Edmonton R User Group



Meetup - March 24, 2022

Last Thursday of every month, 6-8 pm

We're an online and in-person R-enthusiast group hosting live speaking events on a range of topics, from data wrangling to visualization and Shiny.

Learn R, hone your skills, network, or just stay up-to-date. All skill levels are welcome!

Edmonton is located on Treaty 6 territory, a traditional gathering place for diverse Indigenous peoples including the Cree, Blackfoot, Métis, Nakota Sioux, Iroquois, Dene, and many others whose histories, languages, and cultures continue to influence our community.

Our sponsors



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Please introduce yourselves:

What did you do with R lately?

Step-by-step guide for parallelizing your R code

by Peter Solymos

Edmonton R User Group



Mar 24, 2022

About Peter

Ecologist, data scientist, R dev since 2007

E Source

Analythium

Past: UofA / ABMI

Motivation

Dclone package 2009: uses JAGS/rjags

Working on ResourceSelection & detect packages

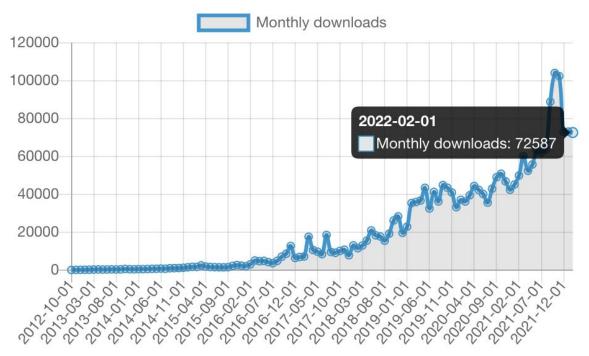
Progress bar: common in these packages, reusability

- Base implementation is piecemeal → Unified interface
- Time estimate missing
- Unify sequential & parallel workflows

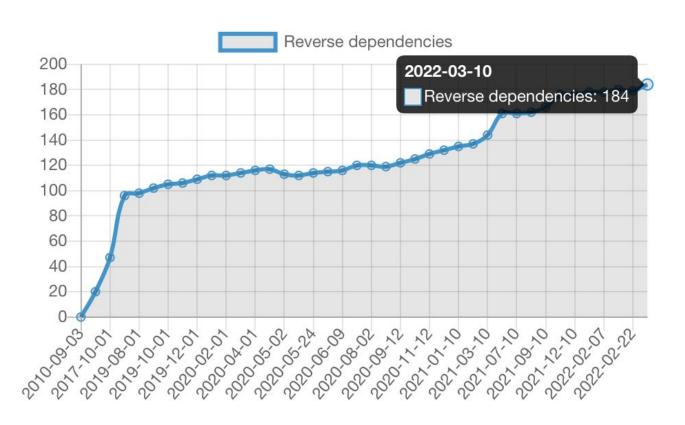
Remember: this is all pre-tidyverse, base focused

pbapply - 2.4M

Most used/downloaded by least scientific package I wrote



pbapply - more vanity metrics



pbapply - lightweight, no dependencies

pbapply: Adding Progress Bar to '*apply' Functions

A lightweight package that adds progress bar to vectorized R functions ('*apply'). The implementation can easily be added to functions where showing the progress is useful (e.g. bootstrap). The type and style of the progress bar (with percentages or remaining time) can be set through options. Supports several parallel processing backends.

Version: 1.5-0

Depends: $R (\ge 3.2.0)$ Imports: parallel

Imports: paralle Suggests: shiny

Published: 2021-09-16

Author: Peter Solymos [aut, cre], Zygmunt Zawadzki [aut]

Maintainer: Peter Solymos <solymos at ualberta.ca>

BugReports: https://github.com/psolymos/pbapply/issues

License: <u>GPL-2</u>

URL: https://github.com/psolymos/pbapply

NeedsCompilation: no

In views: <u>HighPerformanceComputing</u>

CRAN checks: <u>pbapply results</u>

pbapply - testimonial

Did you guys seriously just implement

- parallel processing
- on whatever platfrom automatically
- with a total progress bar?

You're now officially demigods.

Hi Peter, want to give you a shoutout to your phapply package it's awesome. Especially the fact that it supports parallel backends!

Just last week I taught a bunch of students about lapply, pblapply, mclapply/parLapply and mused how awesome it would be to have parallel AND a progress bar.

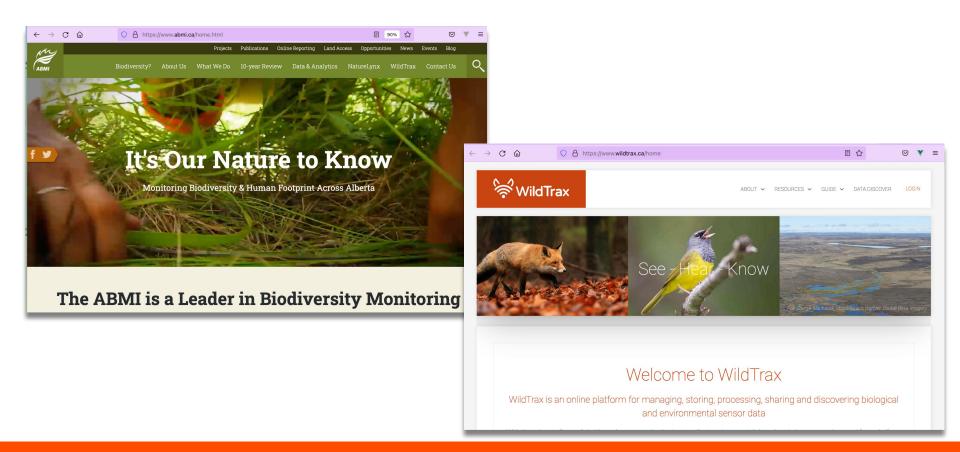
And there it is.

You're awesome!!!

Thanks for making my day.

Berry

Data source



Hands-on

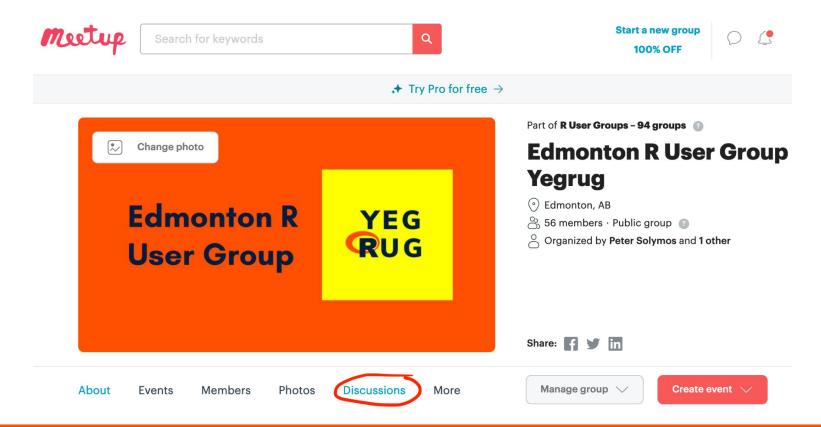
Now, let's get to the point where you'll be able to take advantage of phapply even if you are not a package developer

https://github.com/psolymos/the-road-to-progress

Next up: Apr 28, 2022

Echarts in R with Michael Thomas

Questions/suggestions >> Meetup



#meetup-r Slack channel

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Dev Edmonton Society

Fostering a stronger software development community in Edmonton.

We are made up of people who believe that an impactful, diverse, and collaborative developer community enriches us all. We realize this vision by sharing knowledge and ideas, understanding the community and its needs, promoting events and initiatives, and supporting technology meetups and organizations.

Join our community on Slack



Join Slack

https://devedmonton.com/

Past Meetups >> GitHub site



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Meetups

If you would like to present in one of our upcoming meetups, please get in touch with the organizers by on the groups' Meetup page

2022

- February 24: YEGRUG and CalgaryR joint meetup and social
- January 31: Interfacing R with ArcGIS by Brandon Allen

2021

- December 16: ggplot2 intro with Marcus Becker
- November 25: Model fitting in the cloud with Mauricio Vargas
- October 28: R Open Science with Steffi LaZerte
- September 30: R in Production with Bruno Tremblay

Thanks for coming!