

Excellence in RegTech Solutions

Siron Activate

January 2025



Siron Activate

Siron Activate is a set of tools and libraries for license management and capability activation for the Siron One platform.

Requirements

- Licenses are issued for a specific customer
- The license can activate a capability for a certain amount of time
- When the license expires, the capability is deactivated
- The license mechanism must work for both on-prem (offline and online) and SaaS deployments



Licensing models



Perpetual licenses



Floating licenses



Timed licenses



Service licenses



User-locked licenses



Metered licenses



Node-locked licenses

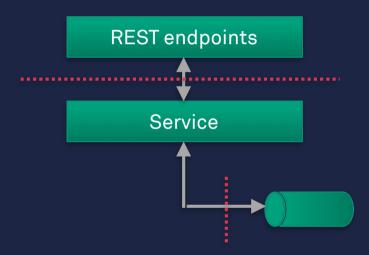


Offline licenses



Challenges - capability and timed licenses

- Activation
- Deactivation
- Reactivation



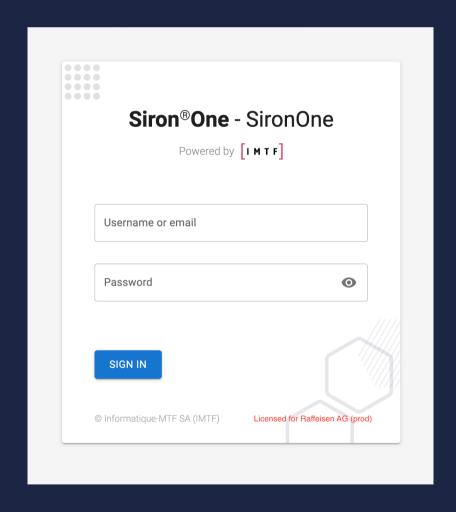


Challenges - offline licenses

- Tracking activation
- Temporary online

- Machine fingerprinting
- QR code

Simple approach



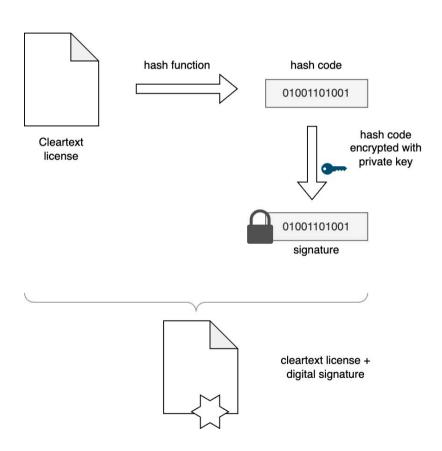
License

A secure tampered-proof document describing the term of activation of a capability

License data

```
"metadata": {
    "capabilities": [ "acm", "aml" ],
    "customerId": "raiffeisen",
    "customerName": "Raiffeisen (development)",
    "creationDate": "2024-11-07",
    "expirationDate": "2025-12-31",
    "schemaVersion": 2
}
```

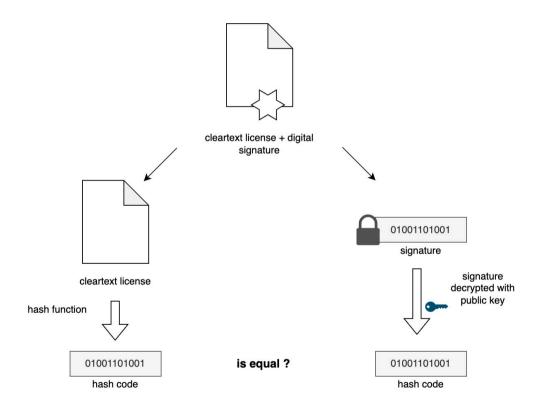
License signature



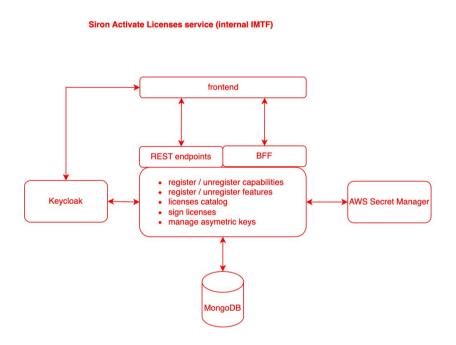
Signed license

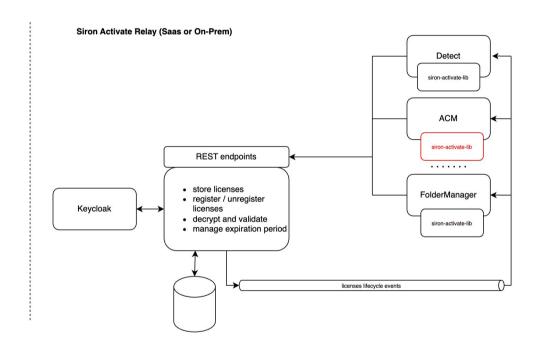
```
{
   "metadata": {
        "capabilities": [ "acm", "aml" ],
        "customerId": "raiffeisen",
        "customerName": "Raiffeisen (development)",
        "creationDate": "2024-11-07",
        "expirationDate": "2025-12-31",
        "schemaVersion": 2
},
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K0Crf9kr8ECkD+IdfFdJmA=="
}
```

License verification



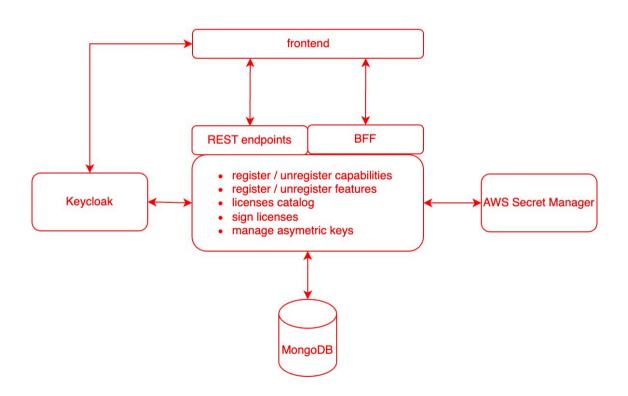
Architecture overview





License service

Siron Activate Licenses service (internal IMTF)



- Quarkus
- MongoDB
- AWS secret manager
- Keycloak
- OpenTelemetry
- NextJS

siron-activate-lib

- Facilitate services integration with Siron Activate
- Contains public key for decryption
- Help handling modifications of the license format

Demo

Next steps

- Online activation server
- License distribution for multi-services architecture (K8s)
- Improving offline activation
- Notifications
- License automation

https://github.com/imtf-group/siron-activate

https://github.com/imtf-group/siron-activate-fe

https://github.com/imtf-group/siron-activate-lib