# DevOps Cron & flock Full Session

By Ekansh Gupta

All conversation details, commands, and scripts

DevOps Cron & flock - Full Session with Ekansh Gupta

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1. Command Explanation:

Command:
nc -zv localhost 8080 || echo "Port 8080 down"

Explanation:
- `nc`: netcat command to check if a port is open.
- `-z`: zero-I/O, just scan without sending data.
- `-v`: verbose output.
- `||`: OR operator; if nc fails (port not open), then echo "Port 8080 down".

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2. Log Filter by Hour and Keyword:

Command:
grep "$(date --date='1 hour ago' '+%H')" /var/log/syslog | grep "ERROR"

Explanation:
- `date --date='1 hour ago' '+%H'`: fetches last hour (e.g., 14 for 2PM).
- First grep gets logs from that hour.
- Second grep filters for lines containing "ERROR".

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3. Crontab & Job Scheduling (DevOps Deep Dive):

- `crontab -e`: Edit current user's crontab.
- Cron format: m h dom mon dow command

Example:
0 2 * * * /home/user/backup.sh >> /var/log/backup.log 2>&1

Keywords: @reboot, @daily, etc.

Best Practices:
- Use full paths.
- Redirect output.
- Use `flock` to prevent overlaps.
- Monitor logs.

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4. flock for Safe Scheduling:

```
Basic:
exec 200>/tmp/my.lock
flock -n 200 || exit 1
```

```
Use in Cron:
* * * * * /home/user/job.sh
```

job.sh uses flock internally to prevent duplicate execution.

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5. Consolidated flock Script:

```
#!/bin/bash
LOCKFILE="/tmp/myjob.lock"
exec 200>"$LOCKFILE"
flock -n 200 || { echo "Already running"; exit 1; }
echo "Job started at $(date)"
# do work
echo "Job finished at $(date)"
```

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6. Troubleshooting & File Cleanups:

```
Command:
sudo rm /tmp/cron_test1
```

Explanation:
- Removes a temp file (e.g., lock file)
- Ensure no job is currently using it.

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7. Branding & Export:

- Generated a logo with your name
- Created branded PDFs for the cron job guide
- Built professional templates

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8. Final Request:

You asked for a complete transcript including code, explanations, and branding from start to finish.

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