

# [Fondamentaux] Cron

## Introduction

Cron est un **planificateur de tâche** disponible sur les distributions Linux.

Il peut permettre l'exécution de binaire ou de script notamment pour vos sauvegardes ou vos programmes.



## Configuration

Cron se configure depuis le fichier **/etc/crontab** où chaque ligne est une tâche planifiée. Voici un pense bête explicatif :

# Cron reference sheet for sysadmins

Min Hour Day Mon Weekday

\* \* \* \* \* script/command to be executed



**Minutes** 0..59 the command/script would be executed at the specified minute.

**Hours** 0..23 the command/script would be executed at the specified hour.

**Days** 1..31 the days of the months in which the script or command would be executed.

**Months** 1..12 the month in which the script would be executed.

**Weekdays** 0..6 the days of the week in which the script gets executed. 0 is Sunday.

## Format

Cron Expression	Command	Description
0 * * * *	/opt/backup.sh	perform a system backup every hour.
*/7 * * * *	/opt/ping.sh	check if the remote server is online every 7 minutes.
0 */6 * * *	/opt/emptytrash.sh	empty trash every 6 hours.
20 14 * * *	/opt/upgrade	upgrade the system at 14:20 PM of every day.
5 9 * 4 *	/opt/upgrade	upgrade the system at 09:05 AM in April.
20 14 * * ?	/opt/update.sh	update system At 14:20 PM of every day.
6 11 * * 3	/opt/upgrade.sh	upgrade the system at 11:06 AM of every Wednesday.
0 22 * * 1-5	/opt/upgrade.sh	upgrade the system at 22:00 PM on every day-of-week from Monday through Friday.
0 0 * * 2	/opt/upgrade.sh	upgrade the system at midnight (00:00) of ever Tuesday.
10 8 * * 4L	/opt/monitor.sh	monitor the system at 08:10 AM on the last Thursday of every month.
15 0 * * 4#2	/opt/upgrade	upgrade the system at at 00:15 AM on the second Thursday of every month.
0 0 0 1 * *	/opt/backup.sh	perform a sys backup every 1st of month (monthly).
0 0 0 1 1 *	/opt/backup.sh	perform a sys backup every 1st of january (yearly).
5 12 * * 6	/opt/emptytrash.sh	clears the trash at 12:05 PM on Sunday.
@reboot	/opt/backup.sh	perform a system backup at reboot.

## Examples

## Special strings

@reboot	command will be executed once at system startup (non-standard).
@hourly	command will be executed once an hour, same as ("0 * * * *") but non-standard.
@daily	command will be executed once each day, same as ("0 0 * * *") but non-standard.
@midnight	same as @daily but also non-standard.
@weekly	command will be executed once every week, same as ("0 0 * * 0") but non-standard.
@monthly	command will be executed once every month, same as ("0 0 1 * *") but non-standard.
@yearly	command will be executed once every year, same as ("0 0 1 1 *") but non-standard.



Command	Description
crontab -e	Edit or create a crontab file if doesn't already exist.
crontab -l	Display the crontab file.
crontab -r	Remove the crontab file.
crontab -u username -l	Display another user's crontab file.
crontab -u username -e	Edit another user's crontab file.
crontab -v	Display the last time you edited your crontab file.

## Crontab

## Special characters

<b>Asterisk (*)</b>	this operator is used to represent all potential values in a field. Write an asterisk "*" in the Minute column, for example, if you want your cron job to execute every minute.
<b>Hyphen (-)</b>	to determine a range of values, use this operator. For example, if you want to set up a cron job from Monday through Friday, simply write 1-5 in the weekday column.
<b>Slash (/)</b>	to split a value, use this operator. For instance, if you want a script to run every 6 hours, enter */6 in the Hour field.
<b>Comma (,)</b>	to list numerous values, use this operator. Writing 1,5 in the Day of the week field, for example, will schedule the task to be executed every Monday and Friday.
<b>Last (L)</b>	this operator can be used in the month and weekday fields. Writing 6L in the day-of-week field, for example, signifies the last Saturday of the month.
<b>Weekday (W)</b>	this operator is used to get the closest weekday from a given time. If the 1st of the month is a Saturday, for example, entering 1W in the day-of-month field will execute the command on the following Monday (the 3rd).
<b>Hash (#)</b>	it is only permitted for the Day Of Week field, which must be followed by a number between 1 and 5. For instance, 5#2 denotes "the second Friday" of a given month.
<b>Question mark (?)</b>	can be used instead of "*" in the Day of Month and Day of Week fields. Use this operator to enter "no specified value" for the "day of the month" and "day of the week" fields.

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