

# Commit 4bc5a35

3 people committed on Mar 7, 2024

Copy the output of fixed-output derivations before registering them

It is possible to exfiltrate a file descriptor out of the build sandbox of FODs, and use it to modify the store path after it has been registered.

To avoid that issue, don't register the output of the build, but a copy of it (that will be free of any leaked file descriptor).

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2.18-maintenance + eclairevoyant/backport-10564-to-2.18 · 2.18.9 ... 2.18.2

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src/libstore/build/local-derivation-goal.cc

```

@@ -2558,6 +2558,12 @@ SingleDrvOutputs LocalDerivationGoal::registerOutputs()
2558 2558         [&](const DerivationOutput::CAFixed & dof) {
2559 2559             auto & wanted = dof.ca.hash;
2560 2560
2561 +         // Replace the output by a fresh copy of itself to make sure
2562 +         // that there's no stale file descriptor pointing to it
2563 +         Path tmpOutput = actualPath + ".tmp";
2564 +         copyFile(actualPath, tmpOutput, true);
2565 +         renameFile(tmpOutput, actualPath);
2566 +
2561 2567         auto newInfo0 = newInfoFromCA(DerivationOutput::CAFloating {

```

```
2562 2568 .method = dof.ca.method,
2563 2569 .hashType = wanted.type,
```



src/libutil/filesystem.cc



```
@@ -133,6 +133,12 @@ void copy(const fs::directory_entry & from, const fs::path & to, bool
andDelete)
```

```
133 133
134 134
135 135
```

```
136 +
137 + void copyFile(const Path & oldPath, const Path & newPath, bool andDelete)
138 + {
139 +     return copy(fs::directory_entry(fs::path(oldPath)), fs::path(newPath), andDelete);
140 + }
141 +
```

```
136 142 void renameFile(const Path & oldName, const Path & newName)
137 143 {
138 144     fs::rename(oldName, newName);
```



src/libutil/util.hh



```
@@ -274,6 +274,13 @@ void renameFile(const Path & src, const Path & dst);
```

```
274 274
275 275
276 276
```

```
277 + /**
278 + * Recursively copy the content of `oldPath` to `newPath`. If `andDelete` is
279 + * `true`, then also remove `oldPath` (making this equivalent to `moveFile`, but
280 + * with the guaranty that the destination will be "fresh", with no stale inode
281 + * or file descriptor pointing to it).
282 + */
283 + void copyFile(const Path & oldPath, const Path & newPath, bool andDelete);
```

```
277 284
278 285
279 286
```

```
/**
* Wrappers around read()/write() that read/write exactly the
```



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