

The  GNOME™ Conference
GUADDEC

Download management on metered connections

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What's the problem?

- Many people use metered internet connections
- Cannot download everything they want to, when they want to
- Downloads have to be prioritised

What is metering?

- 👉 Pay per unit bandwidth used
- 👉 Pricing structures vary a lot
- 👉 Could have unmetered periods of the day
- 👉 Could be non-net-neutral

Does it affect me?

- 🐾 Home/Work internet connection may be unlimited
- 🐾 Trains, public Wi-Fi, mobile internet often aren't
- 🐾 Main internet connection may be bandwidth constrained, even if unlimited
- 🐾 Downloads can be prioritised

Introducing Mogwai

- 🐾 Mogwai is a download scheduler
- 🐾 It does downloads after midnight (hence the name)
 - 🐾 It's also a daemon, which ties in with the Cantonese meaning
- 🐾 Applications ask it when to start 'big' downloads
- 🐾 It schedules all the requests and notifies the applications
- 🐾 Uses various configuration, including tariff files

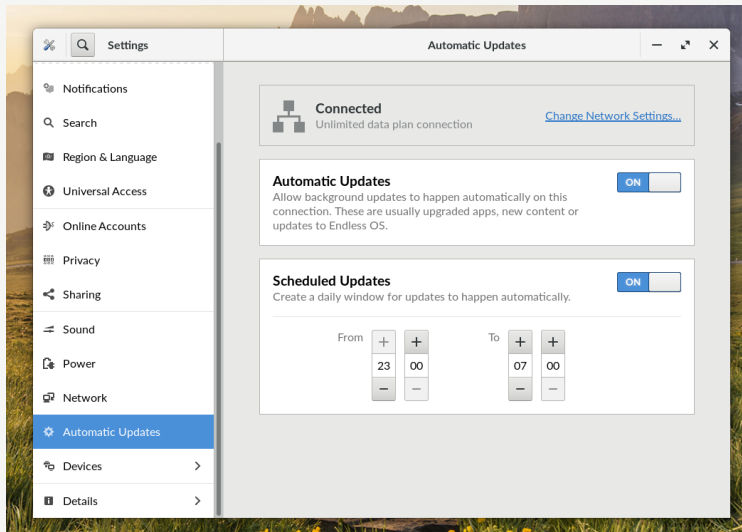
What Mogwai is not

- 🐾 Not security — it's an opt-in system
- 🐾 Not currently monitoring bandwidth usage

How do I use it?

- `libmogwai-schedule-client`
- See source code for `mogwai-schedule-client` utility
- Or the 'Automatic Updates' panel in `gnome-control-center`

Mogwai in gnome-control-center



Future work — available for mentoring

- 🐾 Monitor bandwidth usage to close the feedback loop
- 🐾 Provide download statistics to GNOME Usage
- 🐾 Account for more factors when scheduling downloads

Miscellany

GitLab <https://gitlab.freedesktop.org/pwithnall/mogwai>



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Beamer theme: <https://gitlab.gnome.org/GNOME/presentation-templates/tree/master/GUADEC/2018>