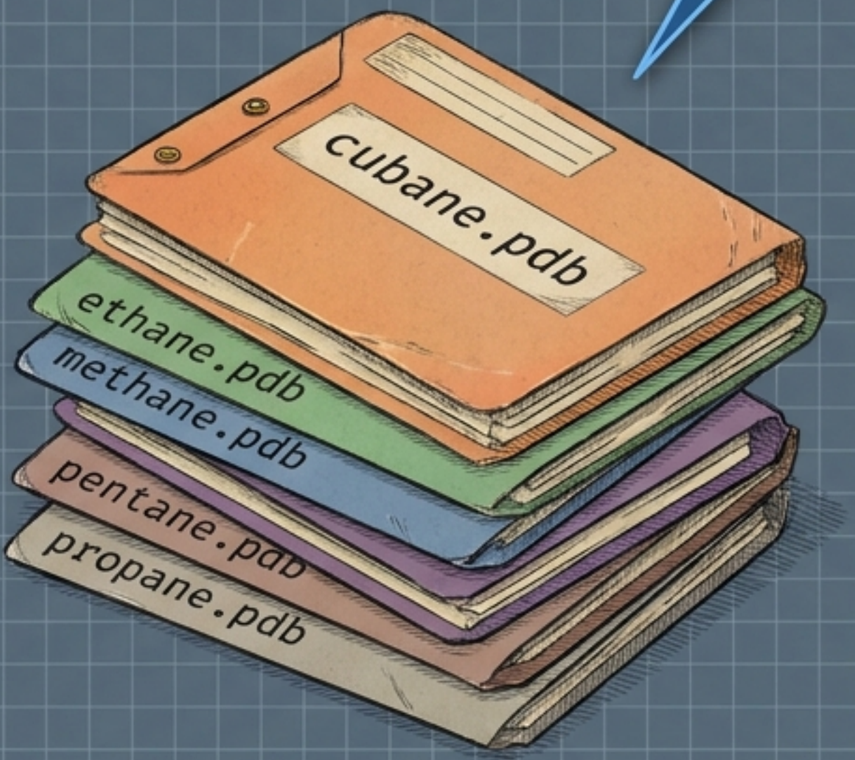


The Unix Shell: Pipes & Filters

AutoContent API

How do we find the shortest file without opening them all?

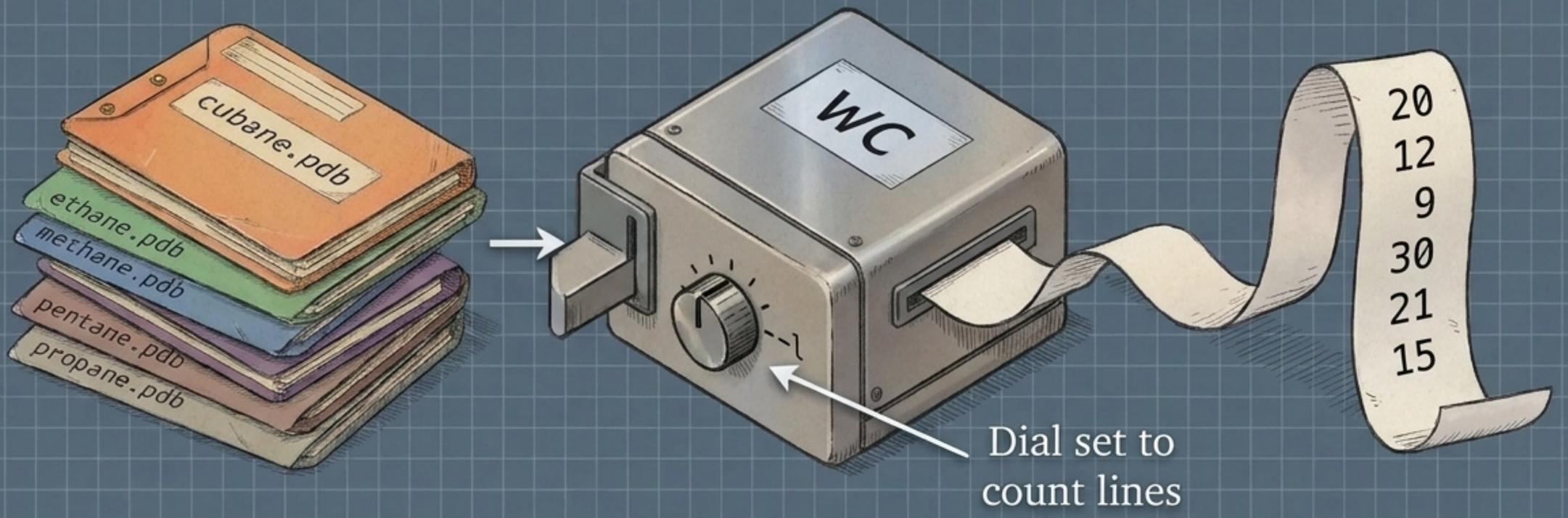



```
$ ls *.pdb
```

AutoContent API

The Counter

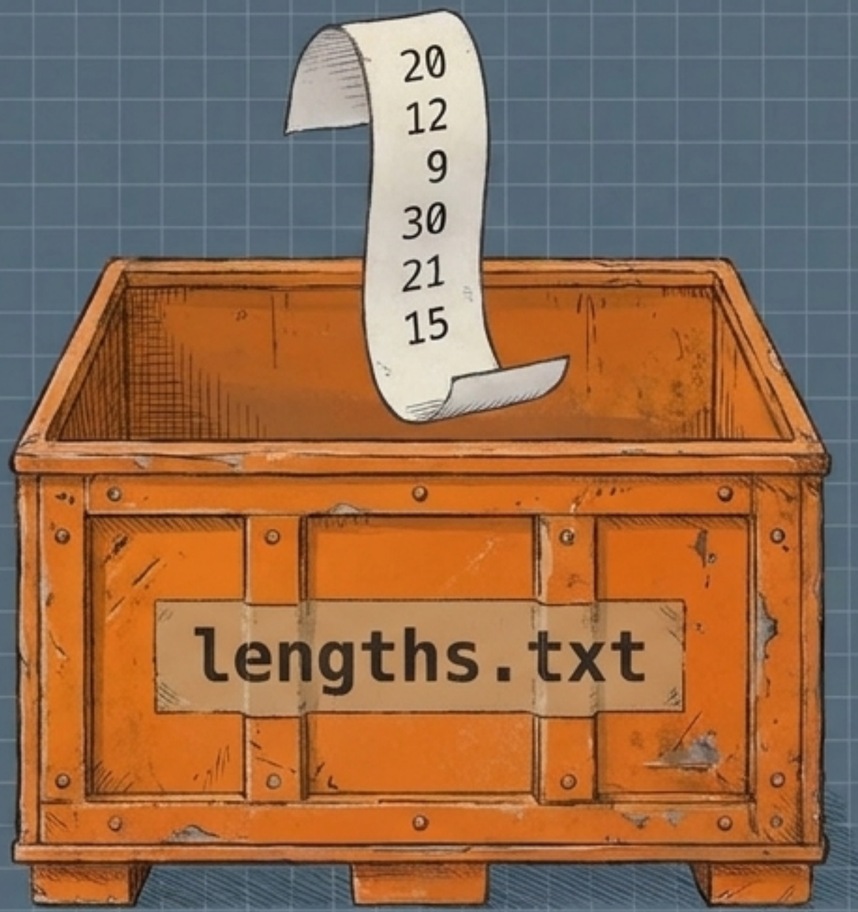
Input → Machine → Output




```
$ wc -l *.pdb
```

AutoContent API

The Shipping Container



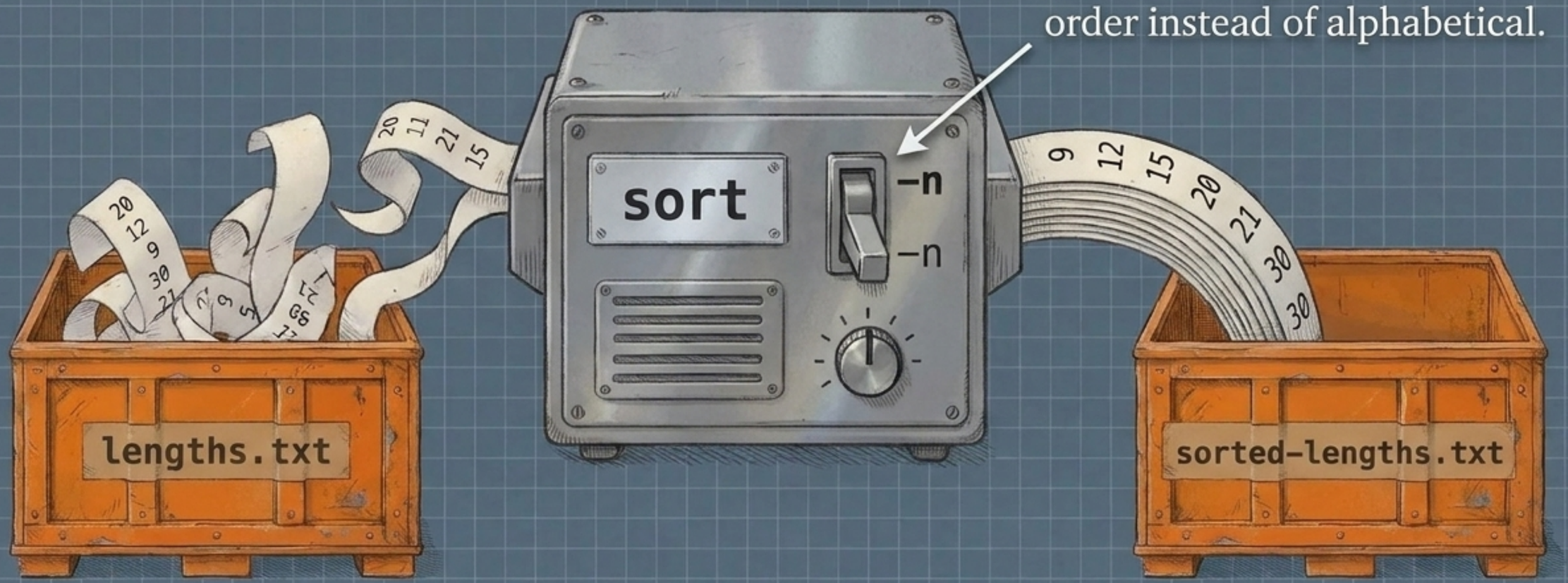


Silent Overwrite: Existing boxes with the same name are destroyed without warning.

```
$ wc -l *.pdb > lengths.txt
```

AutoContent API

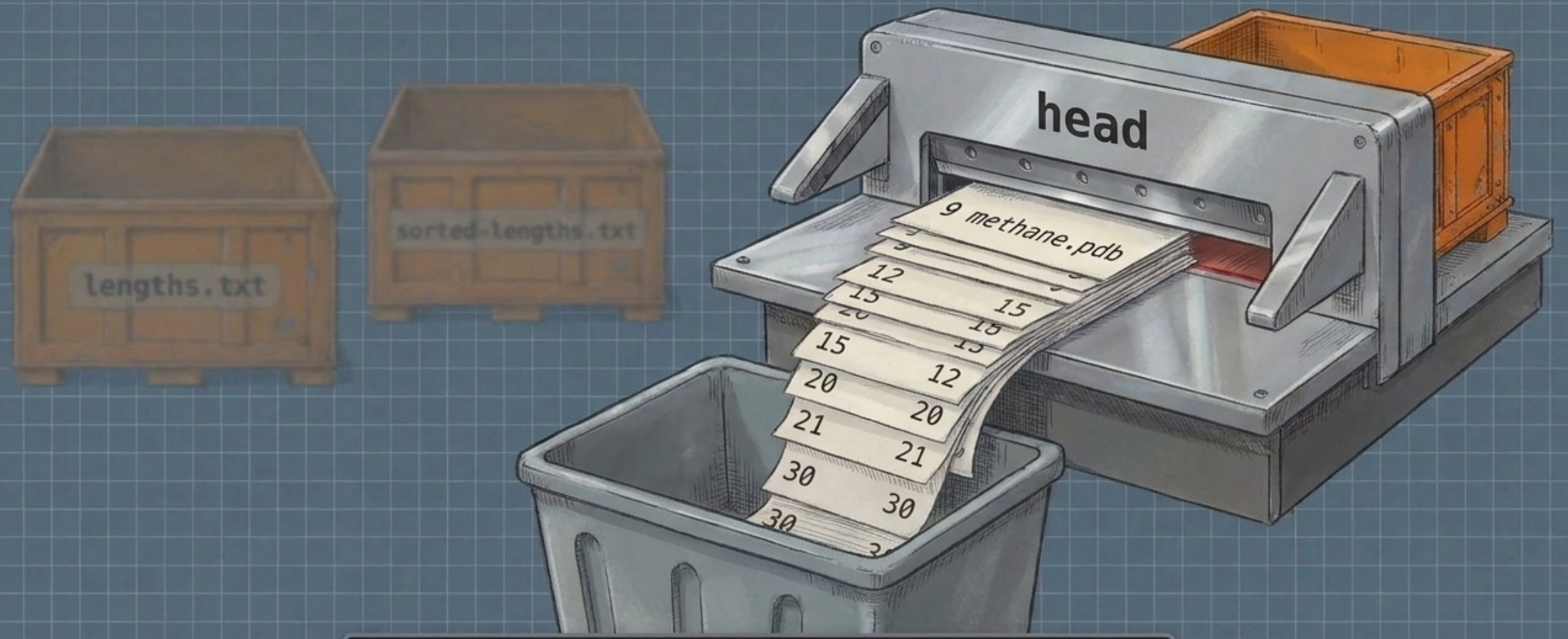
The Organizer




```
$ sort -n lengths.txt > sorted-lengths.txt
```

AutoContent API

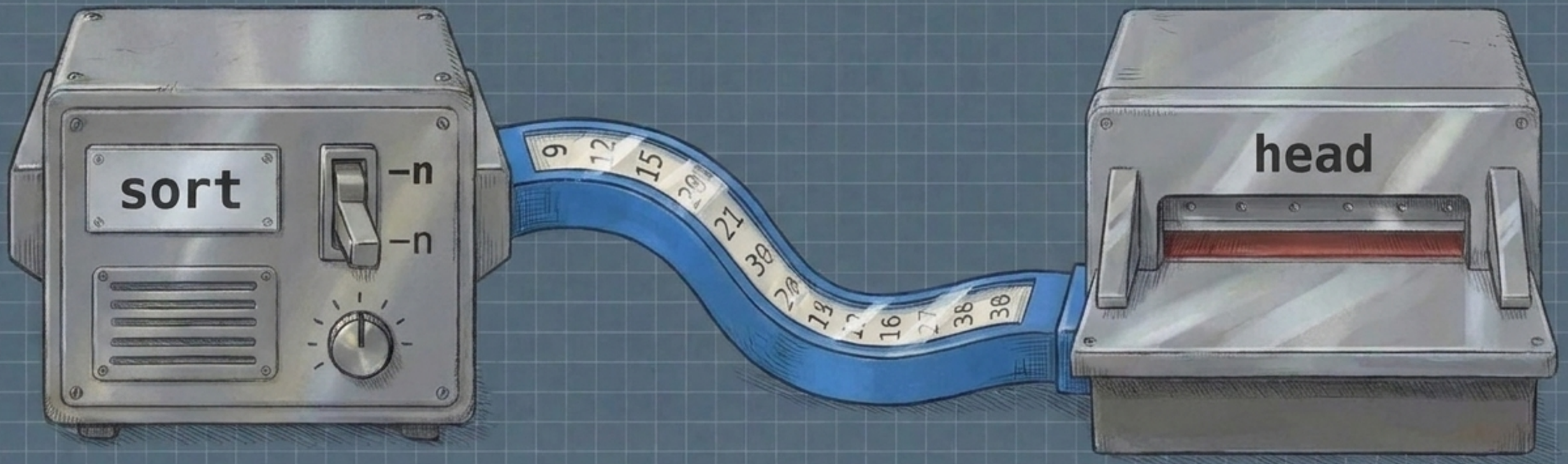
The Slicer




```
$ head -n 1 sorted-lengths.txt
```

AutoContent API

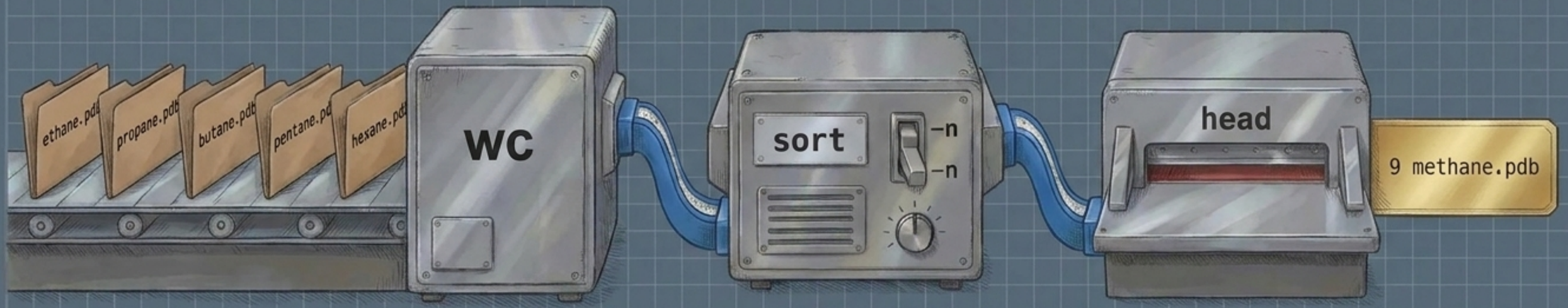
The Conveyor Belt:
Direct connection, no temporary files.




```
$ sort -n lengths.txt | head -n 1
```

AutoContent API

The Complete Pipeline

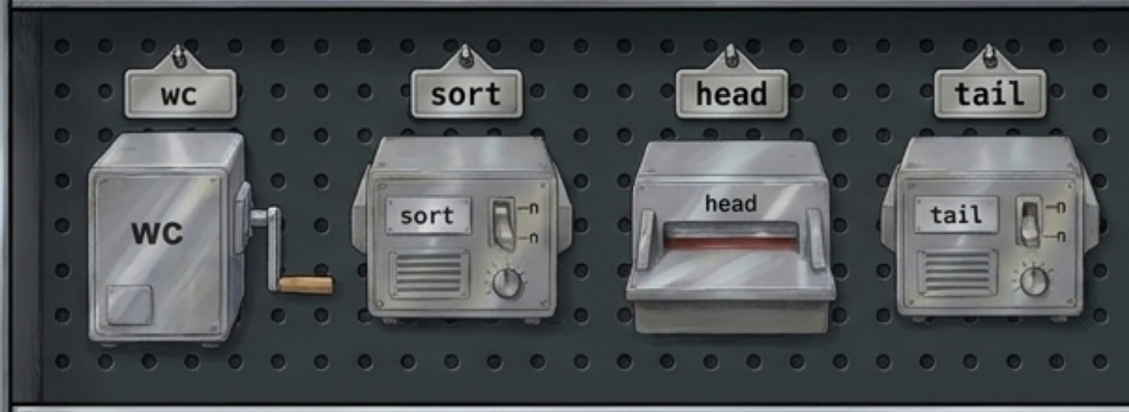



```
$ wc -l *.pdb | sort -n | head -n 1
```

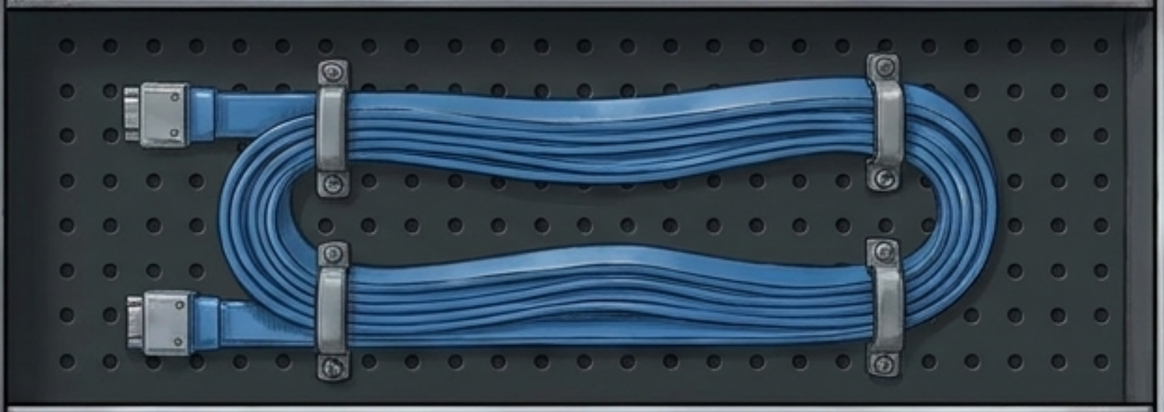
AutoContent API

The Factory Toolbox

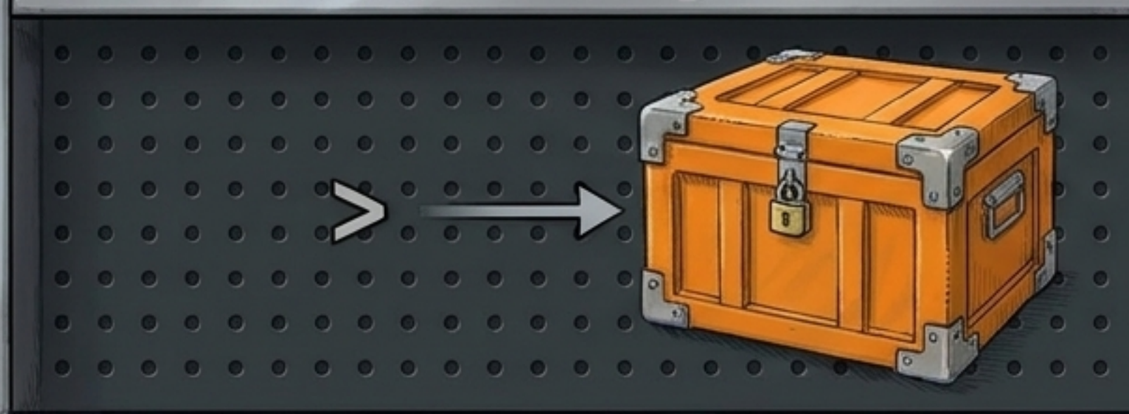
The Filters (Transform Data)



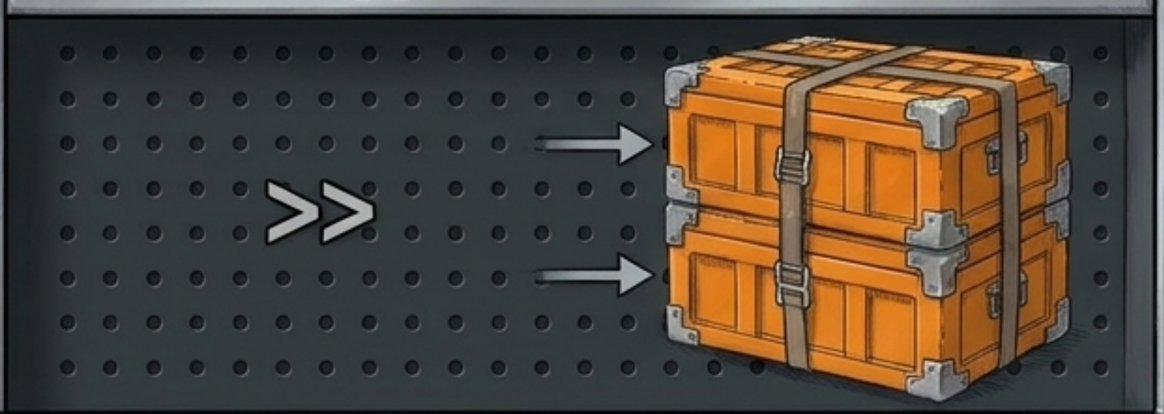
The Connectors (Create Flow)



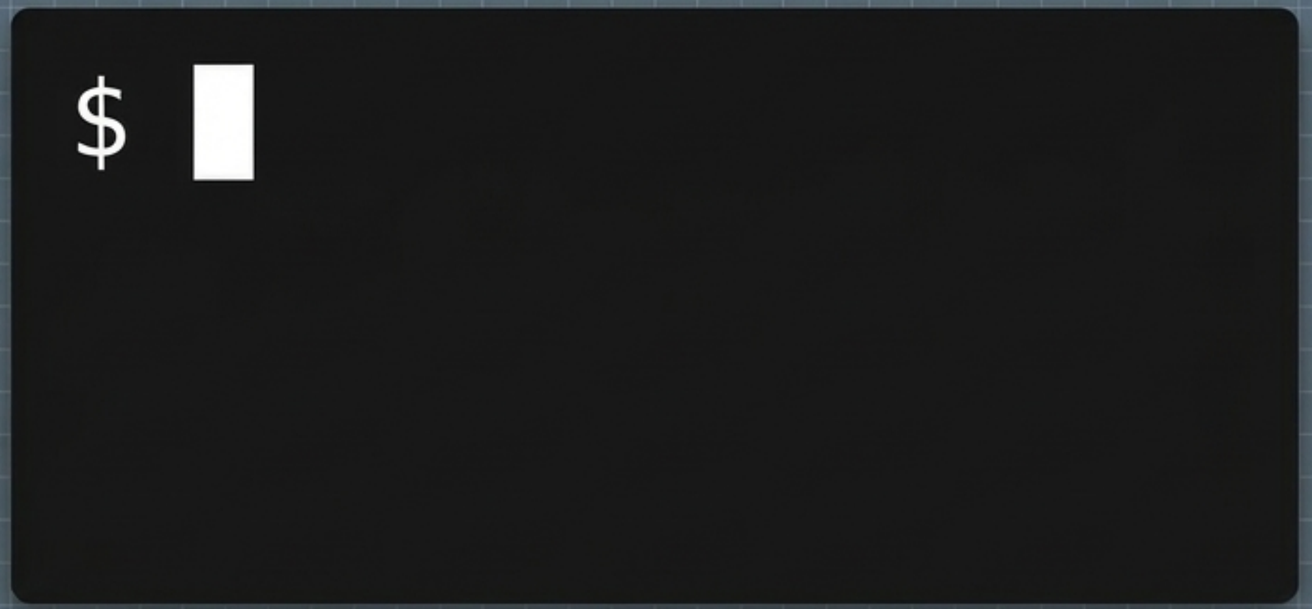
The Directors (Capture State)



The Appenders (Add State)



AutoContent API



Build Your Assembly Line.

AutoContent API