

Security Patch

Steel-Belted Radius Installation Instructions for EAP-FAST Security Patch

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Introduction

The following editions and versions of Steel-Belted Radius should be updated if EAP-FAST is enabled (by setting `Enable = 1` in `fastauth.aut`).

- Steel-Belted Radius version 5.3.x (GEE, EE, SPE)
- Steel-Belted Radius version 5.4.x (GEE, EE, SPE)
- Steel-Belted Radius version 6.0.x (GEE, EE, SPE)
- Steel-Belted Radius version 6.1.x (GEE, EE, SPE)

Steel-Belted Radius versions 5.3.x and 5.5.x are also vulnerable if EAP-FAST is enabled. However, no patch is available for them. EAP-FAST should be disabled.

Download Instructions

This section describes how to download and install the `fastauth` patch for Steel-Belted Radius.

The patch file you need depends on the operating system and version of Steel-Belted Radius you are using. Table 1 identifies the patch file location for supported versions of Steel-Belted Radius.

Table 1: Patch File Location

Steel-Belted Radius v6.1.0 (GEE, SPE, or EE)	
Windows	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/6.1x/Windows/fastauth.dll
Solaris	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/6.1x/Solaris/fastauth.so
Linux	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/6.1x/Linux/fastauth.so
Steel-Belted Radius v6.0.1 (GEE, SPE, or EE)	
Windows	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/6.0x/Windows/fastauth.dll
Solaris	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/6.0x/Solaris/fastauth.so
Linux	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/6.0x/Linux/fastauth.so
Steel-Belted Radius v5.4.1 (GEE, SPE, or EE)	
Windows	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/5.4x/Windows/fastauth.dll
Solaris	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/5.4x/Solaris/fastauth.so
Linux	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/5.4x/Linux/fastauth.so
Appliance	https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/5.4x/Windows/fastauth.dll

Installation Instructions

This section describes how to download and install the fastauth patch for Steel-Belted Radius.

The process of installing the patch depends on your operating system and on the version of Steel-Belted Radius you are using.

Steel-Belted Radius v5.4.1 on Windows

1. Log into the computer running Steel-Belted Radius using an account with administrator privileges.
2. Open a command prompt window.
3. Stop Steel-Belted Radius.

```
C:\> net stop "steel-belted radius"
```

4. Navigate to the installation directory (which is typically `c:\radius\service`).

```
C:\> cd /d c:\radius\service
```

5. Rename the existing `fastauth.dll` file.

```
C:\> rename fastauth.dll fastauth.dll.orig
```

6. Copy the new `fastauth.dll` file to the same directory.

```
C:\> copy \path\to\downloaded\fastauth.dll .\fastauth.dll
```

7. Start Steel-Belted Radius.

```
C:\> net start "steel-belted radius"
```

8. Verify that the Services Control Panel indicates that Steel-Belted Radius is started.

Steel-Belted Radius v5.4.1 on Solaris or Linux

NOTE: After this patch is applied, on Linux platforms, `rpm -v` will report that `fastauth.so` is damaged. This is normal.

1. Log into the computer running Steel-Belted Radius as `root`.
2. Navigate to the installation directory (which is typically `/opt/funk/radius`)

```
# cd /opt/funk/radius
```

3. Stop Steel-Belted Radius.

```
# ./sbrd stop
```

4. Rename the existing `fastauth.so` file.

```
# mv fastauth.so fastauth.so.orig
```

5. Copy the new `fastauth.so` file to the same directory and modify its owner/permissions.

```
# mv /path/to/downloaded/fastauth.so ./fastauth.so
```

```
# chown root ./fastauth.so
```

```
# chmod 755 ./fastauth.so
```

6. Start Steel-Belted Radius.

```
# ./sbrd start
Sbrd: starting SBR software
```

7. Verify that the Steel-Belted Radius is running.

```
# ./sbrd status
radius processes are active
radius lock files exist
radius state is running
radius status 1100
aggregate state is running
```

Steel-Belted Radius v6.0.1 or v6.1 on Windows

1. Log into the computer running Steel-Belted Radius using an account with administrator privileges.
2. Stop Steel-Belted Radius.

```
C:\> net stop "steel-belted radius"
```

3. Open a command prompt window.
4. Navigate to the installation directory (which is typically c:\Program Files\Juniper Networks\Steel-Belted Radius\Service)

```
C:\> cd /d "c:\Program Files\Juniper Networks\Steel-Belted Radius\Service"
```

5. Rename the existing fastauth.dll file.

```
C:\> rename fastauth.dll fastauth.dll.orig
```

6. Copy the new fastauth.dll file to the same directory.

```
C:\> copy \path\to\downloaded\fastauth.dll .\fastauth.dll
```

7. Start Steel-Belted Radius.

```
C:\> net start "steel-belted radius"
```

8. Verify that the Services Control Panel indicates that Steel-Belted Radius is started.

Steel-Belted Radius v6.0.1 or v6.1 on Solaris or Linux

NOTE: After this patch is applied, on Linux platforms, rpm -v will report that fastauth.so is damaged. This is normal.

1. Log into the computer running Steel-Belted Radius as root.
2. Navigate to the installation directory (which is typically /opt/JNPRsbr/radius)

```
# cd /opt/JNPRsbr/radius
```

3. Stop Steel-Belted Radius.

```
# ./sbrd stop
sbrd: stopping SBR software
```

4. Rename the existing fastauth.so file.

```
# mv ./fastauth.so ./fastauth.so.orig
```

5. Copy the new fastauth.so file to the same directory and modify its owner/permissions.

```
# mv /path/to/downloaded/fastauth.so ./fastauth.so
# chown root ./fastauth.so
# chmod 755 ./fastauth.so
```

6. Start Steel-Belted Radius.

```
# ./sbrd start
sbrd: starting SBR software
```

7. Verify that the Steel-Belted Radius is running.

```
# ./sbrd status
radius processes are active
radius lock files exist
radius state is running
radius status 1100
aggregate state is running
```

Upgrading Steel-Belted Radius after Patching v5.4.1, v6.0.1, or v6.1 on Solaris or Linux

Before installing an upgrade, uninstall the patch, as follows.

1. Stop Steel-Belted Radius.
2. In the installation directory, move `fastauth.so.orig` back to `fastauth.so`.

After installing the upgrade, apply the patch appropriate to the new version (per the instructions above).

Steel-Belted Radius v5.4 Appliance

1. Launch Internet Explorer
2. Depending on the version of the NEWS (Web Interface) installed on the appliance, you may need to apply a patch which will allow you to upload DLL files to the SERVICE directory.

Enter the following URL:

```
https://APPLIANCEADDRESS:3886/hidden/hidden_advanced_upload.htm
```

If this URL loads a page, then you do not need the patch described below. Click the **Back** button in your browser and proceed to step 4.

If the URL fails to load a page, perform step 3.

3. Install a patch to NEWS, as follows.
 - a. Copy the following URL into the address bar of a web browser:
`https://download.juniper.net/software/aaa_802/public/sbr/eap-fast/NEWS-Update/NewsPatch.EXE`
 - b. Copy the file named `NewsPatch.EXE` to your local system.

- c. Copy the following URL into the address bar of your browser (please be sure to copy the complete URL).

IMPORTANT: The word *APPLIANCEADDRESS* MUST be replaced with the IP address (or hostname) of the SBR appliance you wish to update:

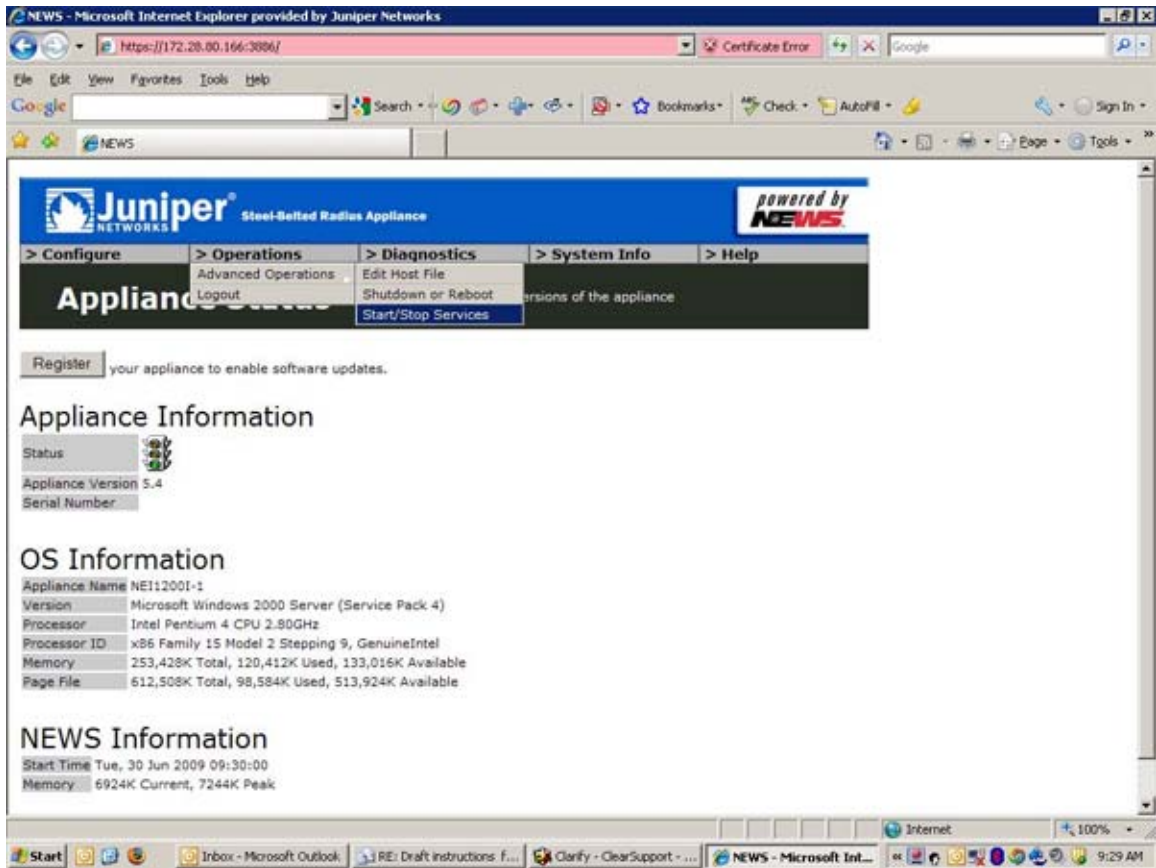
```
https://APPLIANCEADDRESS:3886/upLoad.htm?nm=NewsPatch.EXE&ds=This%20patch%20adds%20the%20ability%20to%20create%20or%20upload%20files%20to%20JuniperRoot/services%20without%20disrupting%20backup.&ty=U  
pdate&so=NEI&pr=/S&sz=223866&dt=Fri%20Oct%2012%2016:27:33%202007&c  
r=EE99FD0EB18FCD37&rs=YES
```

- d. You may be asked to log in. After login, your browser should display the "Load Appliance Update" page.
 - e. Click the **Browse** button.
 - f. In the "Choose file" box, browse and select the downloaded patch file, then click **Open**.
 - g. In the browser, click the **Load Update** button to apply the patch.
 - h. After the patch is installed, a page is displayed stating "Update Was Successfully Applied."
You MUST now reboot the appliance.
 - i. Click the **Reboot Appliance** button to load the Reboot page.
 - j. Enter your password and click the **Reboot** button.
The appliance will reboot.
 - k. After the appliance reboots, the patch is applied completely.
4. Enter this address into the address bar of your browser:

```
https://APPLIANCEADDRESS:3886
```

5. Enter your administrator credentials.

A screen similar to the following appears.



6. Select **Operations** > **Advanced Operations** > **Start/Stop services**.

7. Click the link for Steel-Belted Radius.

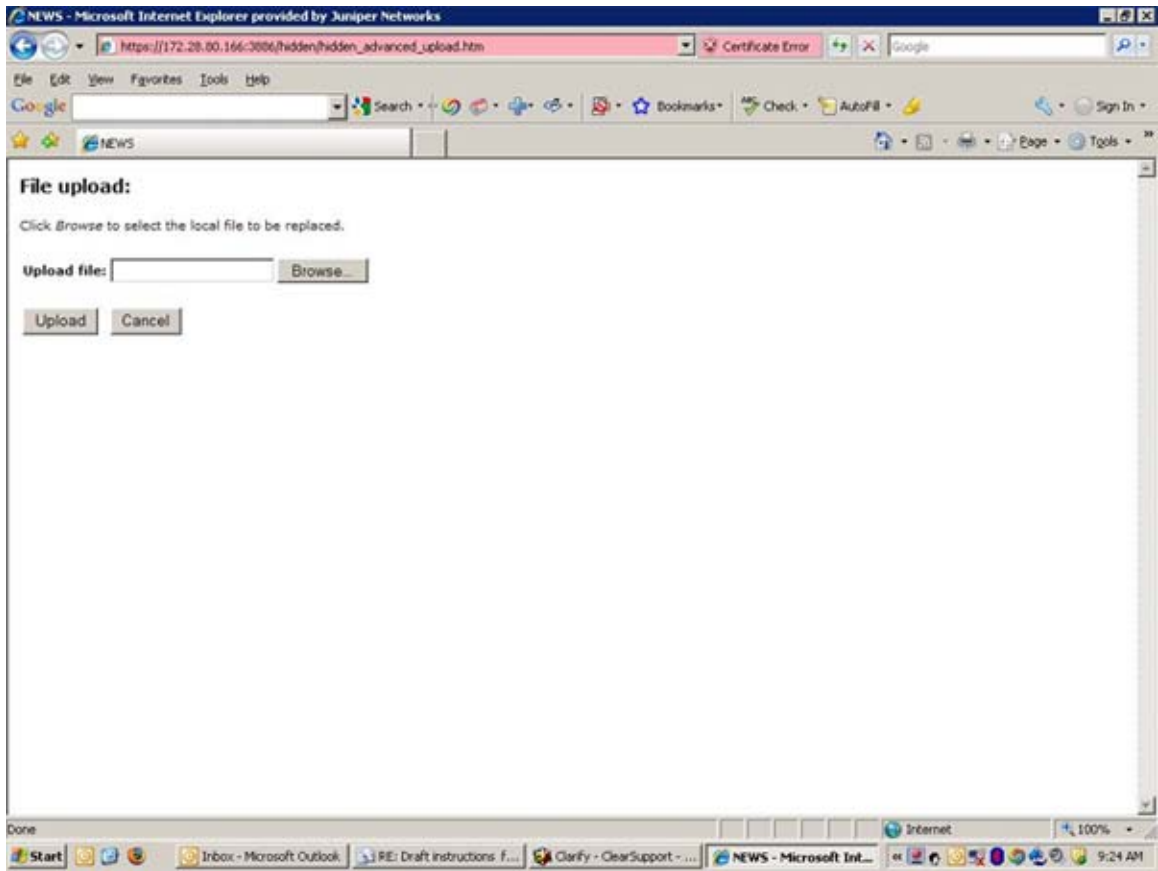
8. Stop the service

9. Enter this into the address bar of your browser:

`https://APPLIANCEADDRESS:3886/hidden/hidden_advanced_upload.htm`

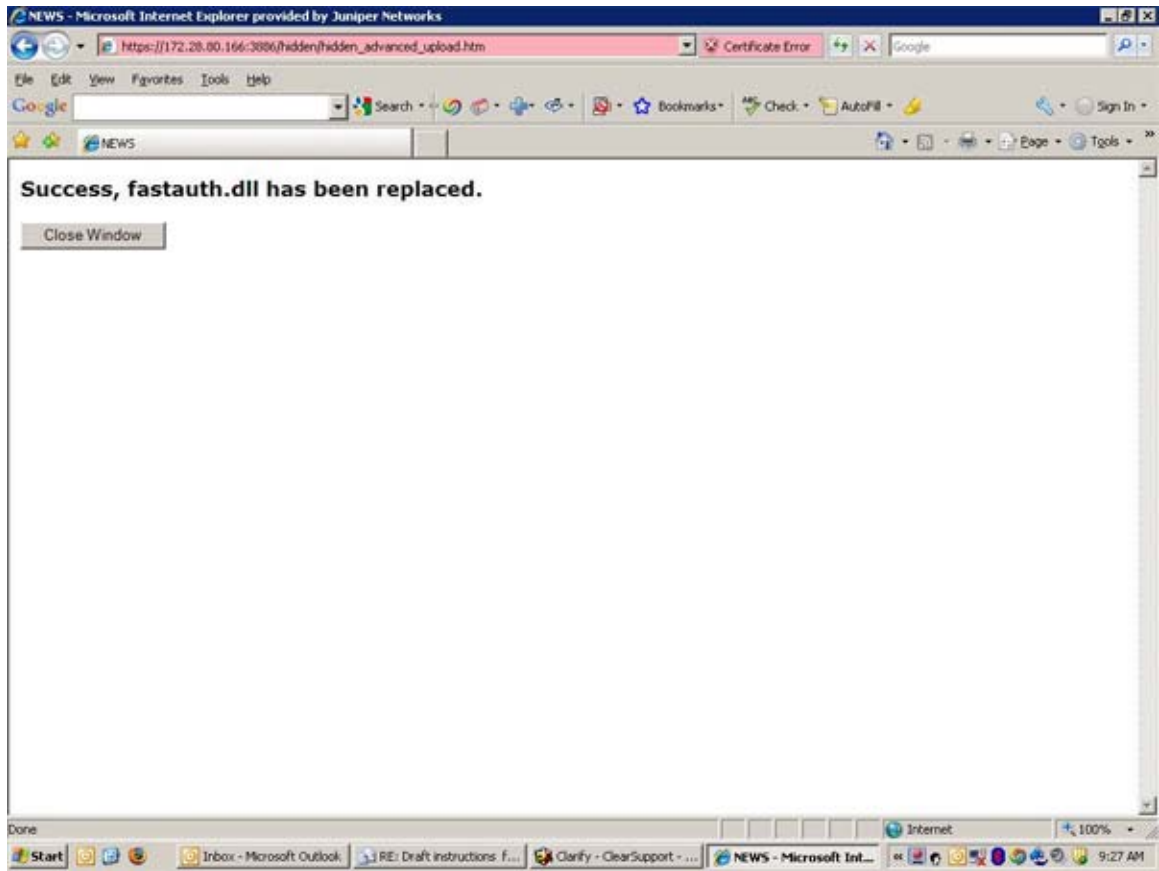
10. Enter your administrator credentials.

A screen similar to the following appears.



11. Click the **Browse** button.
12. Navigate to where the new FASTAUTH.DLL is located and select it.
13. Click the **Upload** button.

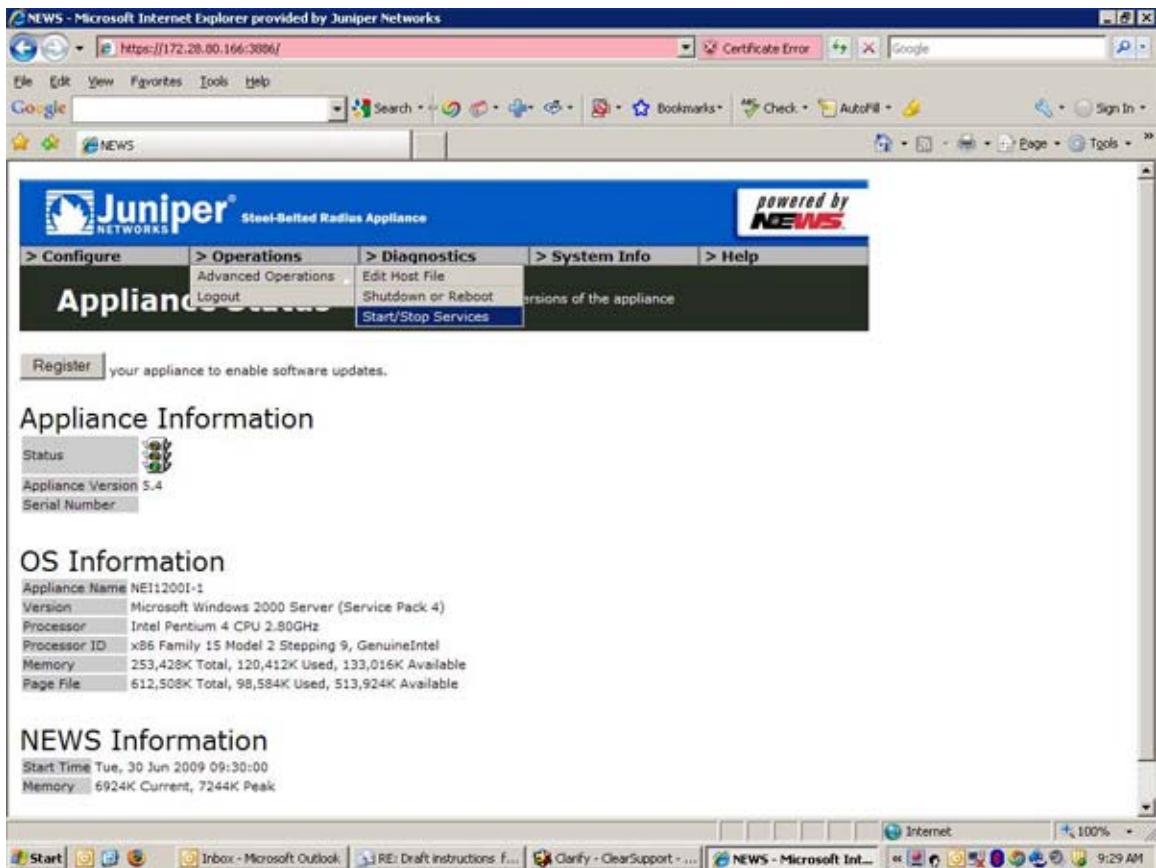
A screen similar to the following appears.



14. Enter this into the address bar of your browser:
`https://APPLIANCEADDRESS:3886`

15. Enter your administrator credentials.

A screen similar to the following appears.



16. Select **Operations** > **Advanced Operations** > **Start/Stop services**.
17. Click the **Steel-Belted Radius** link and then start the service.
18. Verify that the Steel-Belted Radius service has restarted.