaround for this is to edit the `licenses.xml` file located in the `/install-dir/radius` directory and enter the license key strings manually as shown in the following example: [8921]

licenses.xml file:

```
<?xml version="1.0"?>

<licenses>
<license id="6101XXXXXXXXXXXXXXXXX"/>
</licenses>
```

Documentation Errata

The following issue had been identified in the Steel-Belted Radius/High Availability Release 5.5 documentation.

Online Help

The IP Pool and the IPX Pool panels are included in the content of SBR Administrator's online help. These GUI features do not exist in Steel-Belted Radius/High Availability Release 5.5.

Upgrade Instructions

For detailed upgrade procedures, see Chapter 4, "Upgrading from Previous Release," in the *Steel-Belted Radius/High Availability Installation Guide*. It describes the steps required to upgrade the Steel-Belted Radius/High Availability server from release 5.4 and manage the MySQL server backend.

List of Technical Publications

Steel-Belted Radius/High Availability Documentation

The documentation for Steel-Belted Radius/High Availability consists of the following manuals, which can be downloaded from the Juniper Networks Technical Publications Web page located at http://www.juniper.net/techpubs/software/aaa_802/.

- *Steel-Belted Radius/High Availability Installation Guide*—Describes how to install the Steel-Belted Radius/High Availability software, how to install the SBR Administrator configuration application, and how to configure your database cluster to support Steel-Belted Radius/High Availability functions.
- *Steel-Belted Radius/High Availability Administration Guide*—Describes how to configure and administer the Steel-Belted Radius/High Availability software.
- *Steel-Belted Radius/High Availability Reference Guide*—Describes the configuration options for the Steel-Belted Radius/High Availability software.

MySQL Cluster Documentation

MySQL Cluster is a high-availability, high-redundancy version of MySQL adapted for distributed computing environments. You can download or display the MySQL Cluster documentation from the MySQL Developer Zone by pointing a browser at <http://dev.mysql.com/doc/>.

Documentation Feedback

We encourage you to provide feedback, comments, and suggestions so that we can improve the Steel-Belted Radius/High Availability documentation. You can send your comments to techpubs-comments@juniper.net, or fill out the documentation feedback form at <http://www.juniper.net/techpubs/docbug/docbugreport.html>. If you are using email, please be sure to include the following information with your comments:

- Documentation name
- Documentation part number
- Software release version
- Page number

Contacting Technical Support

For technical support, contact Juniper Networks at support@juniper.net, or at 408-936-1576 (United States and International).

Check our website (<http://www.juniper.net>) for additional information and technical notes. When you are running SBR Administrator, you can choose **Web > Steel-Belted Radius User Page** to access a special home page for Steel-Belted Radius/High Availability users.

When you call technical support, please have the following at hand:

- Your Steel-Belted Radius/High Availability edition and release number (for example, Steel-Belted Radius/High Availability version 5.5).
- Information about the server configuration and operating system, including any OS patches that have been applied.
- For licensed products under a current maintenance agreement, your license or support contract number.
- Question or description of the problem, with as much detail as possible.
- Any documentation that may help in resolving the problem, such as error messages, memory dumps, compiler listings, and error logs.