

Package Manager for ICP

Install software in ICP to use it
in a user's subnet.

OS for ICP





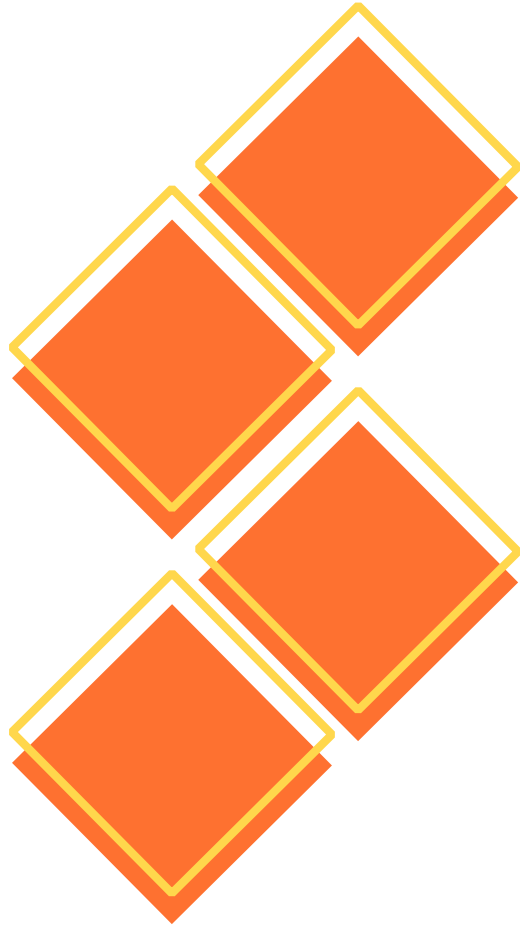
1 User sovereignty over user's software

Put user's soft in the same subnet (speed) **2**

3 Manage software easily

Soft of user choice **4**

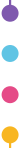
5 Manage permissions



1

Install Software

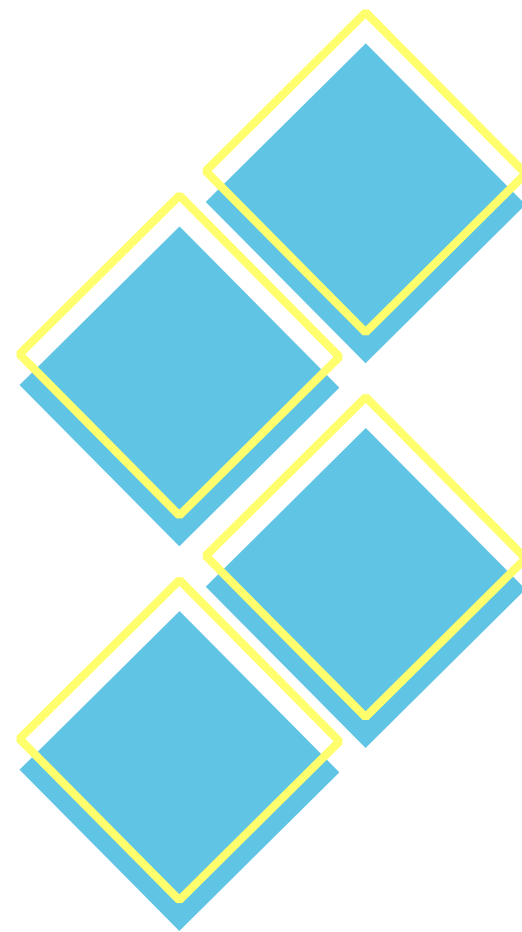
Copying the software to user's own subnet instead of simply use it online from the developer's subnet. Installed software is owned by the user, not the dev or DAO.





Fast

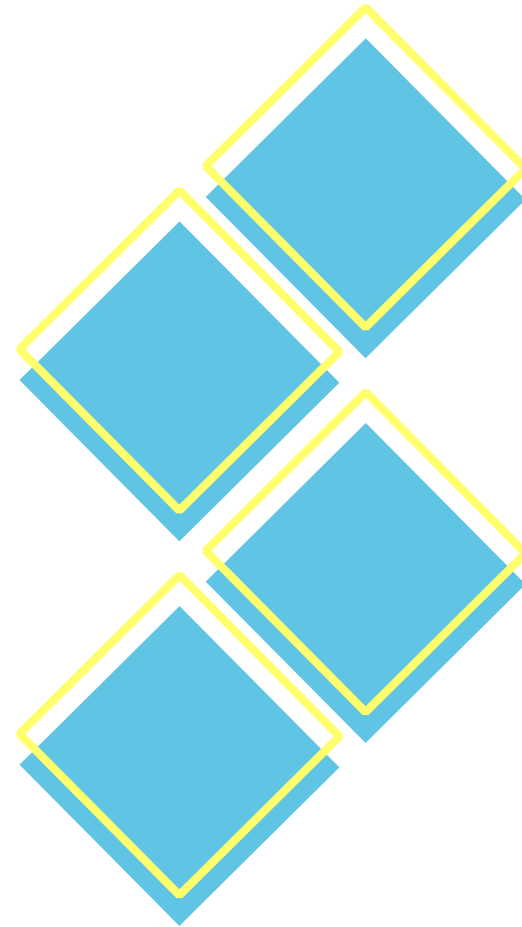
Putting all user's software in the same subnet can much increase the speed.



3

Convinient

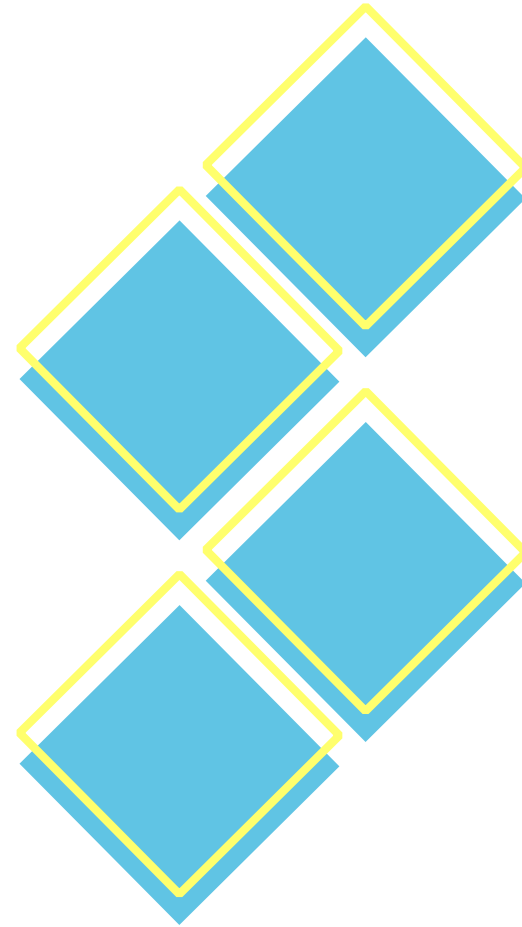
We provide a package manager to manage the software easily.



4

Choice

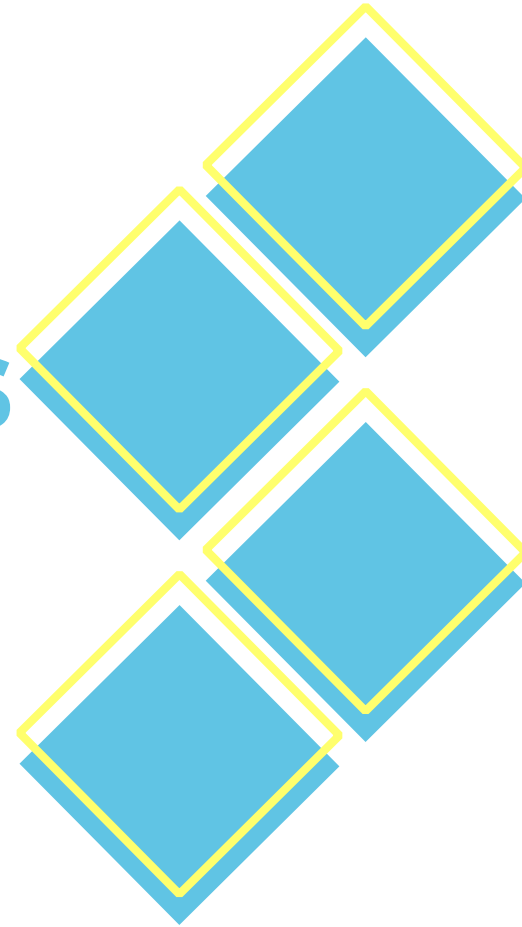
The user may be provided choice between several software packages for a "function" (usage), such as several email clients.



5

Permissions

Like as in Android, user has choice over permissions to give.





**Support for
multiple repos
(DAOs), multiple
installs, and
multiple subnets**

Unlike Linux distros, you can install from multiple repositories.



Blackholed?

We lay aside blackholing package manager or its parts for the future, when we will have more knowledge.



Permissions

Android-like permissions.



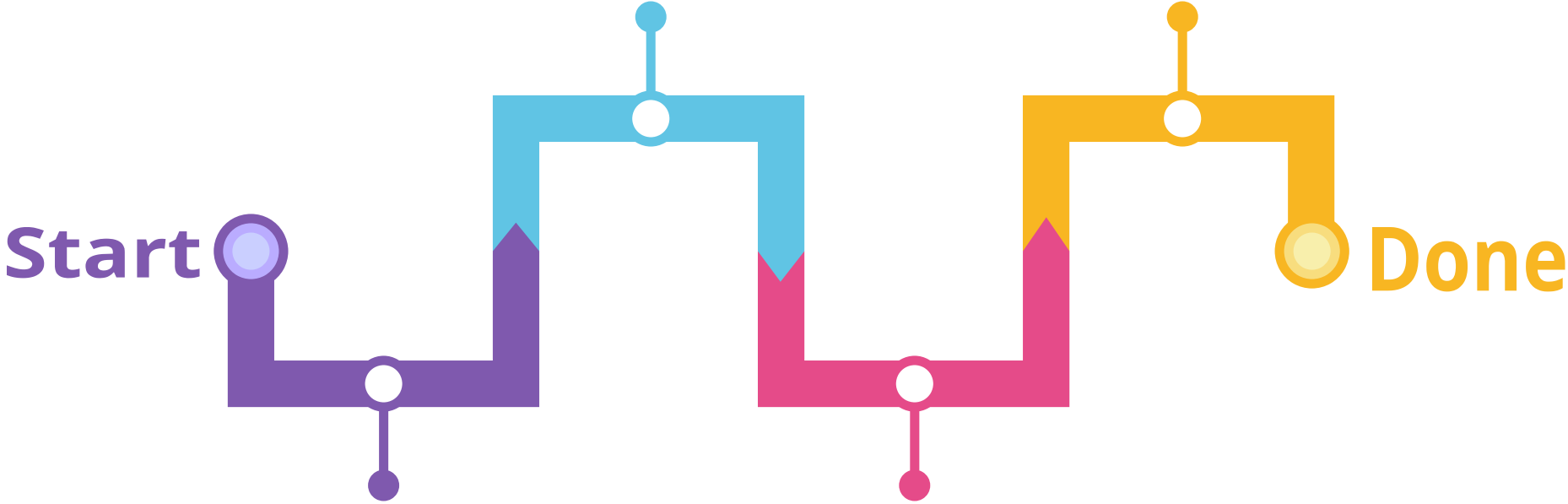
**Support big
repos**

Nearly no limit for repository size.



Writing repository specs

Frontend



Writing package manager specs (mostly done)

Backend (partly written)



We can have as
big success as of
Linux.
But unlike Linux
we can have
"tax" on users.



Work by: Falia Vicky

Scenario 1: 1B users, each installs 100 apps with 3 modules each, \$2 paid in gas, our 1% tax = **\$6B revenue**

Scenario 2: 10K corporate AI users, each spends \$10000 on running AI, our 1% tax = **\$1M revenue**



2024-07-10 15:13:24.630970819 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Creating a distro repository...

2024-07-10 15:13:27.258747705 UTC: [Canister ajuq4-ruaaa-aaaaa-qaaga-cai] creating new storage canister with pk=main

2024-07-10 15:13:31.208109583 UTC: [Canister ajuq4-ruaaa-aaaaa-qaaga-cai] new storage canisterId=aovwi-4maaa-aaaaa-qaagq-cai

2024-07-10 15:13:31.208109583 UTC: [Canister ajuq4-ruaaa-aaaaa-qaaga-cai] creating new storage canister with pk=wasms

2024-07-10 15:13:35.180839589 UTC: [Canister ajuq4-ruaaa-aaaaa-qaaga-cai] new storage canisterId=ahw5u-keaaa-aaaaa-qaaha-cai

2024-07-10 15:13:35.180839589 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Uploading WASM code...

2024-07-10 15:13:35.180839589 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Uploading package and versions description...

2024-07-10 15:13:35.180839589 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Installing the ICP Package manager...

2024-07-10 15:13:37.822419090 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Using the PM to install 'counter' package...

2024-07-10 15:13:40.471292265 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Getting package info...

2024-07-10 15:13:40.471292265 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Running the 'counter' software...

2024-07-10 15:13:40.471292265 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] Counter is equal to 1...

2024-07-10 15:13:40.471292265 UTC: [Canister bw4dl-smaaa-aaaaa-qaacq-cai] COUNTER: 1



Main page Installed packages [Connect to IC](#)

Distribution

Distro: [Remove from the list](#) (doesn't remove installed packages)

[Add distro](#)

Install

Enter package name to install: [Start installation](#)

Partially Installed

`fineedit` 2.3.5

[Install checked](#)

[Delete checked](#)



Main page Installed packages [Connect to IC](#)

Installed packages

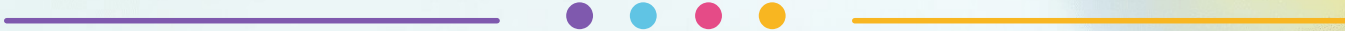
All [Uninstall](#) [Upgrade](#)

photoedit 3.5.6 ([1](#), [2](#)), [3.5.7](#)

altcoin 4.1.6



THANK YOU



Victor Porton, the mathematician who discovered
ordered semigroup actions

CREDIT BY:

@lken_ @menggeling_ @ealita.id @li_orch @cahyaning_asih

BIDADARI GIMPSCAPE