How to Disable and Remove AppArmor on Ubuntu 14.04

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AppArmor, an acronym for Application Armor, is a Linux kernel security module that provides a Mandatory Access Control (MAC) system. It is a powerful tool that helps mitigate the risk of security breaches by restricting programs' capabilities with per-program profiles. While it is a valuable asset for enhancing security, it can sometimes cause unexpected issues with certain services on your Ubuntu system.

This guide will walk you through the process of disabling and removing AppArmor on Ubuntu 14.04, which can be particularly useful if you find that it's causing more problems than it's solving.

Before we proceed, it's important to note that this guide is intended for Ubuntu 14.04 minimal installations without a graphical user interface (GUI). If you're using a different version of Ubuntu or a different Linux distribution, the steps may vary.

Disabling and Removing AppArmor on Ubuntu 14.04

Step 1: Checking the Status of AppArmor

Before you disable or remove AppArmor, it's a good idea to check its current status. This can be done by entering the following command into your terminal:

```
sudo apparmor_status
```

This command will display information about the AppArmor module, including whether it's loaded and how many profiles are in enforce mode, complain mode, or unconfined.

Example:

```
dimitri@ubuntu14:~$ sudo apparmor_status
apparmor module is loaded.
4 profiles are loaded.
4 profiles are in enforce mode.
   /sbin/dhclient
   /usr/lib/NetworkManager/nm-dhcp-client.action
   /usr/lib/connman/scripts/dhclient-script
   /usr/sbin/tcpdump
0 profiles are in complain mode.
1 processes have profiles defined.
1 processes are in enforce mode.
   /sbin/dhclient (669)
0 processes are in complain mode.
0 processes are unconfined but have a profile defined.
```

Step 2: Disabling AppArmor

To disable AppArmor, you will need to stop the service and unload the kernel module. This can be done with the following commands:

`sudo /etc/init.d/apparmor stop`

`sudo update-rc.d -f apparmor remove`

Alternatively, you can use the service command to stop AppArmor:

`sudo service apparmor stop`

`sudo update-rc.d -f apparmor remove`

Step 3: Removing AppArmor Software

After disabling AppArmor, you can remove the software from your system with the following command:

`sudo apt-get remove apparmor apparmor-utils -y`

This command will remove both the apparmor and apparmor-utils packages from your system. After running this command, you should see a message indicating that the packages have been removed and how much disk space has been freed.

See also How to Check Apache Error Log and Access Log file
Example:

```
dimitri@ubuntu14:~$ sudo apt-get remove apparmor apparmor-utils -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be REMOVED:
  apparmor apparmor-utils
0 upgraded, 0 newly installed, 2 to remove and 119 not upgraded.
After this operation, 1,467 kB disk space will be freed.
(Reading database ... 93228 files and directories currently installed.)
Removing apparmor-utils (2.8.95~2430-0ubuntu5) ...
Removing apparmor (2.8.95~2430-0ubuntu5) ...
 * Clearing AppArmor profiles cache
[ OK ]
All profile caches have been cleared, but no profiles have been unloaded.
Unloading profiles will leave already running processes permanently
unconfined, which can lead to unexpected situations.

To set a process to complain mode, use the command line tool
'aa-complain'. To really tear down all profiles, run the init script
with the 'teardown' option."
Processing triggers for man-db (2.6.7.1-1) ...
```

Commands Mentioned

- sudo apparmor_status – This command is used to check the status of AppArmor on your system.
- sudo /etc/init.d/apparmor stop – This command is used to stop the AppArmor service.
- sudo update-rc.d -f apparmor remove – This command is used to unload the AppArmor kernel module.
- sudo service apparmor stop – This is an alternative command to stop the AppArmor service.
- sudo apt-get remove apparmor apparmor-utils -y – This command is used to remove the AppArmor software from your system.

See also How to Uninstall Elasticsearch on Ubuntu

Conclusion

AppArmor is a powerful tool for enhancing system security, but it's not always necessary for every system. In some cases, it can cause more problems than it solves, leading to the need to disable and remove it. This guide has provided step-by-step instructions on how to disable and remove AppArmor on Ubuntu 14.04. Remember, these steps are specifically for Ubuntu 14.04 minimal installations without a GUI. If you're using a different version of Ubuntu or a different Linux distribution, the steps may vary.

In the world of web hosting, understanding how to manage and optimize your server is crucial. Whether you're using a dedicated server, a VPS server, or a cloud hosting solution, knowing how to handle potential issues like this one is part of being a successful

webmaster. For more information on various web servers, check out these guides on <u>best web servers</u>, <u>Apache</u>, <u>Nginx</u>, and <u>LiteSpeed</u>.

<u>See also How to List Available Apache httpd Web Server Package and Info on CentOS 6.2</u>

Remember, while this guide provides a solution to a specific issue, it's always important to understand the implications of any changes you make to your system. Disabling and removing security features should only be done if you're confident that it won't compromise your system's security. Always make sure to have a backup of your data and consider consulting with a professional if you're unsure.

Frequently Asked Questions

1. What is AppArmor?

   AppArmor is a Linux kernel security module that provides a Mandatory Access Control (MAC) system. It restricts programs' capabilities with per-program profiles, enhancing system security.

2. Why would I want to disable AppArmor?

   While AppArmor enhances security, it can sometimes cause issues with certain services on your system. If it's causing more problems than it's solving, you might want to disable it.

3. How can I check the status of AppArmor?

   You can check the status of AppArmor by entering the command 'sudo apparmor_status' into your terminal.

4. How do I disable AppArmor?

   To disable AppArmor, you need to stop the service and unload the kernel module. This can be done with the commands 'sudo /etc/init.d/apparmor stop' and 'sudo update-rc.d -f apparmor remove'.

5. How do I remove AppArmor from my system?

   After disabling AppArmor, you can remove the software from your system with the command 'sudo apt-get remove apparmor apparmor-utils -y'.