Amazon Elastic Container Service (Amazon ECS)

2018.4.2

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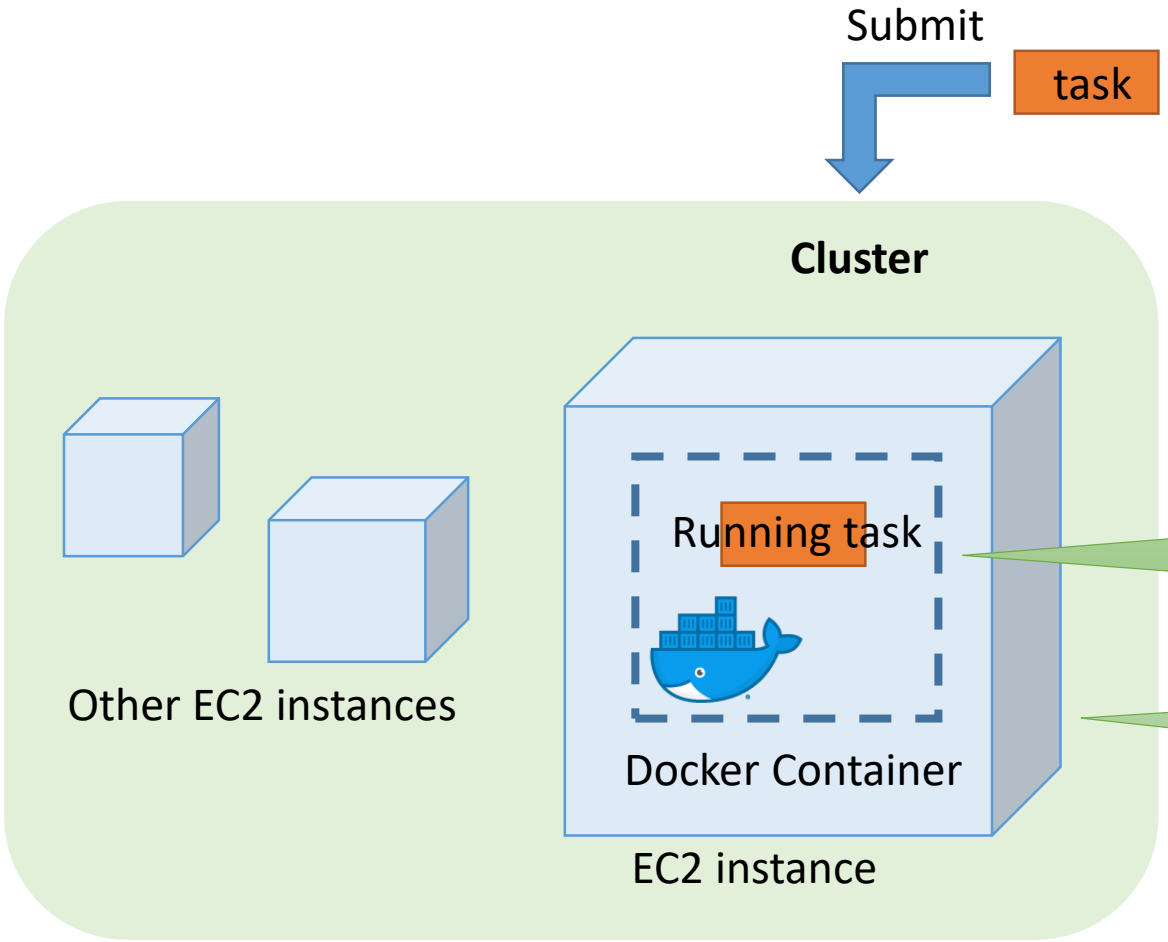
Tasks and clusters in Amazon ECS



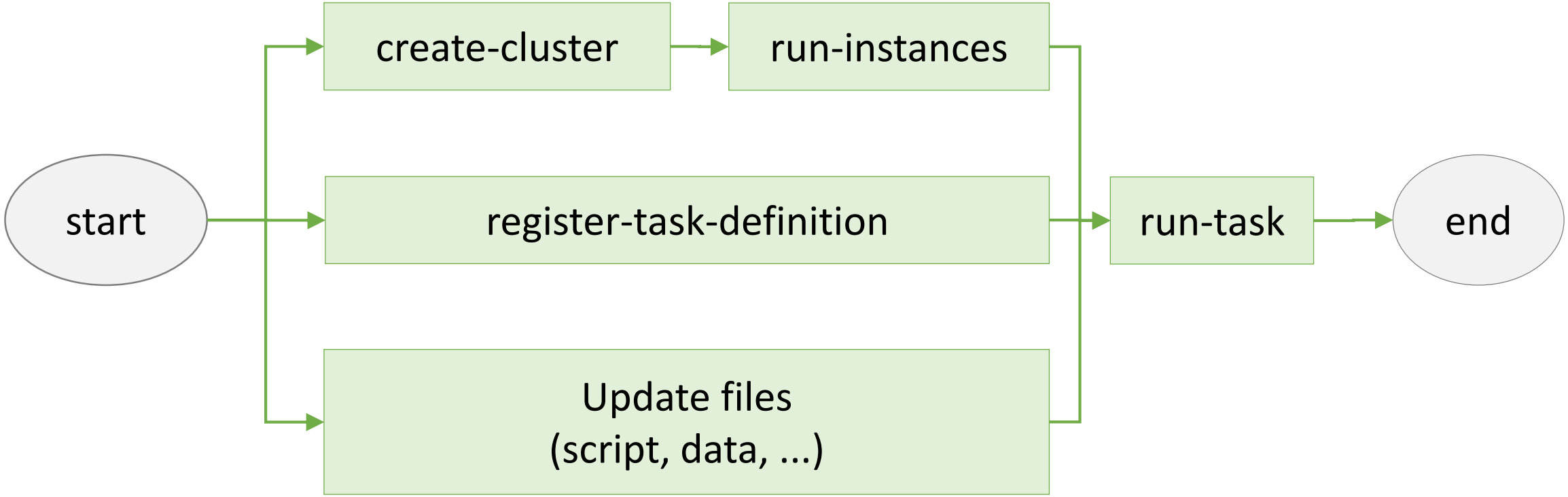
The task is put into the cluster.

The task include,
- Task definition (information on docker container)
- cluster

The task is executed in the docker container of the EC 2 instance.

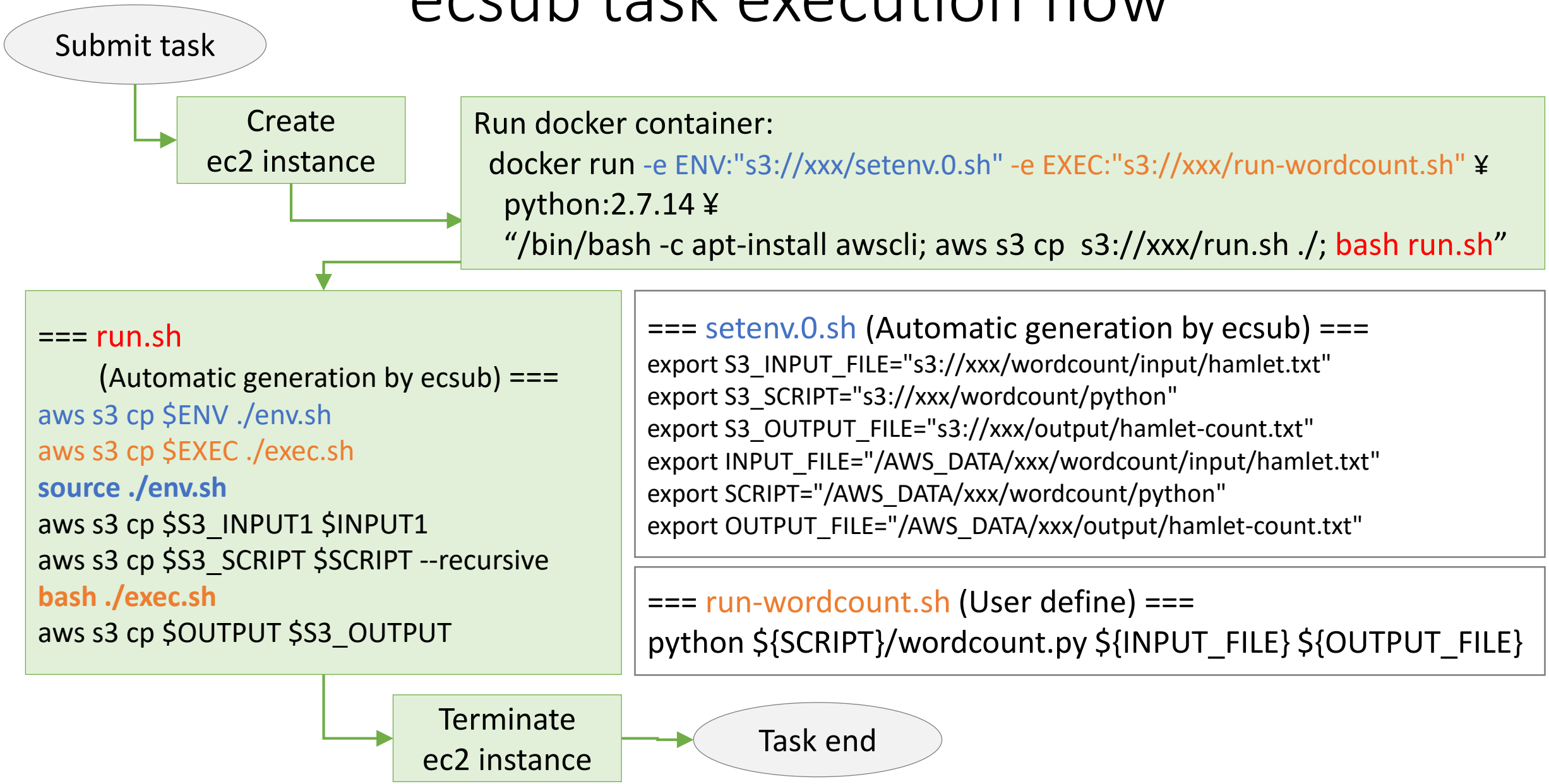
EC 2 instances are started by user.

AWS CLI: Command execution dependency

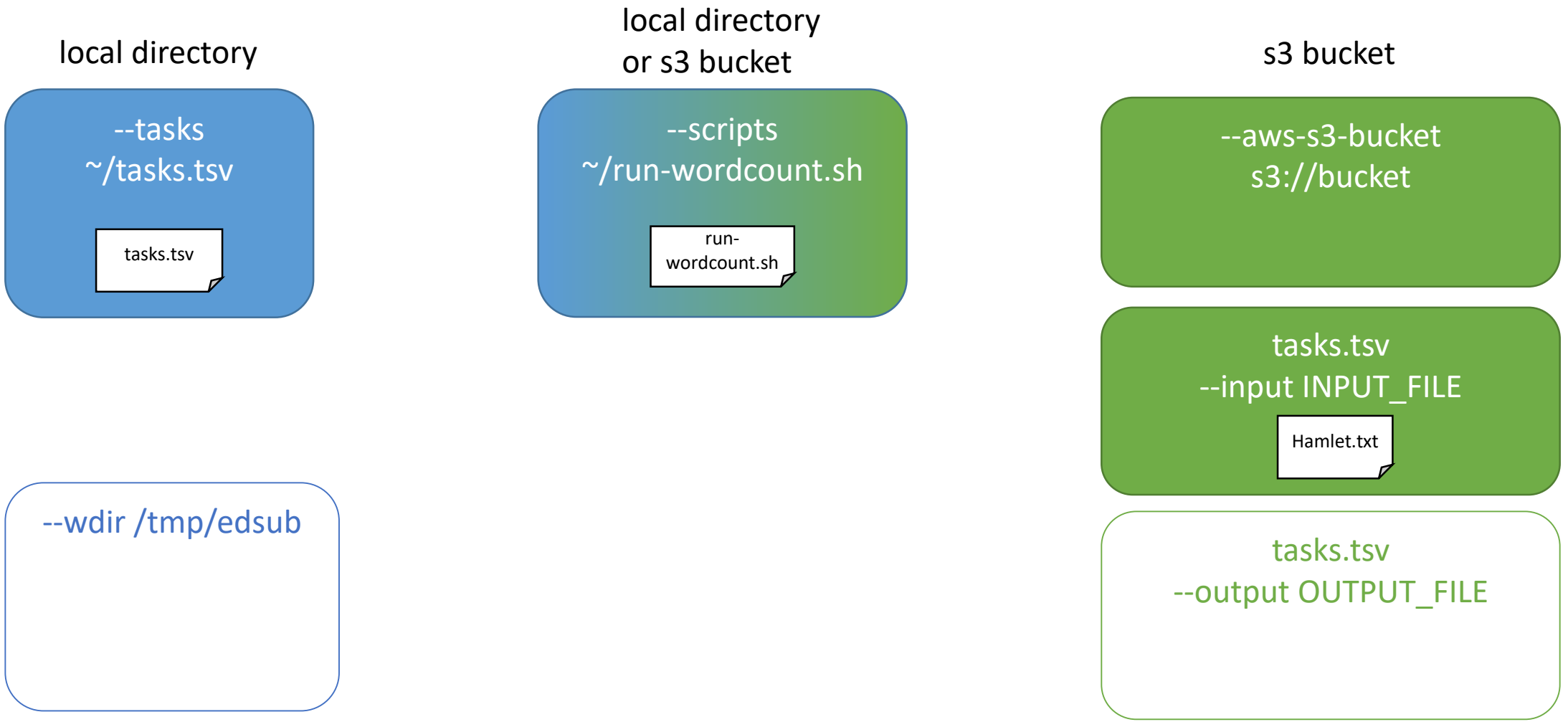


ecsub flow

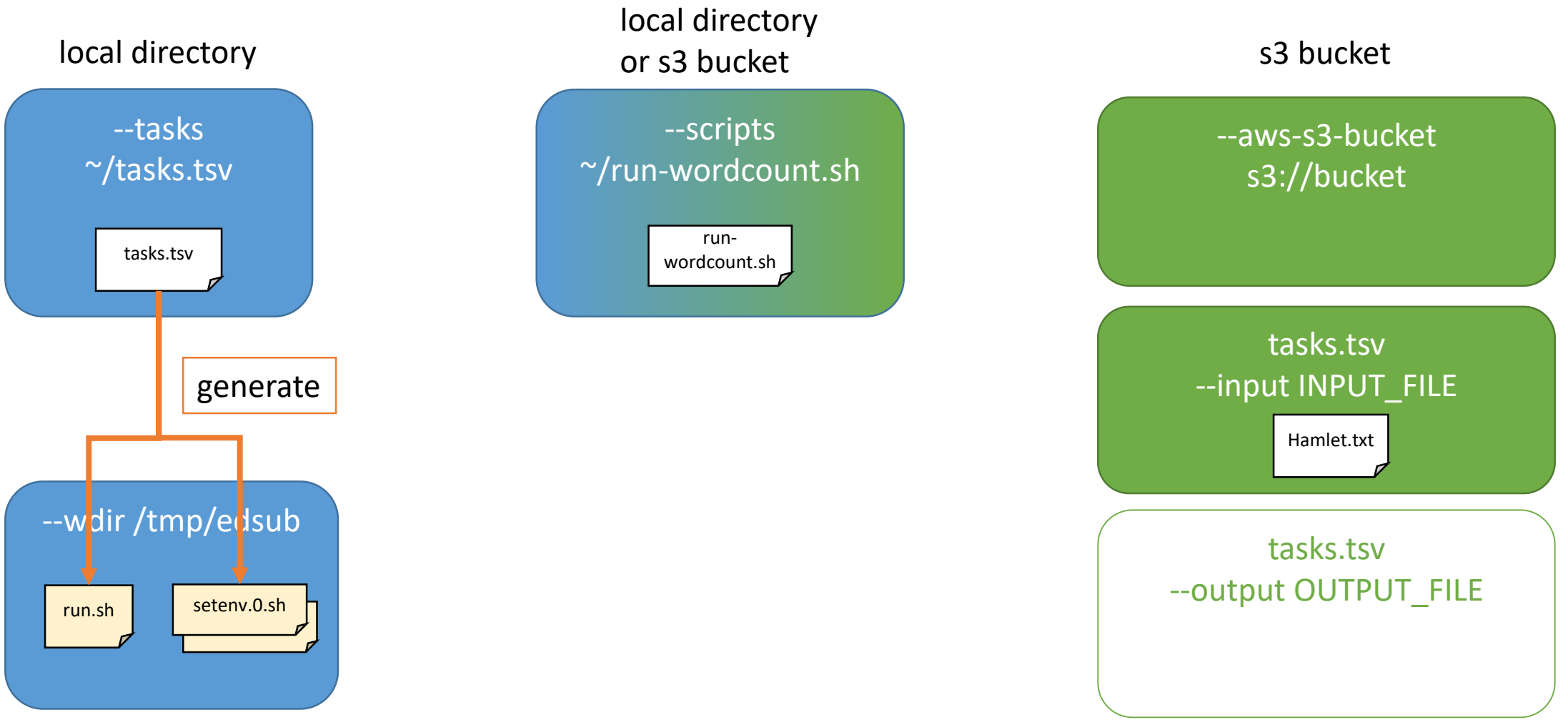
ecsub task execution flow



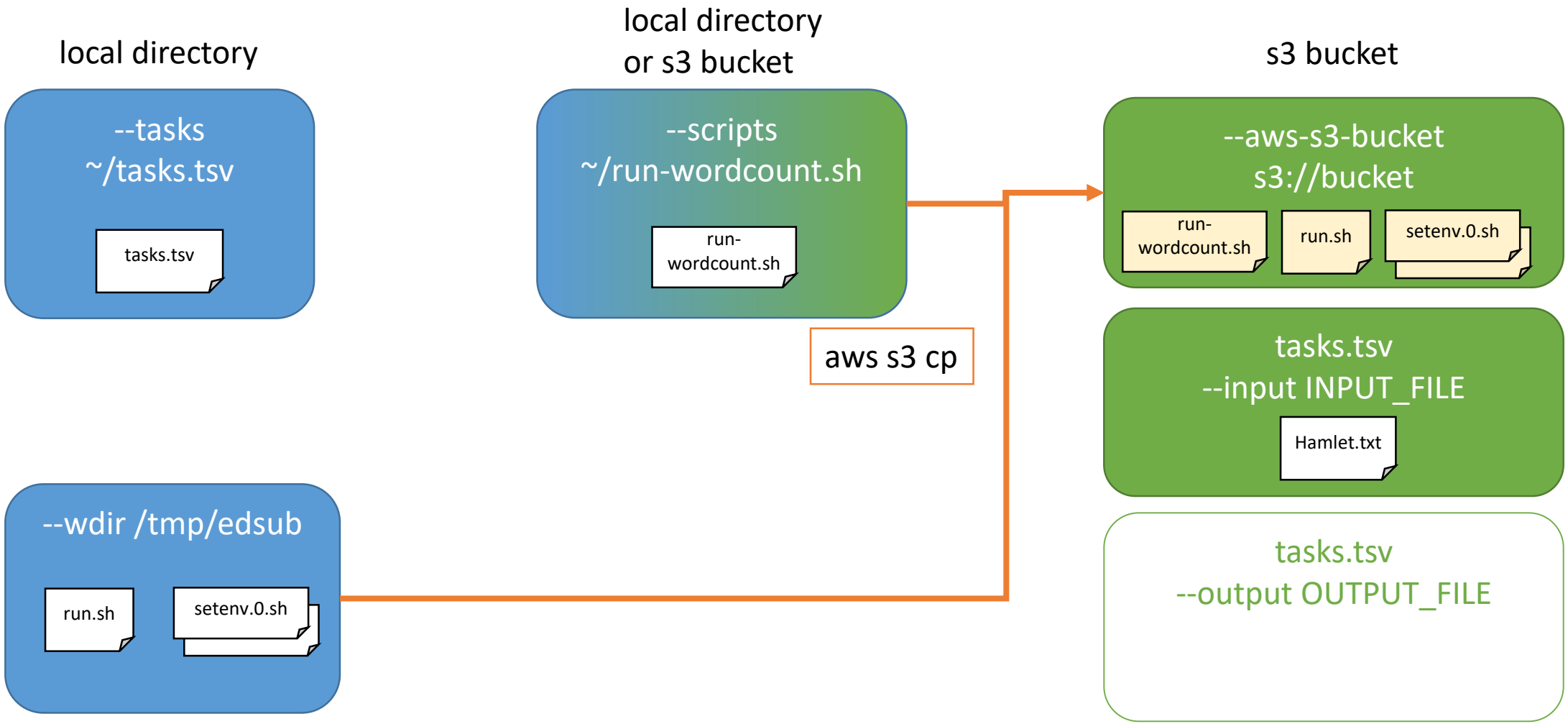
ecsub data flow 1 - init



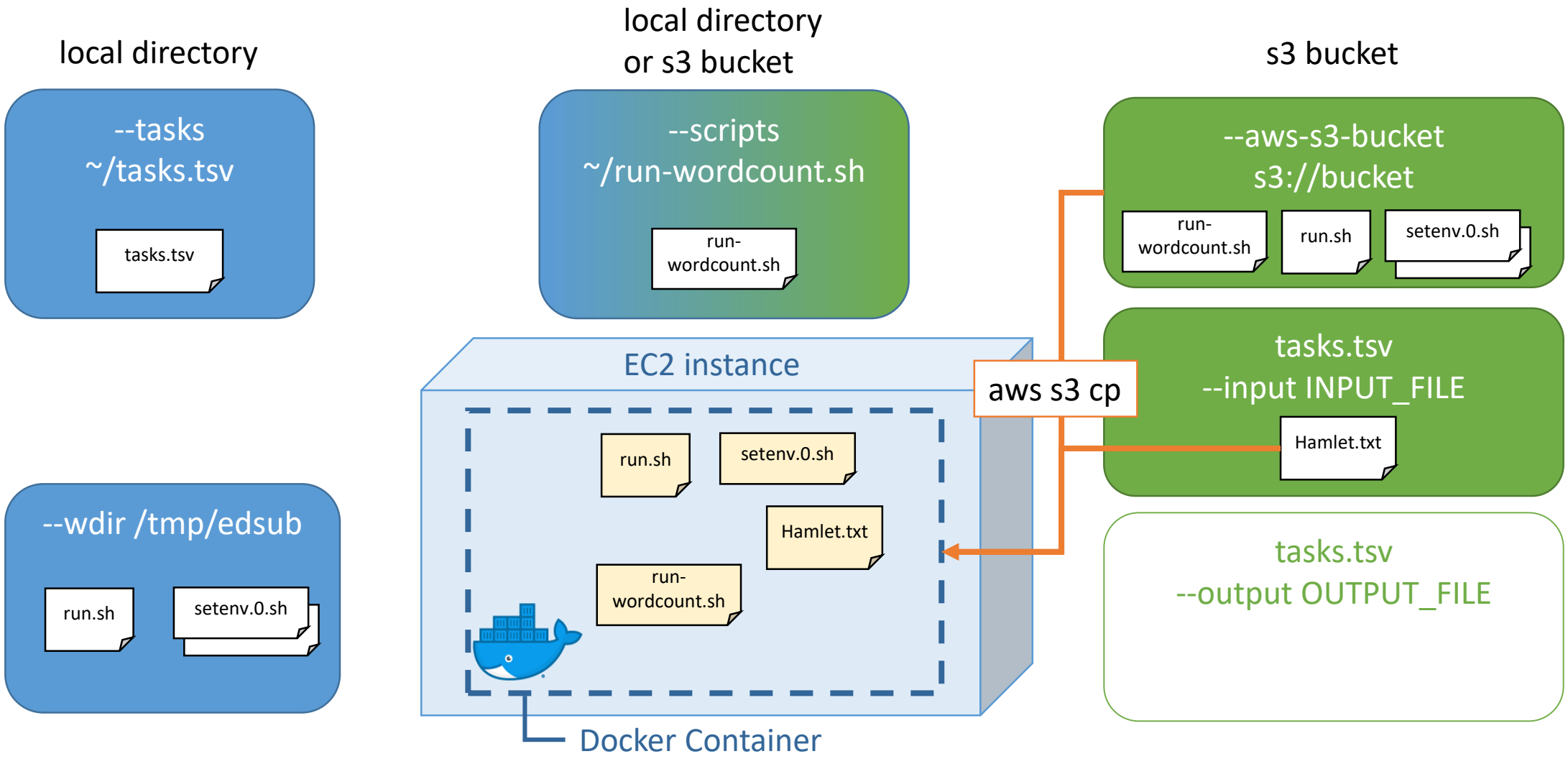
ecsub data flow 2 - generate scripts



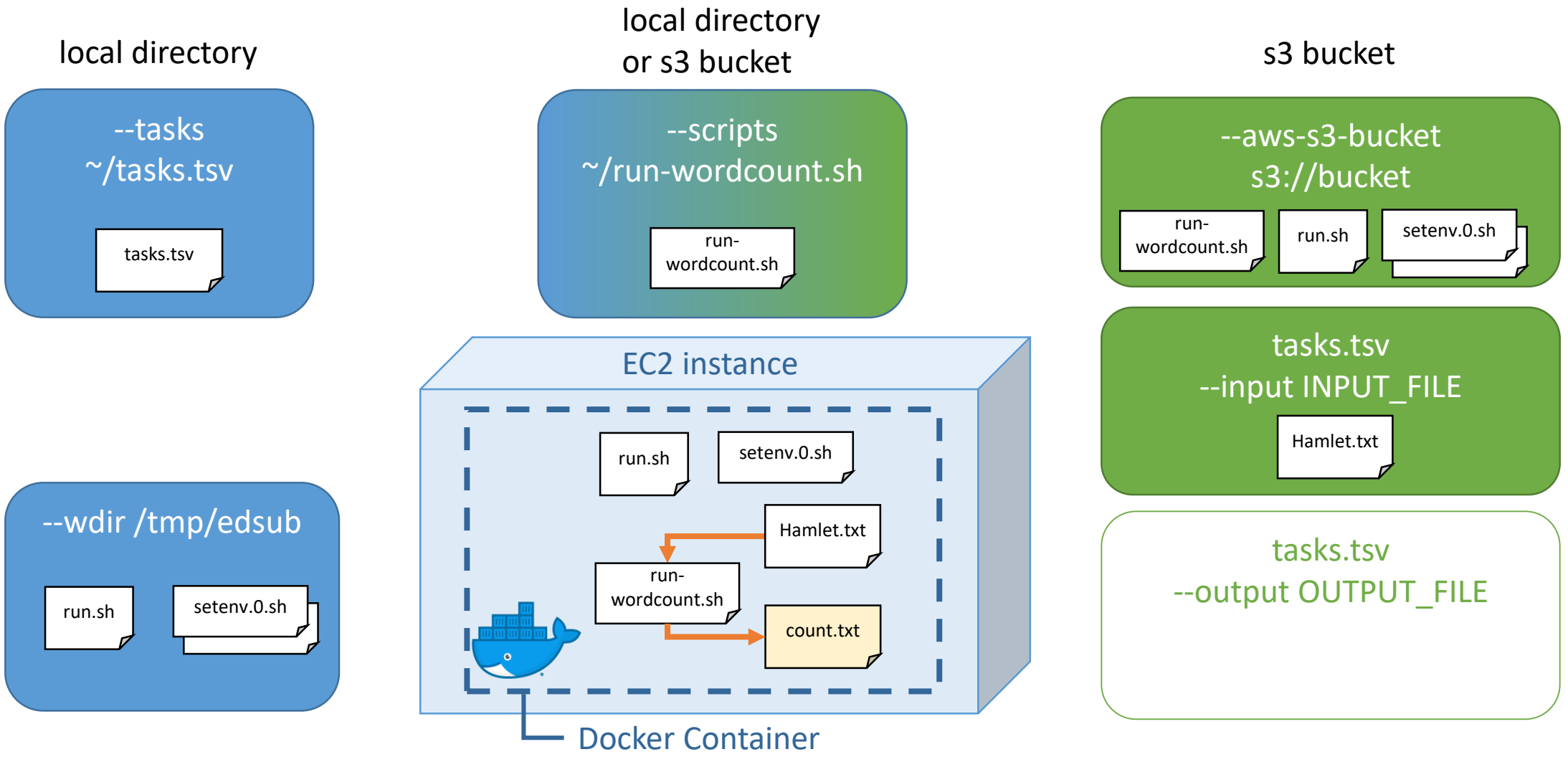
ecsub data flow 3 - upload scripts to s3



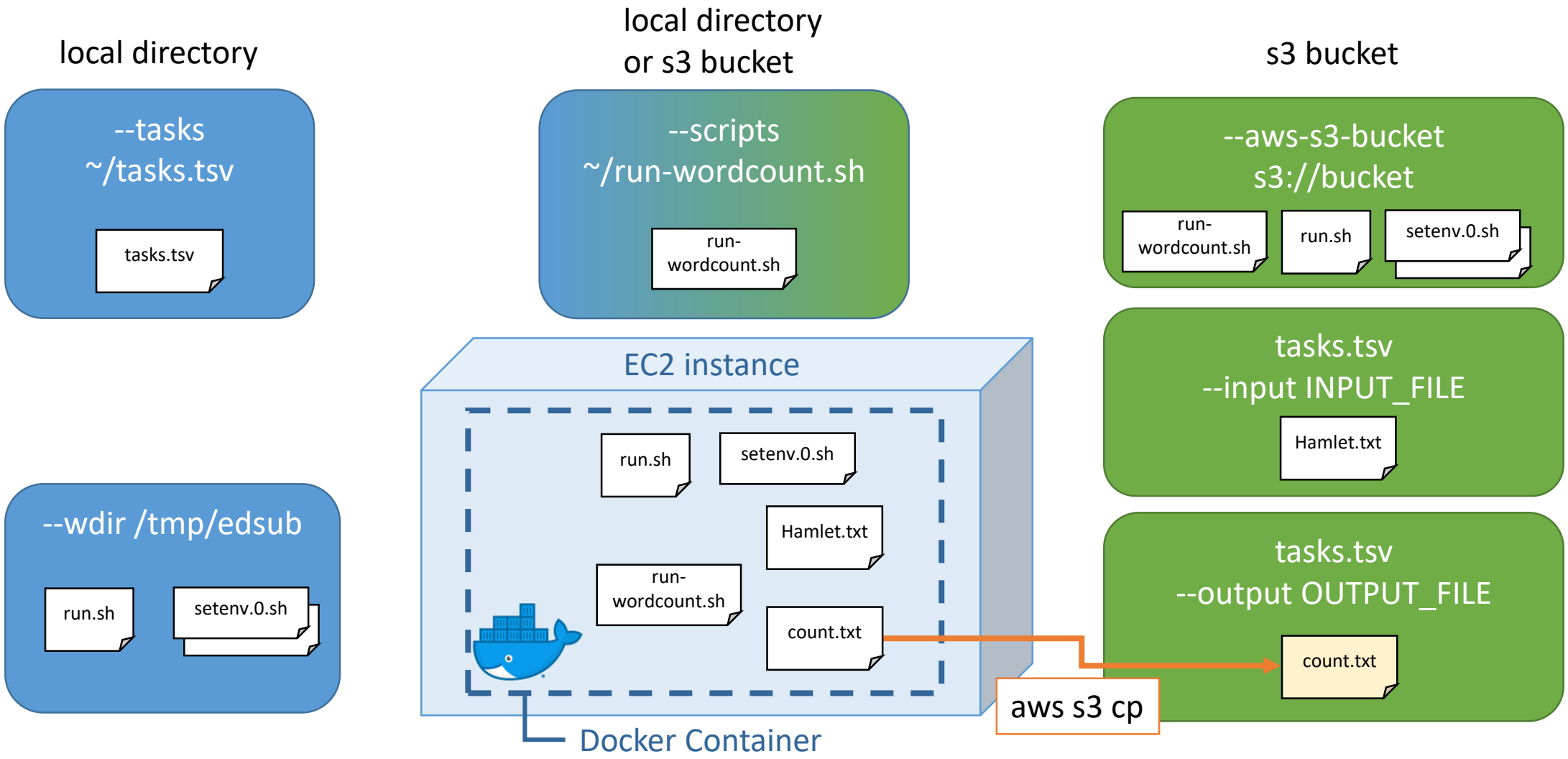
ecsub data flow 4 - run docker container



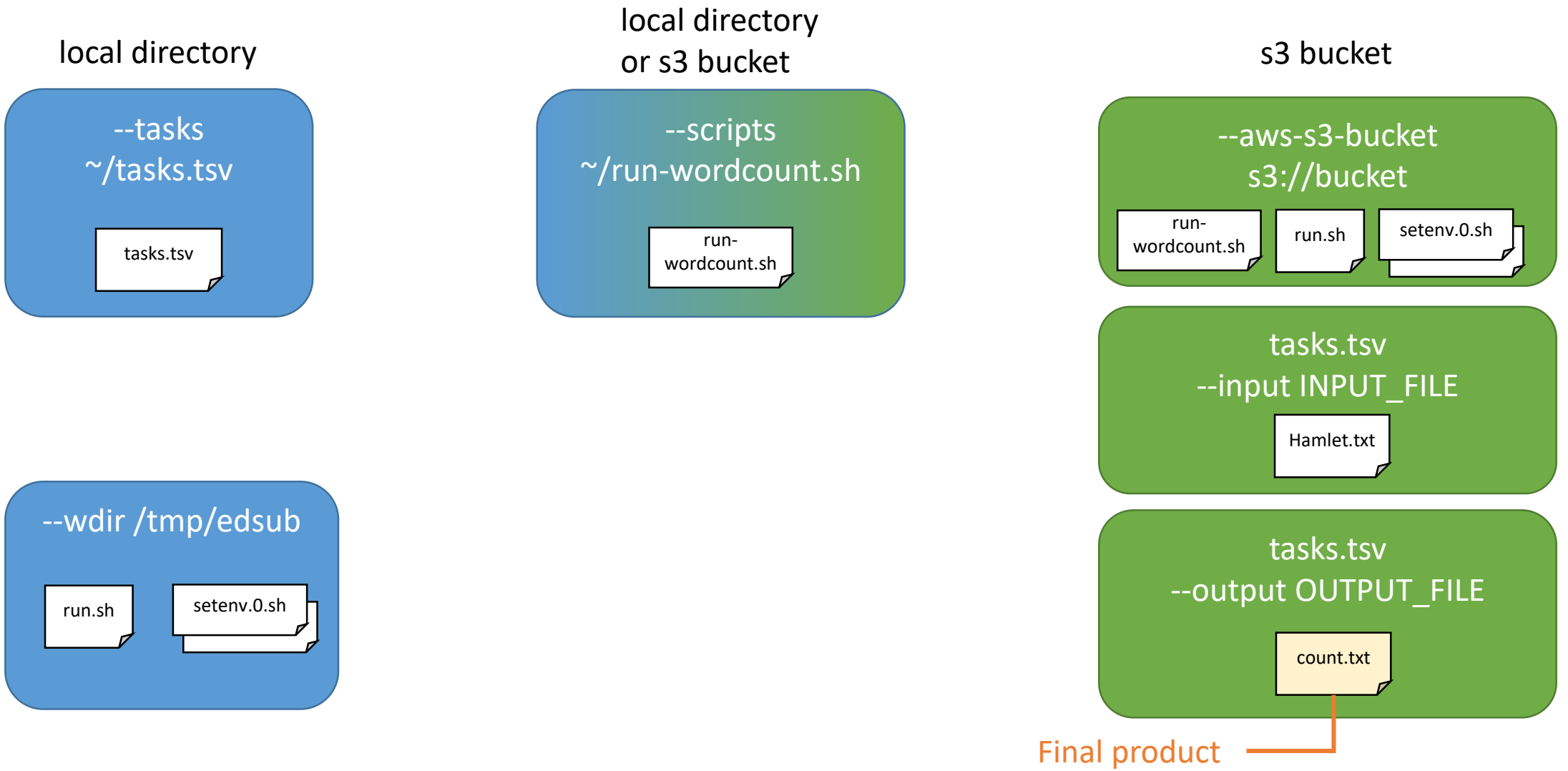
ecsub data flow 5 - run task script



ecsub data flow 6 - copy output file to s3



ecsub data flow 7 - terminate ec2 instance



ecsub tasks.tsv format

format

- Separated with tab ("¥t")
- The first line is a header
  - --input [NAME] set s3 file-path, copy s3 to container.
  - --input-recursive [NAME] set s3 directory-path, copy s3 to container recursive.
  - --output [NAME] set s3 file-path, copy container to s3.
  - --output-recursive [NAME] set s3 directory-path, copy container to s3 recursive.
  - --env [NAME] set environment variable.
- Not correspond to a comment line.

example (./examples/tasks-wordcount.tsv)

--env NAME	--input INPUT_FILE	--input-recursive SCRIPT	--output OUTPUT_FILE
Hamlet	s3://ecsub-ohaio/wordcount/input/hamlet.txt	s3://ecsub-ohaio/wordcount/python	s3://ecsub-ohaio/output/hamlet-count.txt
Kinglear	s3://ecsub-ohaio/wordcount/input/kinglear.txt	s3://ecsub-ohaio/wordcount/python	s3://ecsub-ohaio/output/kinglear-count.txt