

# Commit e518ada

deepow authored and legoktm committed last week Partially verified

Security fix: path traversal for abs path in gzip

Assuming a compromised server, a maliciously crafted gzip can be sent to the client application. The file name after decompression is checked against path traversals before actually creating a physical path. However, absolute paths would not be filtered out.

This vulnerability was discovered by cookiejack15 on Bugcrowd.

release/0.17.5 · 0.17.5

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client/securedrop\_client/crypto.py

```

@@ -84,6 +84,12 @@ def read_gzip_header_filename(filename: str) -> str:
84 84         original_filename = str(fb, "utf-8")
85 85
86 86         check_path_traversal(original_filename)
87 +

```

```

88 + # Ensure this is a single file and not a path
89 + if original_filename != Path(original_filename).name:
90 +     # Otherwise, treat it as an unrecoverable fault for this file:
91 +     raise ValueError("Unsafe file name; aborting further processing")
92 +
87 93     return original_filename
88 94
89 95

```



client/tests/test\_crypto\_gzip.py



```

@@ -153,7 +153,24 @@ def test_path_traversal(tmp_path):
153 153     f.write(original_name.encode("utf-8") + b"\000")
154 154     f.write(gzip.compress(b"test content")[10:])
155 155
156 -     with pytest.raises(
157 -         ValueError, match="Unsafe file or directory name:
158 -         '../../../../../../../../etc/passwd"):
156 +     with pytest.raises(ValueError, match=f"Unsafe file or directory name:
157 +         '{original_name}'):
158 +         read_gzip_header_filename(str(tmp_file))
159 +
160 + def test_overwrite_via_abs_path(tmp_path):
161 +     """Test that an absolute path in the gzip header filename is rejected."""
162 +     tmp_file = tmp_path / "test.gz"
163 +     original_name = "/home/user/.securedrop_client/svs.sqlite"
164 +
165 +     with open(tmp_file, "wb") as f:
166 +         f.write(GZIP_FILE_IDENTIFICATION) # ID
167 +         f.write(GZIP_COMPRESSION_BYTES) # Compression method
168 +         f.write(bytes([GZIP_FLAG_FILENAME])) # Flags
169 +         f.write(b"\000\000\000\000") # mtime
170 +         f.write(b"\000") # XFL
171 +         f.write(b"\377") # OS
172 +         f.write(original_name.encode("utf-8") + b"\000")
173 +         f.write(gzip.compress(b"test content")[10:])
174 +

```

```
175 + with pytest.raises(ValueError, match="Unsafe file name; aborting further  
processing):
```

```
159 176 read_gzip_header_filename(str(tmp_file))
```

## Comments 0



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