

# Beyond the good ol' LaunchAgents - 15 - xsanctl

[theevilbit.github.io/beyond/beyond\\_0015](https://theevilbit.github.io/beyond/beyond_0015)

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This is part 15 in the series of “Beyond the good ol' LaunchAgents”, where I try to collect various persistence techniques for macOS. For more background check the [introduction](#).

I run into this not so exciting persistent method when I was investigating `xsanctl` for... other... reasons... `xsanctl` is a “Xsan file system control utility”, which allows us to mount and manage Xsans.

The `xsanctl` binary can be found at

`/System/Library/Filesystems/acfs.fs/Contents/bin/xsanctl`, however when we simply run the command it is run from `/usr/sbin/xsanctl`. If we check, this is a symbolic link.

```
csaby@mac exploits % ls -l /usr/sbin/xsanctl
lrwxr-xr-x  1 root  wheel  63 Jan  1  2020 /usr/sbin/xsanctl ->
/System/Library/Filesystems/acfs.fs/Contents/bin/redirection.sh
```

Interestingly the link points to a script and not the actual binary.

The script is very short.

```
#!/bin/sh
if [ -r /Library/Preferences/Xsan/.xsanrc ]
then
    . /Library/Preferences/Xsan/.xsanrc
fi
if [ x"${XSAN_ALT_BINDIR}" == x ]
then
    XSAN_ALT_BINDIR=/System/Library/Filesystems/acfs.fs/Contents/bin
fi
COMMAND=`basename $0`
${XSAN_ALT_BINDIR}/${COMMAND} "$@"
```

It will execute the file `/Library/Preferences/Xsan/.xsanrc` if exists. Moreover it will also look for the `xsanctl` binary in different location if the `XSAN_ALT_BINDIR` environment variable is defined, which allows further redirection.

Essentially we can persist in the `/Library/Preferences/Xsan/.xsanrc` script. Unfortunately this location requires root access, and this utility likely also not frequently run, especially by non-enterprise users.

So it's not super useful, but thought it would worth a quick post.

