

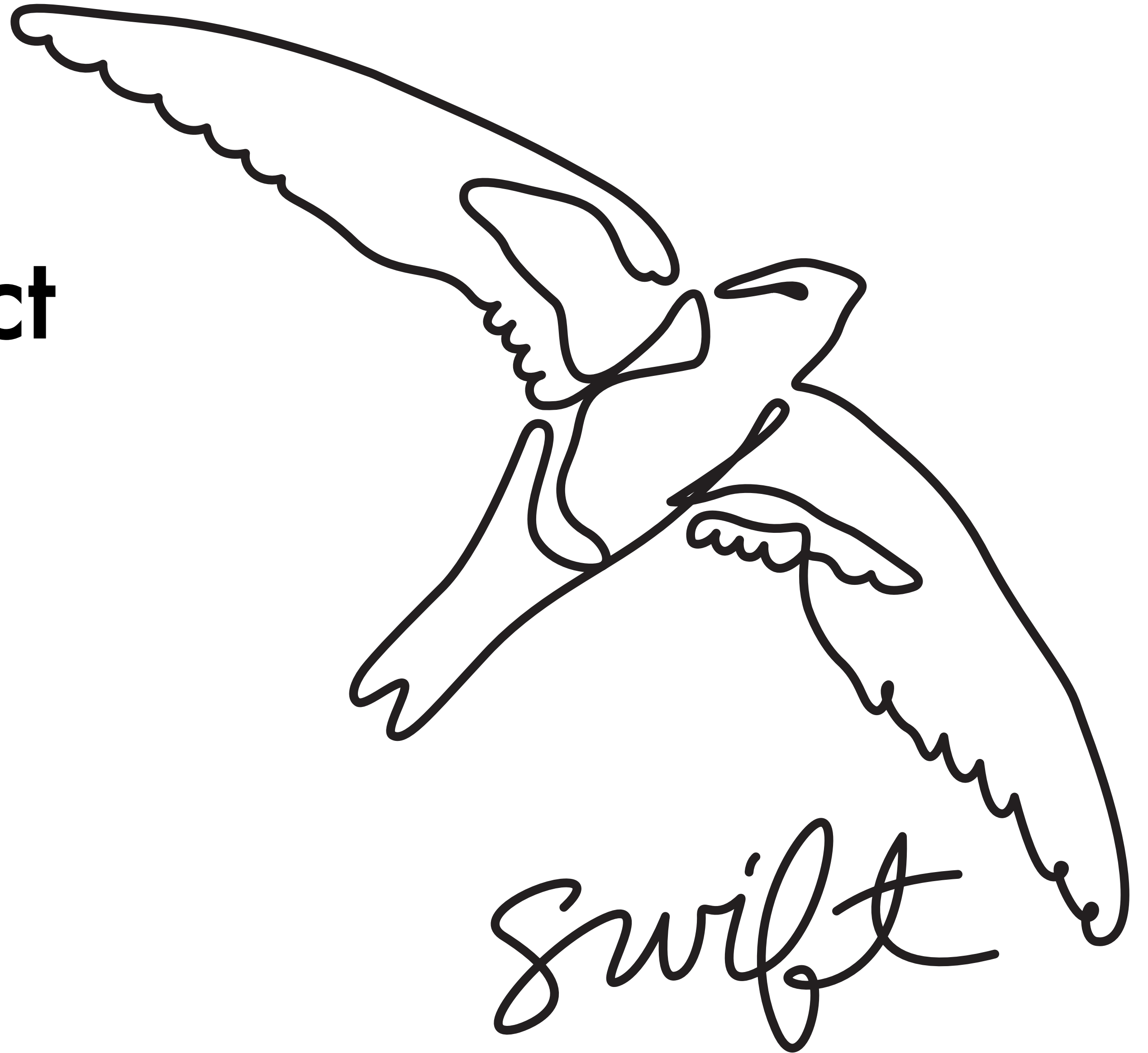
Let's Write an Object

John Dickinson

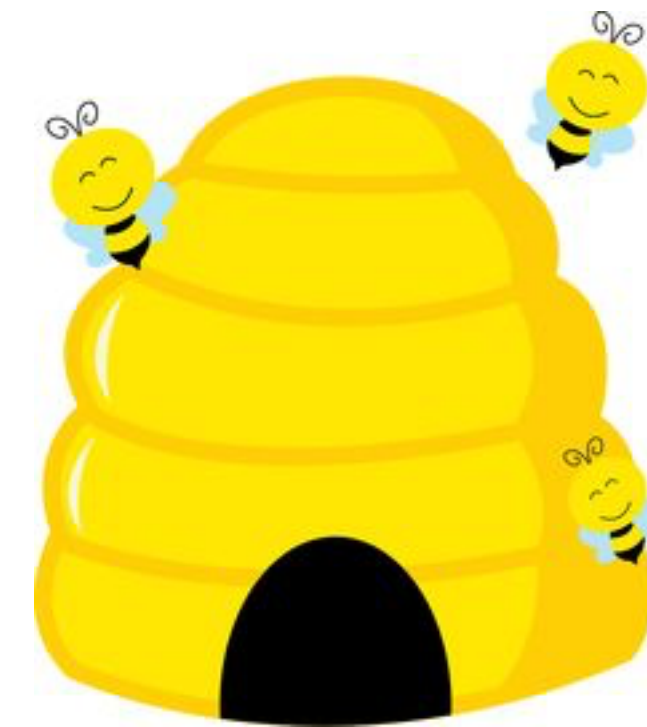
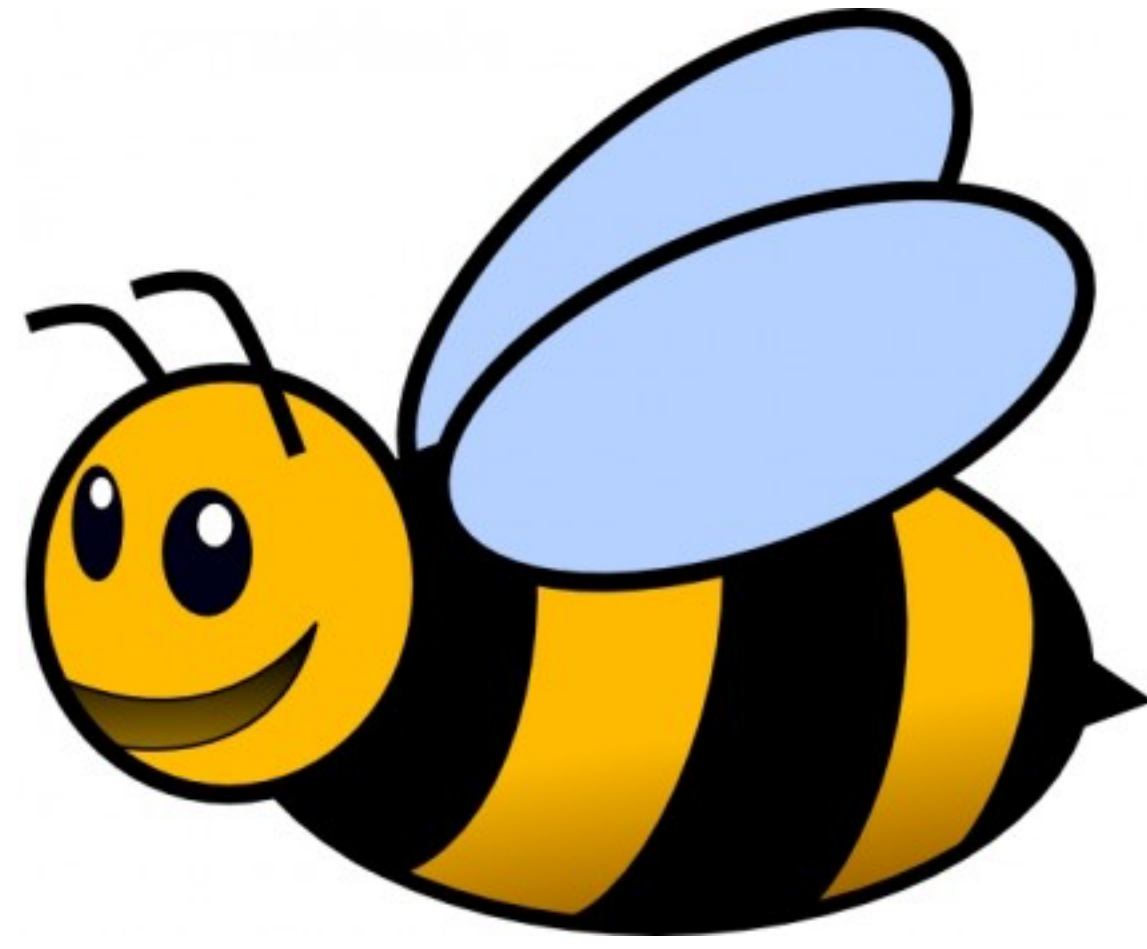
Director of Technology, SwiftStack

Project Technical Lead, Swift

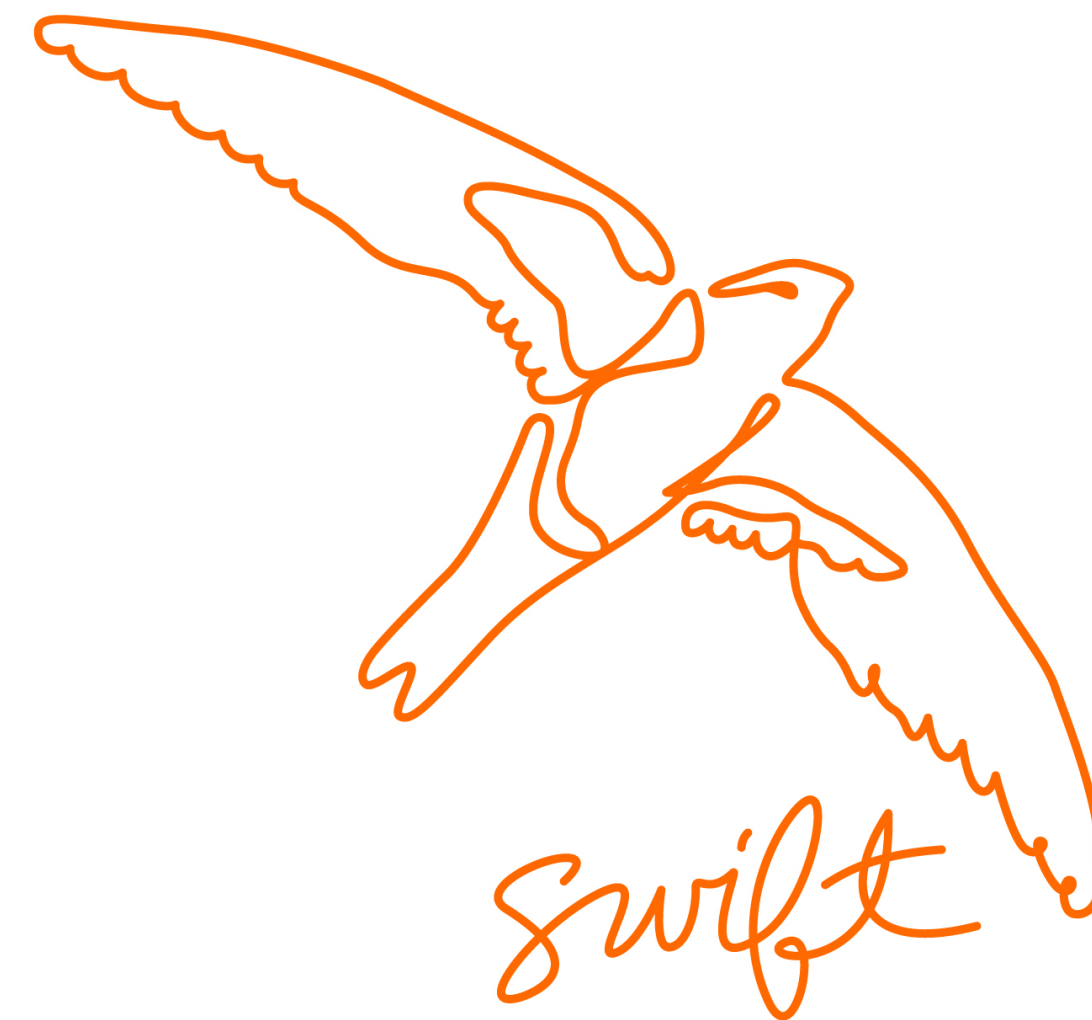
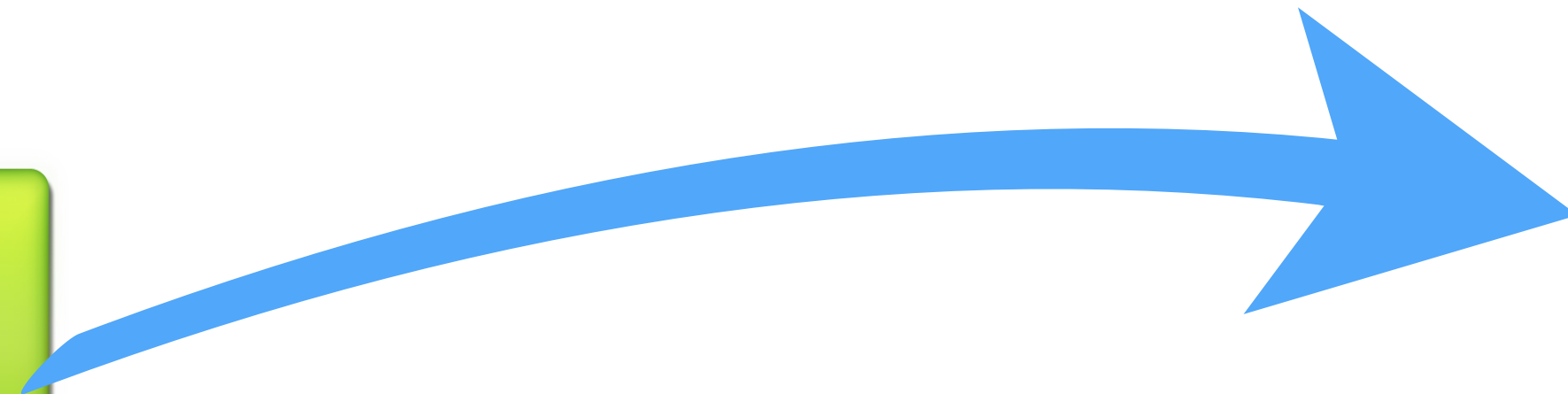
@notmyname







Let's Add an Object to the System



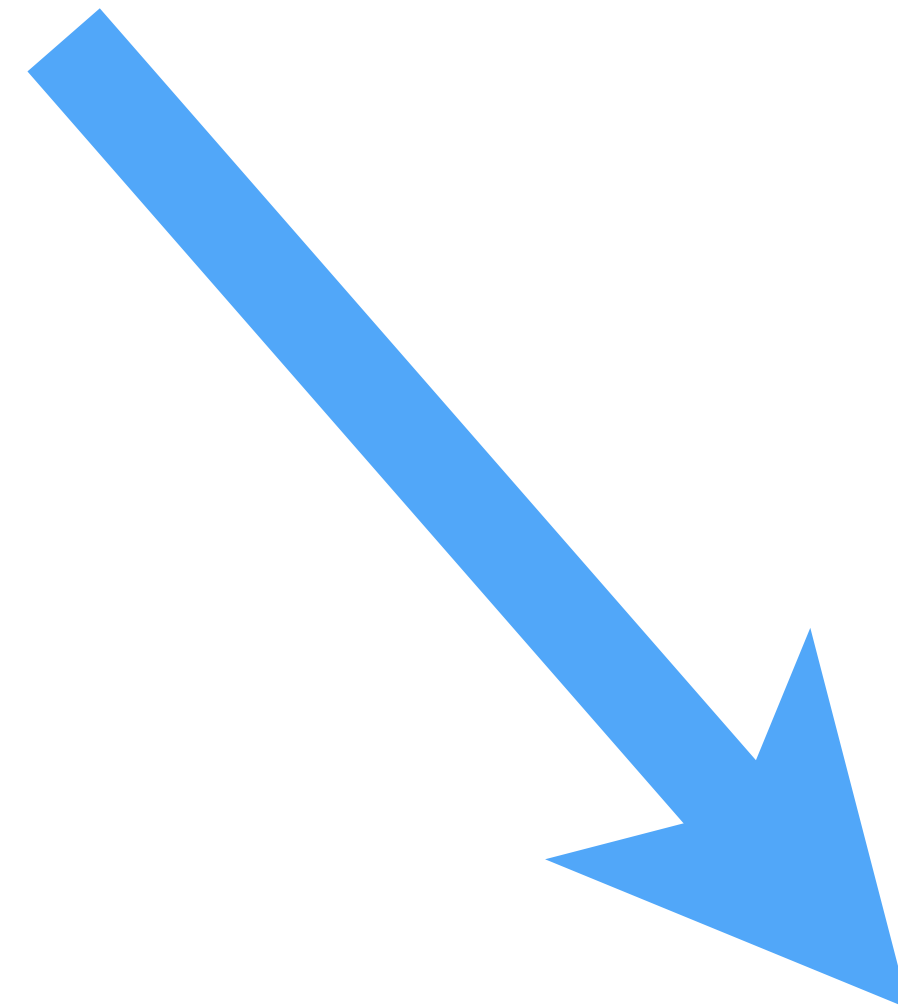
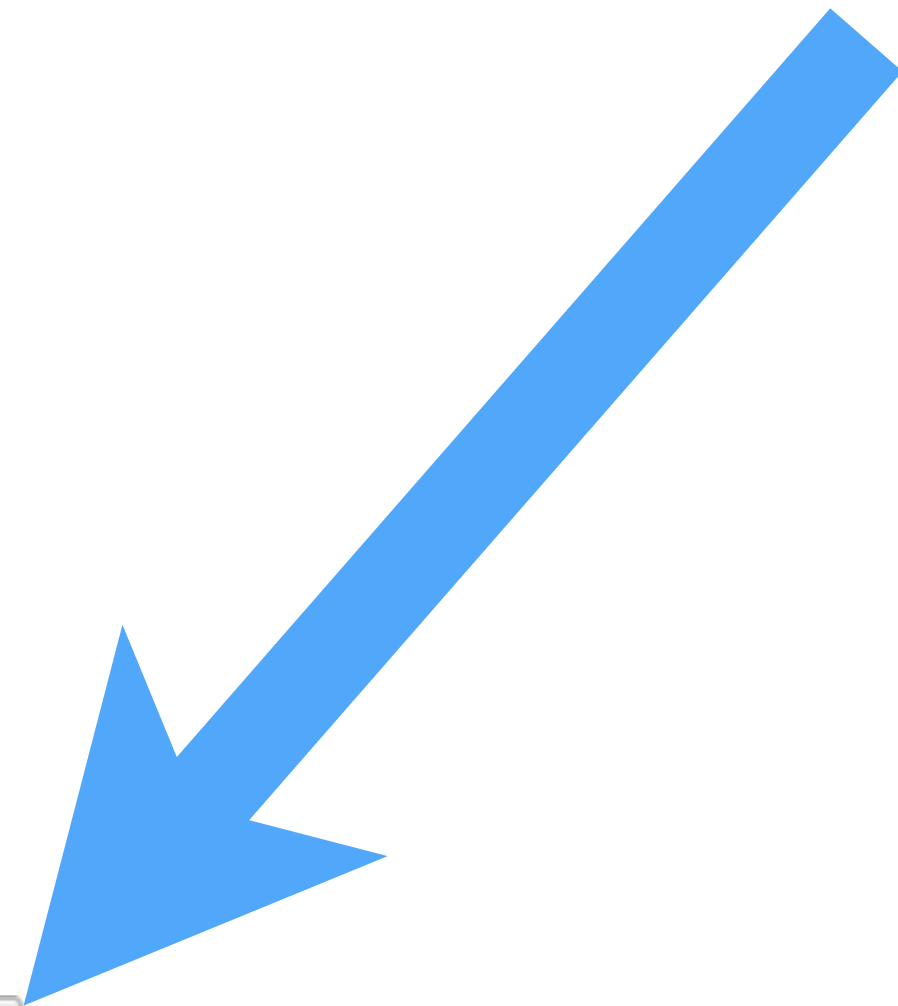
LoC/2016_archives/important.tar

```
curl -X PUT \  
  -H "X-Auth-Token: someauth" \  
  -H "Etag: mylocalmd5sum \  
  -T path/to/local/important.tar \  
  https://s.loc.gov/v1/LoC/2016_archives/important.tar
```



data + checksum

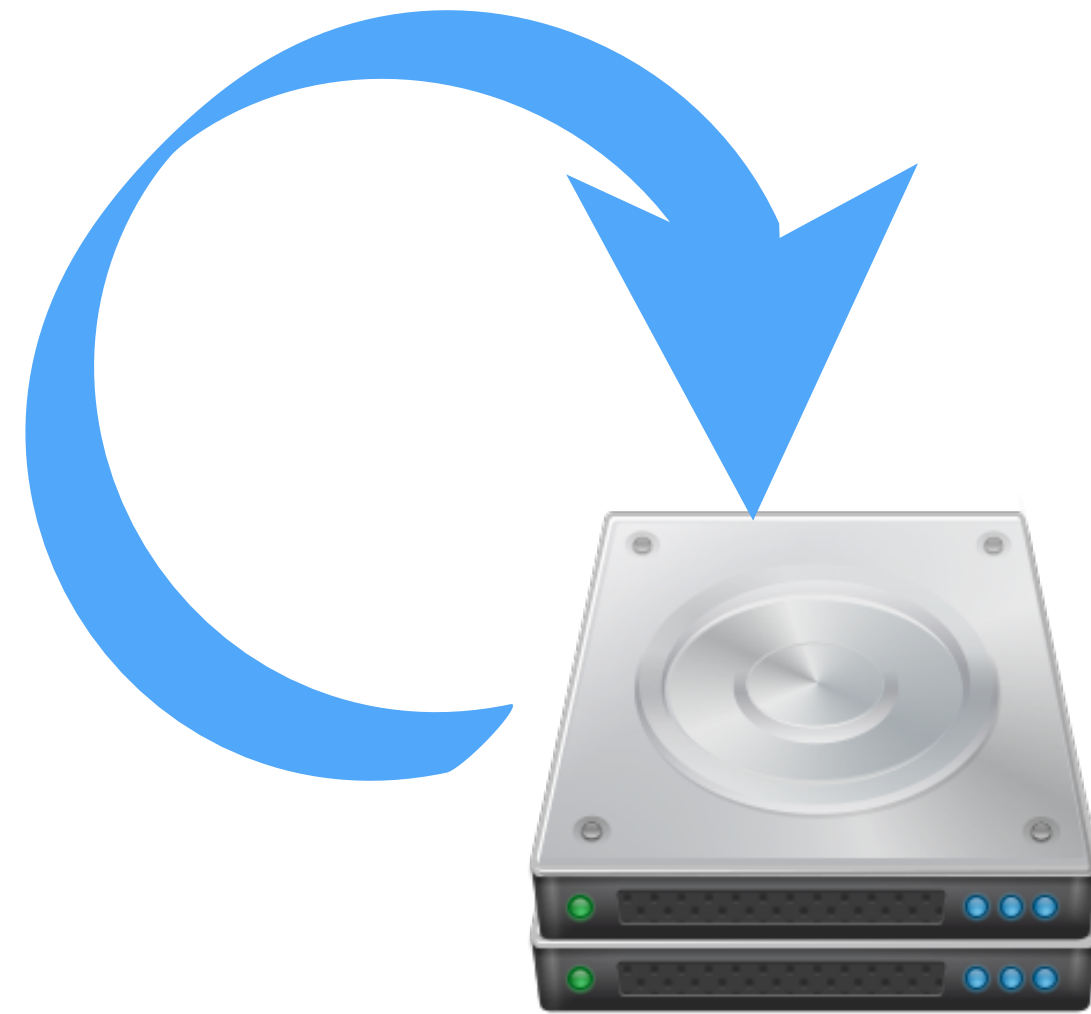
important.tar



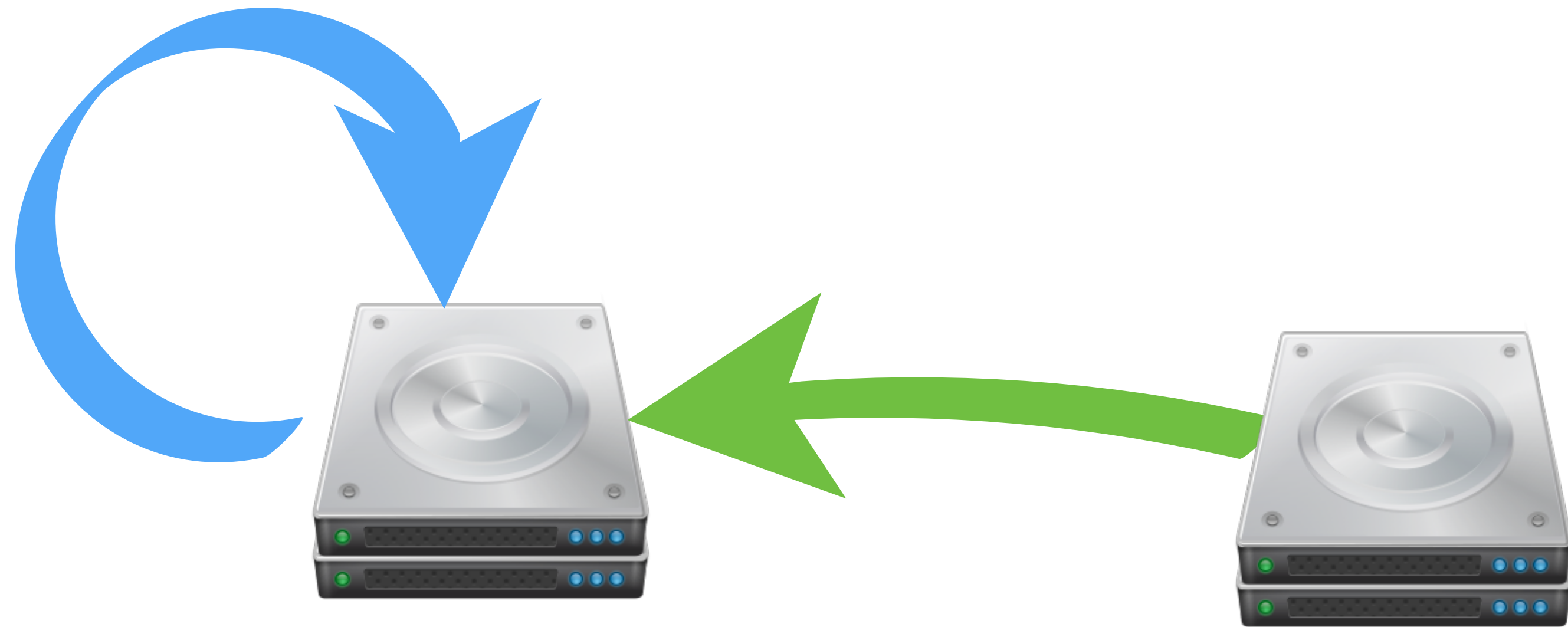
Logs

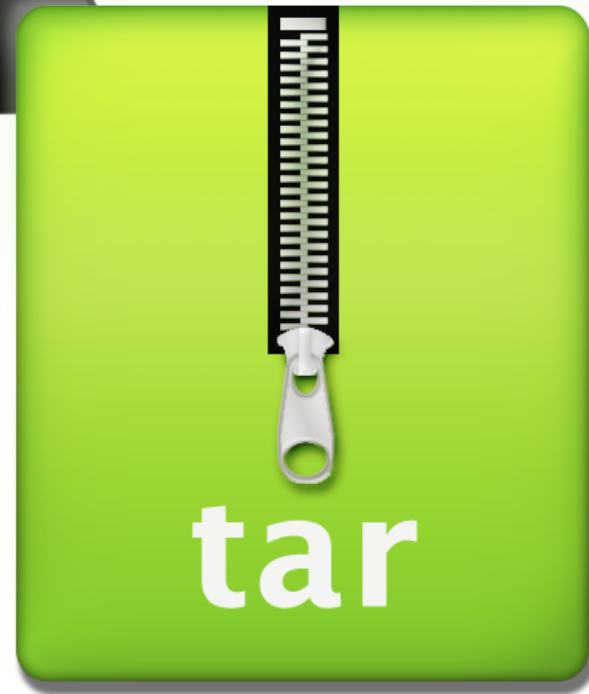
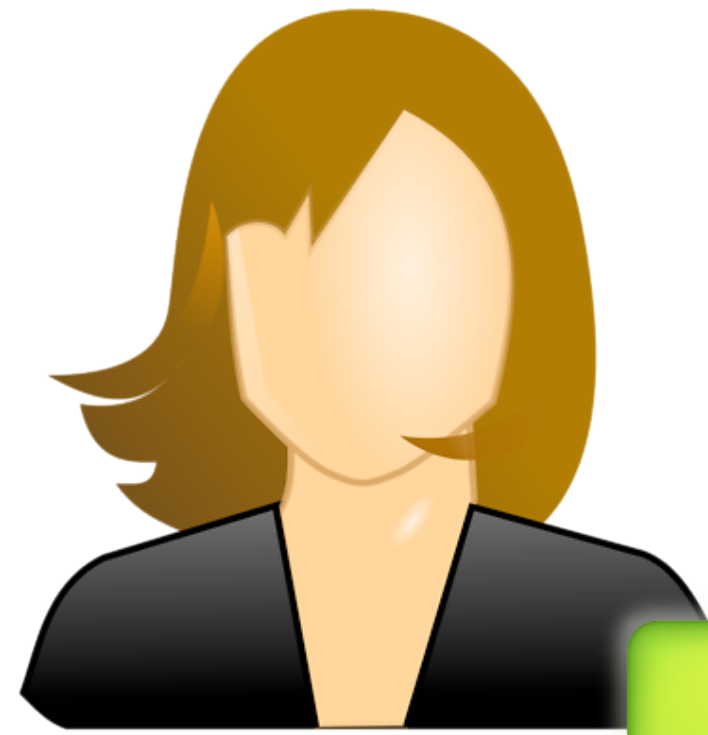
```
# check account metadata
account-server: 127.0.0.1 - - [08/Sep/2017:21:20:00 +0000] "HEAD /d3/802/AUTH_test" 204 - "HEAD http://localhost:8080/v1/AUTH_test"
"tx7408f35bc4624ac8aff40-0059b30980" "proxy-server 645" 0.0274 "-" 652 -
# check account rate limiting
proxy-server: - - 08/Sep/2017/21/20/00 HEAD /v1/AUTH_test HTTP/1.0 204 - Swift - - - - tx7408f35bc4624ac8aff40-0059b30980 - 0.0328
RL - 1504905600.555758953 1504905600.588556051 -
# check container metadata
container-server: 127.0.0.1 - - [08/Sep/2017:21:20:00 +0000] "HEAD /d3/61/AUTH_test/c" 204 - "HEAD http://localhost:8080/v1/
AUTH_test/c" "tx7408f35bc4624ac8aff40-0059b30980" "proxy-server 645" 0.0268 "-" 552 0
# check container rate limiting
proxy-server: - - 08/Sep/2017/21/20/00 HEAD /v1/AUTH_test/c HTTP/1.0 204 - Swift - - - - tx7408f35bc4624ac8aff40-0059b30980 -
0.0323 RL - 1504905600.589883089 1504905600.622215986 0
# update container 1
client_ip remote_addr datetime request_method request_path protocol
status_int referer user_agent auth_token bytes_recvd bytes_sent
client_etag transaction_id headers request_time source log_info
request_start_time request_end_time policy_index
# update object 2
object-server: 127.0.0.1 - - [08/Sep/2017:21:20:00 +0000] "PUT /d3/804/AUTH_test/c/important" 201 - "PUT http://localhost:8080/v1/
AUTH_test/c/important" "tx7408f35bc4624ac8aff40-0059b30980" "proxy-server 645" 0.0795 "-" 661 0
# update container 3
container-server: 127.0.0.1 - - [08/Sep/2017:21:20:00 +0000] "PUT /d2/61/AUTH_test/c/important" 201 - "PUT http://localhost:8080/
d1/804/AUTH_test/c/important" "tx7408f35bc4624ac8aff40-0059b30980" "object-server 650" 0.0006 "-" 563 0
# update object 3
object-server: 127.0.0.1 - - [08/Sep/2017:21:20:00 +0000] "PUT /d1/804/AUTH_test/c/important" 201 - "PUT http://localhost:8080/v1/
AUTH_test/c/important" "tx7408f35bc4624ac8aff40-0059b30980" "proxy-server 645" 0.0885 "-" 650 0
# end-user access log
proxy-server: 127.0.0.1 127.0.0.1 08/Sep/2017/21/20/00 PUT /v1/AUTH_test/c/important HTTP/1.0 201 - curl/7.47.0 AUTH_tkf5fad3d10...
4 - - tx7408f35bc4624ac8aff40-0059b30980 - 0.1665 - - 1504905600.554836988 1504905600.721290112 0
```

Fixity Checking



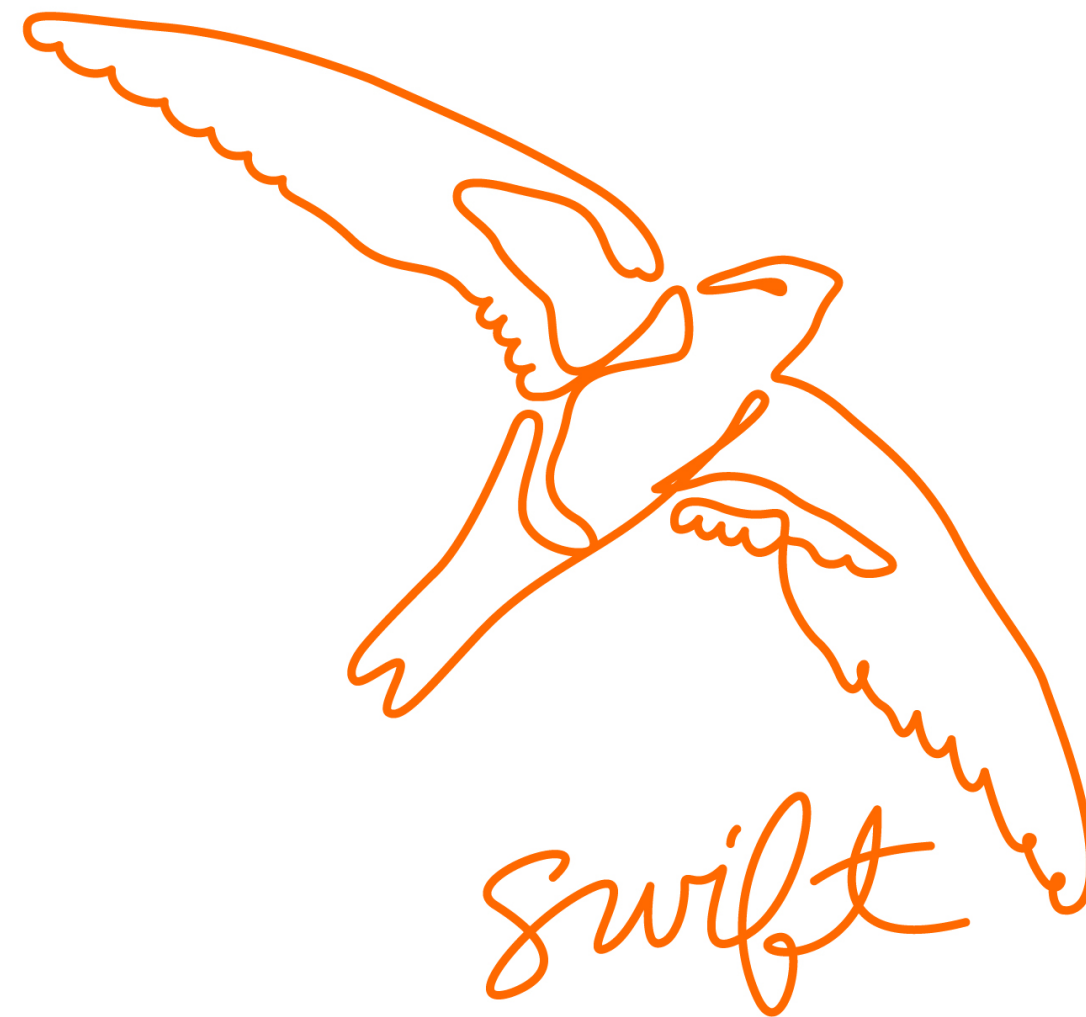
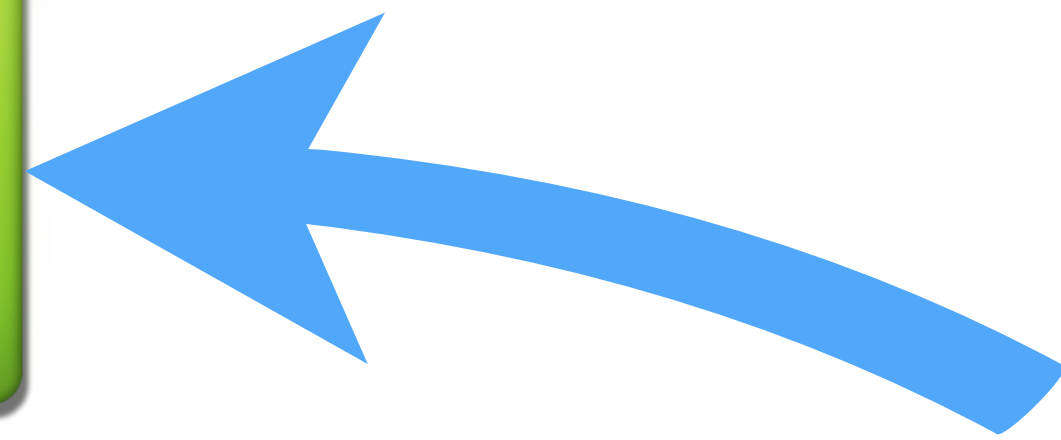
Fixity Checking





important.tar

data + checksum



data + checksum



LoC/2016_archives/important.tar

John Dickinson

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Project Technical Lead, Swift
@notmyname

