

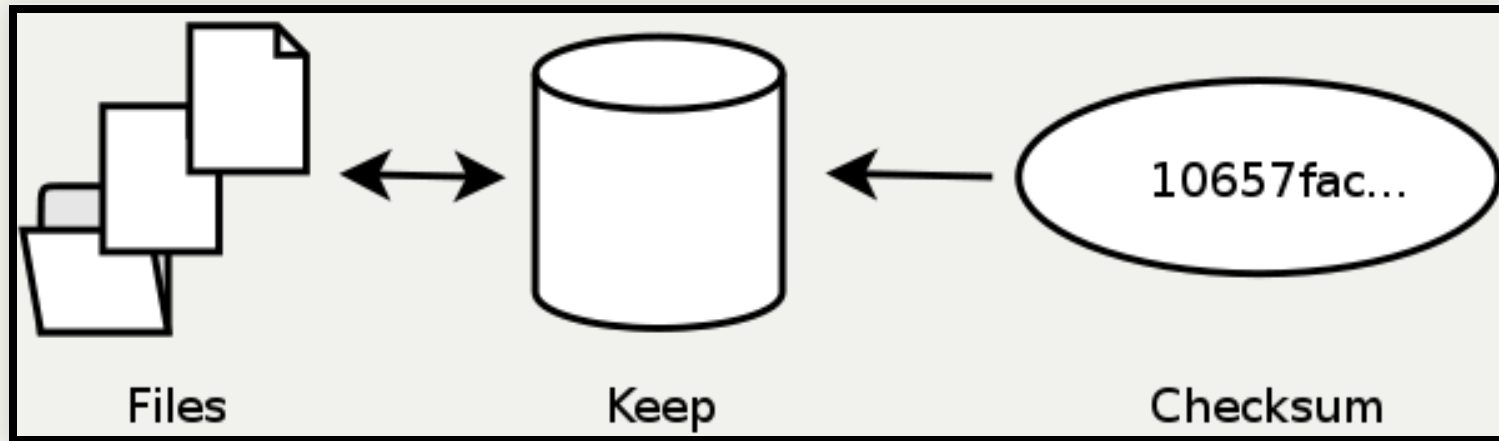


ArvadosTM

About Arvados

- <https://arvados.org/>
- License: GNU AGPL version 3
(with SDKs under Apache License 2.0)
- Written primarily in Rails and Go

Keep: Content-addressable storage



Keep Manifests

Map a collection of files to Keep storage

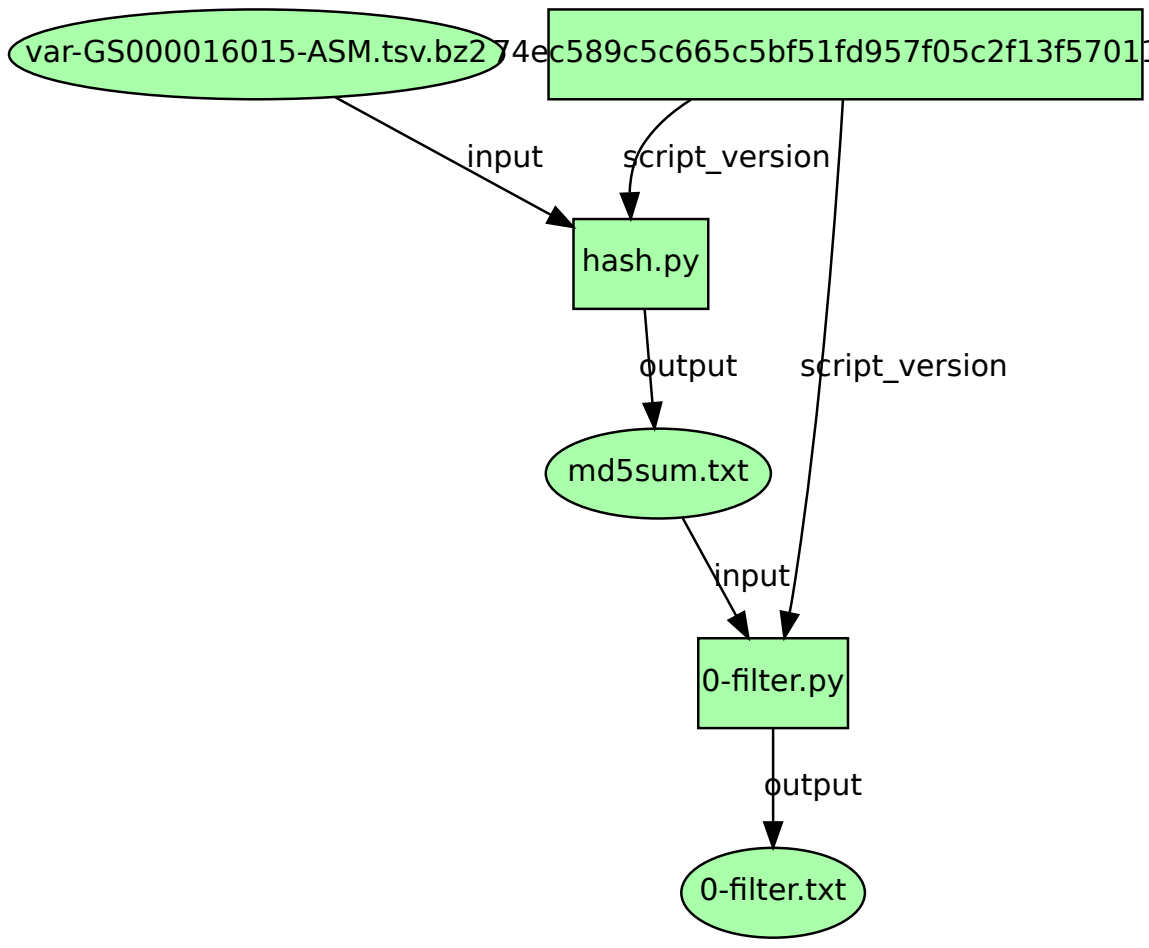
```
. 50edc6a39ac0a3f9f5048e8a18dda5ef+67108864  
0b853b665d5cac96bb6c015ac6cf0c56+67108864  
a2c46aca6d51add2ee90ee8a526c90d0+67108864  
...  
908051:3817477817:HWI-ST1027_129_D0THKACXX.2_1.fastq.bam  
0:908051:HWI-ST1027_129_D0THKACXX.2_1.fastq.bam.recal.csv
```

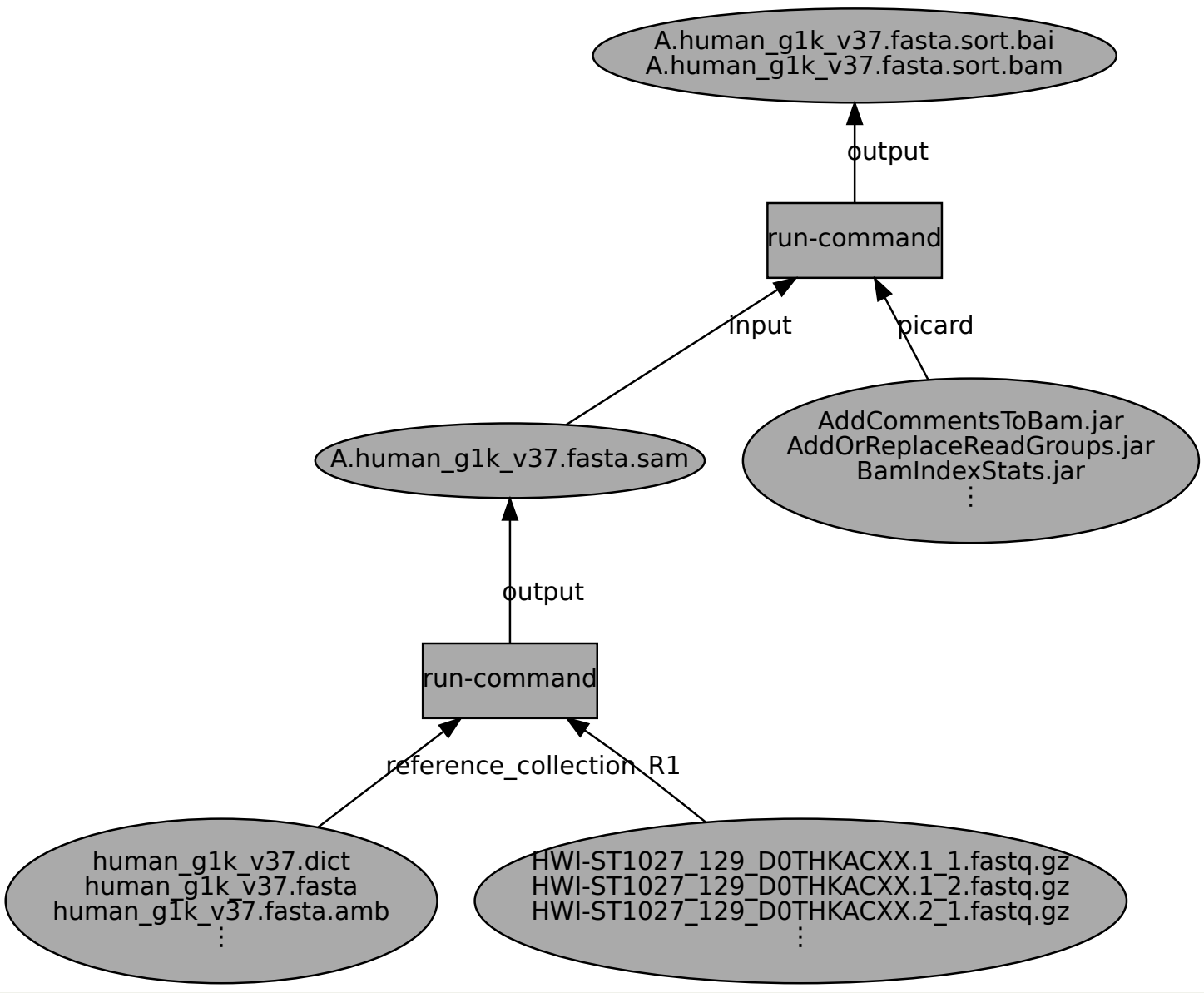
Arvados API Server

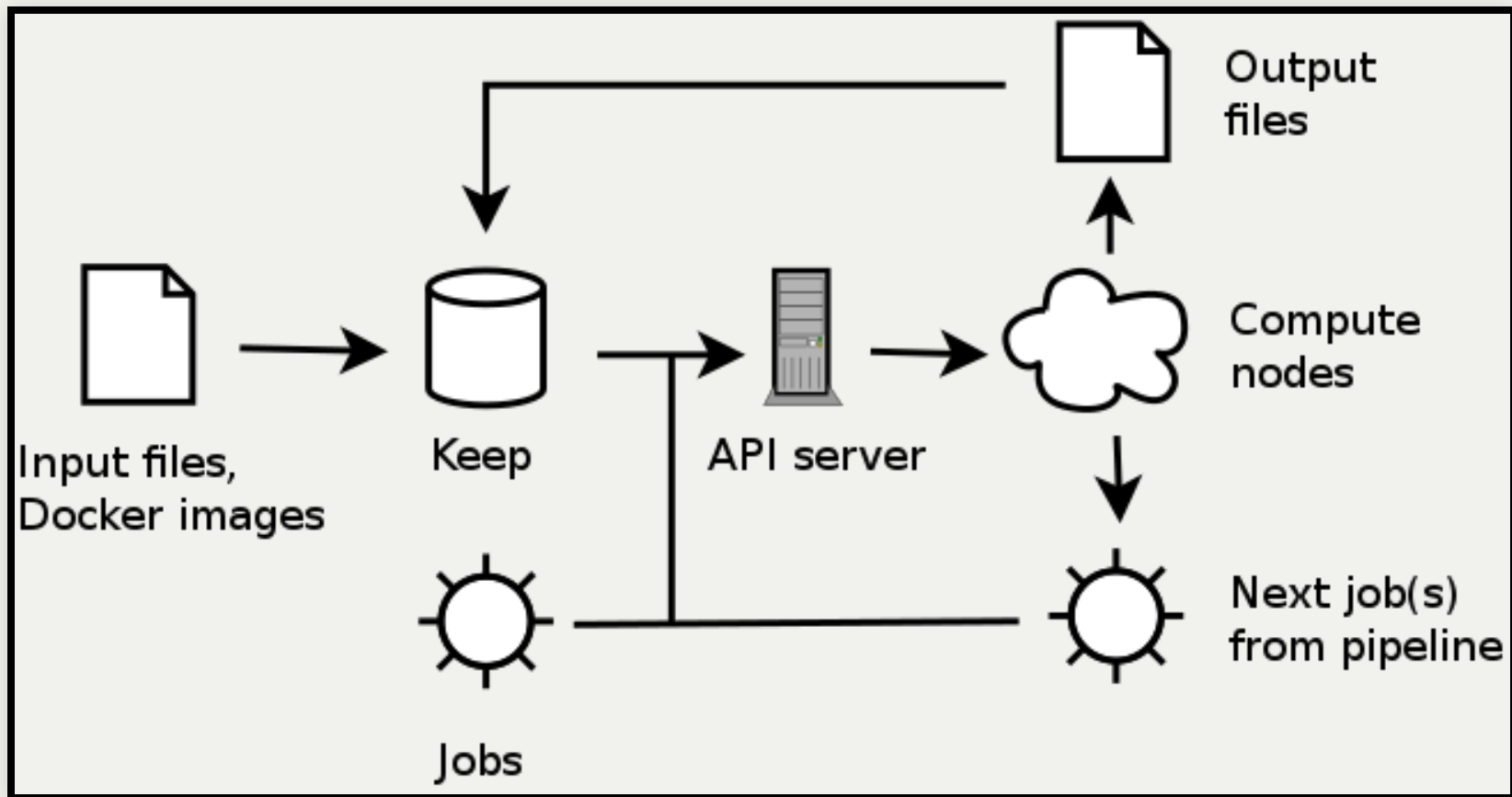
Jobs

```
{"script": "run-command",
 "script_version": "847459b3c257aba65df3e0cbf6777f7148542af2",
 "repository": "arvados",
 "script_parameters": {
  "command": [
    "bwa", "mem", "-t", "${node.cores}", "-R",
    "@RG\tID:group_id\tPL:illumina\tSM:sample_id",
    "${dir $(reference_collection)}/${reference_name}",
    "${file $(R1)}", "${file $(R2)}"
  ],
  "reference_collection": {
    "required": true, "dataclass": "Collection",
    "default": "3514b8e5da0e8d109946bc809b20a78a+5698"
  },
  # ... more input parameters...
},
 "runtime_constraints": {
  "docker_image": "arvados/jobs-java-bwa-samtools",
  "min_cpu_cores_per_node": 8
}
}
```

```
{"script": "run-command",
 "script_version": "847459b3c257aba65df3e0cbf6777f7148542af2",
 "repository": "arvados",
 "script_parameters": {
   "command": [
     "bwa", "mem", "-t", "$(node.cores)", "-R",
     "@RG\tID:group_id\tPL:illumina\tSM:sample_id",
     "$(dir $(reference_collection))/$(reference_name)",
     "$(file $(R1))", "$(file $(R2))"
   ],
   "reference_collection": "3514b8e5da0e8d109946bc809b20a78a+5698",
   "reference_name": "human_g1k_v37.fasta",
   "# ... more resolved input parameters..."
 },
 "docker_image_locator": "fdab1550b0b1d9567fbf9a42b22a38d4+966"
}
```





Learn more

- <https://arvados.org/>
- IRC: [irc.oftc.net/#arvados](irc://irc.oftc.net/#arvados)
- Ask about a beta account