Another talk about CAW?

NGI Stockholm CAWterly meeting

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https://maxulysse.github.io/

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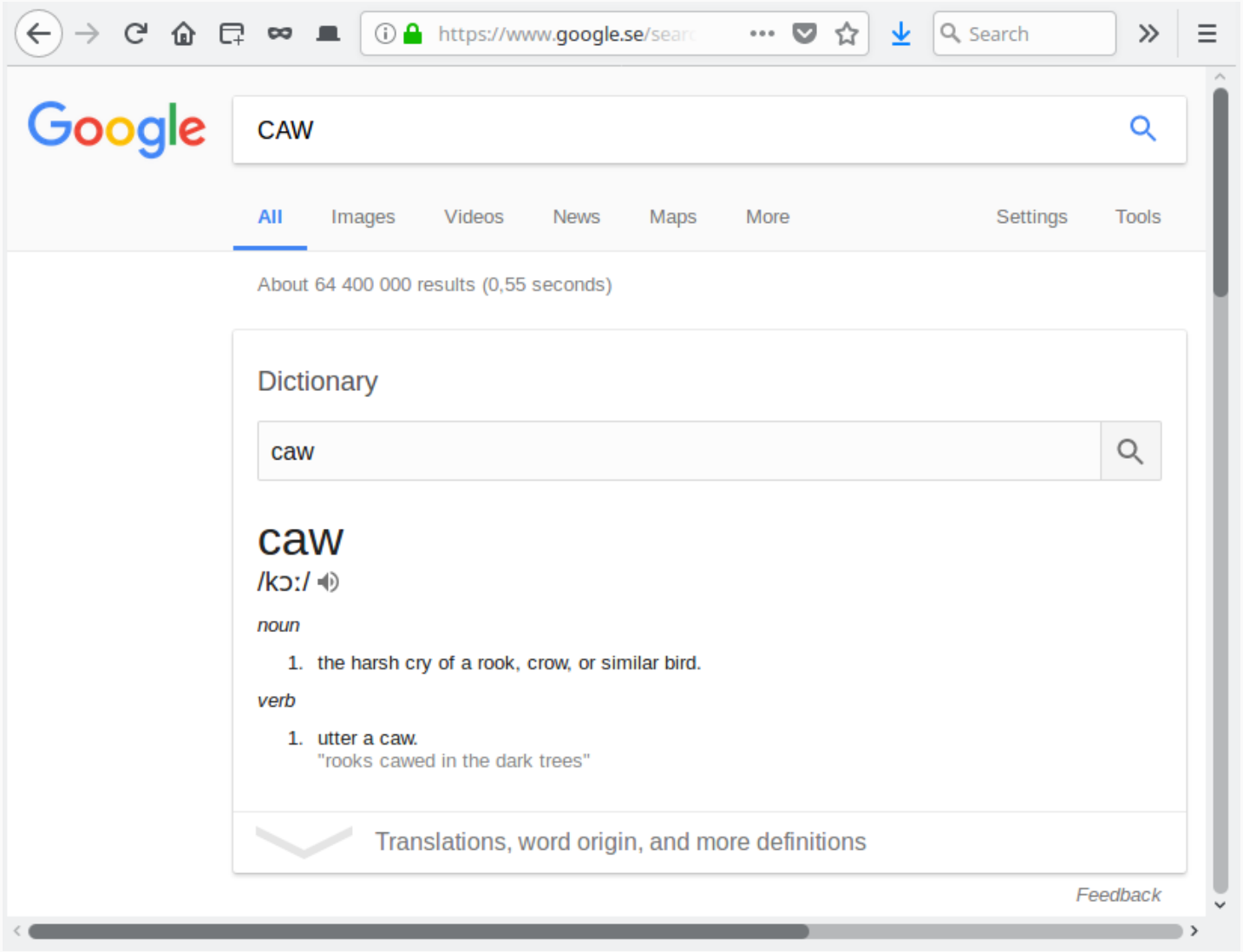
SciLifeLab NGI / BarnTumörBanken

SciLifeLab NATIONAL GENOMICS INFRASTRUCTURE NBIS NATIONAL BIOINFORMATICS INFRASTRUCTURE SWEDEN Karolinska Institutet KTH VETENSKAP OCH KONST Stockholms universitet UPPSALA UNIVERSITET

What is CAW?


https://www.google.se/sear
Search
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Images
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News
Maps
More
Settings
Tools
About 64 400 000 results (0,55 seconds)
Dictionary
caw
caw
/kɔ:/
noun
1. the harsh cry of a rook, crow, or similar bird.
verb
1. utter a caw.
"rooks cawed in the dark trees"
Translations, word origin, and more definitions
Feedback

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- Pipeline developed at NGI
- In collaboration with NBIS
- Support of The Swedish Pediatric Tumor Biobank

What does CAW do?

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- Tumor/Normal pair WGS analysis

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- Tumor/Normal pair WGS analysis
- Based on GATK best practices for processing FASTQ files
- MuTect1, MuTect2, Strelka, and GATK HaplotyeCaller

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- Manta

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- Structural variants
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- Tumor/Normal pair WGS analysis
- Based on GATK best practices for processing FASTQ files
- SNPs, SNVs and indels
- Structural variants
- Heterogeneity, ploidy and CNVs

Using Singularity

http://singularity.lbl.gov/
https://singularity-hub.org/

- Docker-like containers technology
- Specific for HPC environnment

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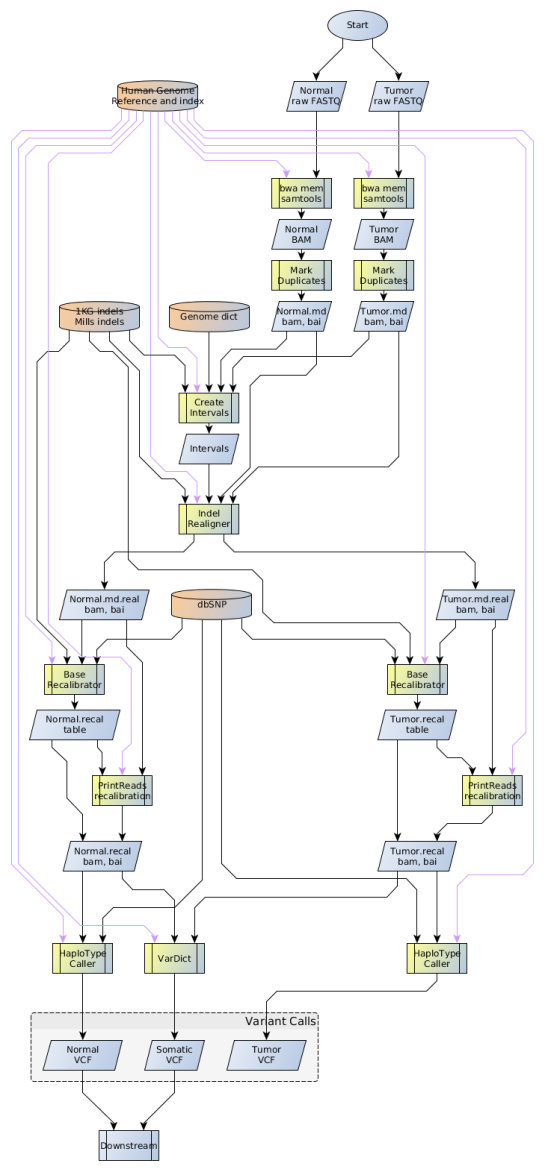
Containerization is not only portable but also reproducible.

Can CAW do more?



Can CAW do more?

- Start from FASTQ files
- More or less processed BAM files
- Annotations with snpEff and/or VEP
- Reports with MultiQC

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- We can also process normal only samples

Can CAW do more?

CAW to replace Piper into production

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CAW to replace Piper into production

- Kick of meeting was 2017-10-04
- Normal only processing of samples
- Handles GRCh38 and GRCh37
- Faster than Piper
- Has already been use to process the 1000 samples from SweGen

The List of People Involved

Sebastian DiLorenzo
Jesper Eisfeldt
Maxime Garcia
Szilveszter Juhos
Max Käller
Malin Larsson
Marcel Martin
Markus Mayrhofer
Monica Nistèr
Björn Nystedt
Pall Olason
Markus Ringnér
Pelin Sahlén
Johanna Sandgren
Teresita Díaz De Ståhl

Where to find us?

- We are on the SciLifeLab Slack
  `#cancer-pipeline`

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- Our code is hosted on Github
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Any questions?