



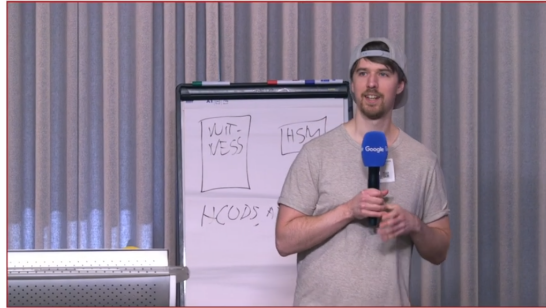
silentct: A Certificate Transparency monitor that filters out the noise

October 20, 2025

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Flashback to last year



Silent CT Monitoring
Rasmus Dahlberg

Silent CT Monitoring - Rasmus Dahlberg



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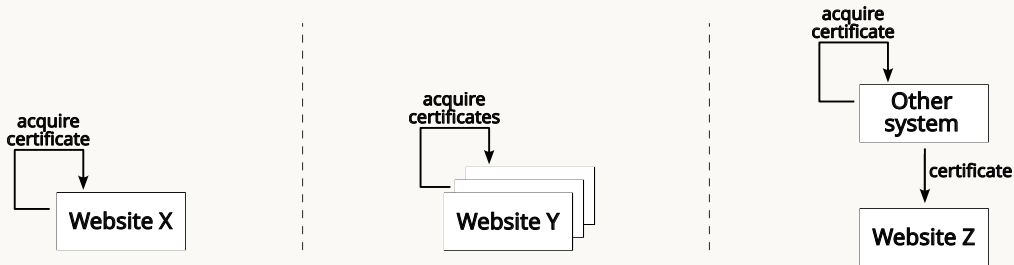
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Silent CT Monitoring: <https://git.glasklar.io/rgdd/silentct...more>

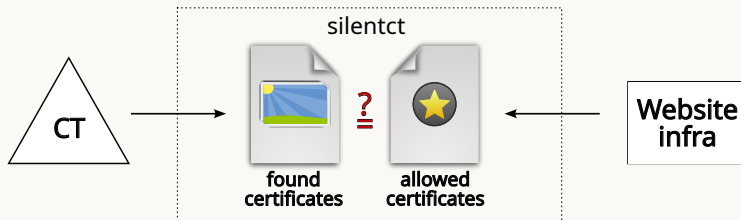
<https://www.youtube.com/watch?v=ca-qnXI0-2Y>

be notified about unexpected certificates only

Setting



Systems acquiring certificates are trusted



System running the monitor is also trusted

Usage—Extend your website's configuration

```
# crontab -l
35 3 * * * certbot renew --post-hook "silentct-mac -n www.rgdd.se -s
    SECRET -o /var/www/rgdd.se/silentct-allowlist
    /etc/letsencrypt/live/rgdd.se/fullchain.pem"
```

Creates a symmetric signature for the allowed certificate

Usage—Allowlist now gets published

```
$ curl https://www.rgdd.se/silentct-allowlist
www.rgdd.se cedc092ffa54eb3577835c1bb2c9f271483d0c2bbb65110a0e66c258a2cb9af2
-----BEGIN CERTIFICATE-----
MIIFQjCCBCqgAwIBAgISBfVvs5llluNYrjXIDuasnhA8QMAOGCSqGSIb3DQEBCwUA
MDMxCzAJBgNVBAYTA1VTMRywFAYDVQQKEw1MZXXQncyBFbmNyeXBOMQwwCgYDVQQD
EwNSMTMwHhcNMjUwODMwMDAzNjMyWhcNMjUxMTI4MDAzNjMxWjASMRAwDgYDVQQD
[snip]
```

Usage—Run the monitor forever

```
$ cat config.json
{
  "monitor": [
    {
      "bootstrap_at": "2025-10-20T15:04:00Z",
      "suffix": "rgdd.se"
    }
  ],
  "certificate_requesters": [
    {
      "name": "www.rgdd.se",
      "secret": "SECRET",
      "location": "https://www.rgdd.se/silentct-allowlist",
      "requests": [
        "rgdd.se",
        "www.rgdd.se",
      ]
    }
  ]
}
$ silentct-mon -c config.json -d db -w 1 -C "rasmus@rgdd.se" --bootstrap
$ silentct-mon -c config.json -d db -w 3 -C "rasmus@rgdd.se"
[snip -- runs forever]
```


restrictive rate limits = not great for “silence”

- Be notified about unexpected certificates only
- Unexpected basically means not allowlisted
- Open-source implementation to run yourself



Future: static-ct support, async running mode, reduce bandwidth to $\approx$ MB/day, ...

Thank you

Project <https://git.glasklar.is/rgdd/silentct>

Slides <https://git.glasklar.is/rgdd/tds-25/>

Speaker <https://www.rgdd.se/>