Linux File Permissions Report

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This report explains how to use the chmod command with octal notation to set file permissions in Linux.

Octal Notation and 751 Breakdown

In Linux, file permissions for the owner, group, and others can be set using a three-digit octal number. Each digit is a sum of the following values: read (4), write (2), and execute (1).

The permission 751 is broken down as follows:

- **First Digit (7):** The file **owner** gets read, write, and execute permissions (4+2+1=7).
- **Second Digit (5):** The file's **group** gets read and execute permissions (4+1=5).
- **Third Digit (1): All other users** get execute permission only (1=1).

Commands and Verification

Here are the commands to create a file and set its permissions to 751, followed by the verification command and output.

1. **Create the file:**
   touch my_file.txt

2. **Set permissions:**
   chmod 751 my_file.txt

3. **Verify permissions:**
   ls -l my_file.txt

4.