

I would change the crucial nginx configuration file located at `/etc/nginx/sites-available/app.conf` using Vim for this incident response scenario. Vim is a safer option for a configuration file that directly impacts whether nginx can restart, even while a GUI editor such as Gedit is available. A minor error could result in the service failing because these files are extremely sensitive to syntax and structure. Vim eliminates the possibility of unintentional formatting changes or hidden characters, which can occasionally occur in GUI editors, especially when working quickly. It also enables extremely exact edits, controlled searching, and easy undo.

I would select editors for the remaining files according to their level of danger. Gedit makes sense because it is simpler to read and view the complete context of the file `/home/dev/docs/whitelist-notes.txt`, which is merely documentation and has no bearing on how the system functions. I would use Vim for `/home/dev/tools/test-ip.sh` because scripts require precise formatting and spacing. Vim makes it simpler to edit without inadvertently breaking the script.

Even though search and replace appear to be correct at first, if they are done incorrectly, nginx may still fail. One may, for instance, alter an allow or forbid directive in the incorrect block, change an IP address inside a remark, or partially substitute a lengthier IP address. Because nginx depends on proper block placement, semicolons, and structure, even a little formatting error can stop it from restarting.

Instead of changing everything at once, I would like to verify each item individually due to these dangers. Although it takes a little longer, there is less likelihood that something significant will be inadvertently changed. A little slower reaction is the trade-off, but it's preferable to needless downtime. Before making any changes, I would quickly create a backup of the nginx configuration file as a precaution, test the setup, and then restart nginx. This helps avoid avoidable service disruptions because it takes little time and provides instant feedback that the configuration is still valid.

Research Tools used-

Nginx official documentation

https://nginx.org/en/docs/beginners_guide.html

Nginx control and testing documentation

<https://nginx.org/en/docs/control.html>

Vim documentation

<https://www.vim.org/docs.php>

Red Hat Linux configuration practices-

https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/9/html/configuring_basic_system_settings/index

