

*id/fv*

# Value proposition

1

## IDENTIFICATION



- *How can I identify my customers/users in a safe way?*

2

## SIGNATURES



- *How can I digitize and streamline my document processes?*

# Idfy at a glance

## eID portfolio



## Products

- API
- Form
- Portal
- Integration

## Offices

Bergen Oslo



## Usecase

KYC/  
customer onboarding

Real estate bidding

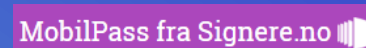
Identification of callers

Digital age control

Efficient sales process

Digital administrative processes

## Idfy-case example



Idfy offers user-friendly solutions for digitizing and streamlining costly manual document processes and has large and small customers in over 20 different industries. We work with everything from large established banks and festivals to small accounting offices and startups.

Idfy has the last couple of years become a preferred supplier of secure identification and electronic signing to many small and large innovative companies, especially within the fintech industry.

We also have integrations in different professional systems such as Uni Economy, SuperOffice and Infodoc. We have very flexible and developer-friendly REST APIs that are well documented.

# Idfy has large and small innovative customers and a strong foothold within «fintech»

## Banking, insurance, asset management & fintech



## Innovative customers



# Drivers behind usage of trust services



1

## Efficiency

Between 2006 and 2013, ICT was stood for about 50 percent of the total productivity growth in Norway. The need to strengthen productivity in Norway has led to a sharp rise in the demand for digitization services. Digital signature and identification solutions provide immediate benefits to the businesses that use them.



2

## Regulation

At European level, there are now several regulations in force or in preparation that affect the use and demand for electronic IDs (PSD2, eIDAS, GDPR, AML4). All of these regulations point to the fact that digital trust services are crucial for further growth in the digital economy.



3

## Security

Preventing fraud and safeguarding privacy and security are becoming increasingly important as criminals become more sophisticated in the methods they use. Digital solutions for identification and signature are becoming increasingly important as the consequences of security breaches become more and more severe.

# The essence of PSD2 is authentication and APIs

*“If the practical application of the PSD2 is to be really effective and transform the digital payments market in Europe, the real challenge will be to come up with standards for the bank API sector in terms of definition, nomenclature, **access protocols and authentication** (OAuth, certificates, tokens, two-factor authentication etc.) – this last under the umbrella of XS2A – focused on access to bank account information.”*





# Idfy built the first «Access to Account» (XS2A) payment solution in Norway

22 | MANDAG 24. JULI 2017  
NYTT EU-REGELVERK | BANKENE FÅR NYE KONKURRENTER

## Rigges for betalingsinnovasjon

Snart innfører EU nytt regelverk for betalingstjenester. Idfy bistår Nordea med å gi eksterne aktører mulighet til å gjennomføre betalinger.

HENRIK OVALSEN

– Mitt inntrykk er at norske og nordiske banker generelt er opp-tatt av konsekvensene ved EUs nye betalingsdirektiv, men de fleste er ikke kommet spesielt langt med det praktiske arbeidet, sier Stein-Olav Davidsen, operasjonell leder (COO) i fintechselskapet Idfy.

Dårlig betalt

Med innføringen av det nye EU-regelverket PSD2 vil bankenes ansvar på kundenes kontoinformasjon og betalingstjenester forveksles. Noe av hensikten med regelverket er å standardisere og få nye typer betalingsløsninger inn i regulerte former.

– De tradisjonelle bankene risikerer å ende opp som infrastrukturleverandører, identisk med hva telekommunikasjonssektoren har opplevd, sier Davidsen, og fortsetter:

– Det er ikke usannsynlig at både du og jeg bruker Facebook eller Google til å betale en del av regningene våre om noen år.

EU-direktivet vil ikke la bankene ta mer betalt av tredjeparten enn hva det koster for bankens kunder å for eksempel betale en regning.

– I dag er det gratis å betale i netbanken, så bankene kan ikke regne med noen inntekter fra tredjepartsselskaper, sier Davidsen.

– Hvilke betalingstjenester tror du tredjepartsselskaper vil angripe først?

– Betaling med kredittkort er relativt dyrt og tungvint for butikker og brukere i dag, og jeg er sikker på at mange er interessert i å ta en del av dette markedet, sier Davidsen.

– Sats på partnerskap

Den norske banknæringen jobber nå med å lage tekniske løsninger som innfrir kravene som det nye EU-regelverket stiller.

– Bankene som vinner på regelverket kjenner seg av at de åpner opp systemene sine, og ser på og selv som en del av et større økosystem, men med sin egen plattform i bunnen, sier Davidsen.

Idfy har jobbet i et halvt år med å få på plass en tilgang- og betalingsløsning for storbanken Nordea. Løsningen åpner opp for tredjepartsselskaper, og benytter sikringsvidde

**EUs nye betalingsdirektiv**

■ EUs nye betalingsdirektiv, også kalt PSD2 (Payment Services Directive), trer i kraft i 2018.

■ Hensikten er å legge til rette for det konkurranse i markedet for betalingstjenester, fremme innovasjon, styrke sikkerheten for nettbetalinger og tilgang til kort.

■ Betalingsdirektivet fører blant annet til at kontoppløpninger gjøres tilgjengelige for alle finansinstitusjoner.

■ Marked for betalingstjenester i EU er anslått til 200-300 milliarder euro i årlig transaksjonsvolum.

API-er, samt den velkjente BankID-teknologien til å autentisere brukerne.

– Løsningen vi har bygget er skalbar, og kan brukes i mange av Nordias fremtidige banktjenester, sier Davidsen.

Han mener DNIs Vipps og svenske Swish er eksempler på gode tjenester som bankene har fått frem, men at tredjepartsselskaper trolig vil komme opp med løsninger som overgår det bankene måler å utvikle.

– En vei går for bankene er å inngå partnerskap med fintechselskaper, noe vi ser er mer utstrakt i flere av våre naboland. For majoriteten av de nordiske bankene er bildet annerledes, de har en lang vei å gå, sier Davidsen.

Tusenvis av timer

Det er det norske IT-sikkerhetselskapet Unit4 som byr inn Idfy som underleverandør til en avtale de fikk med Nordea sent i 2016.

– Til sammen har vi brukt flere tusen timer på å sørge for at løsningen både er sikker og møter de kravene som stilles, sier Frank Hornstvedt, adm. direktør i Unit4Bridge.

Davidsen, som har en fortid i konsultantselskapet McKinsey, mener Nordias ligger langt fremme i møte med det nye betalingsdirektivet, og mener andre norske banker har mye å lære.

– Vår erfaring er at de fleste banker ser på hva konkurrentene gjør før de forestar seg noe. De som faktisk gjør noe har mer enn nok med å tilfredstille kravene som PSD2 medfører, og klarer ikke å se mulighetene som det nye regelverket gir, sier han, og fortsetter:

– Jo tidligere man får det obligatoriske på plass, jo bedre stiller en man til å utnytte mulighetene det nye konkurranselandskapet gir.



■ Kredittkort angripes først ■ Banker flest har en lang vei å gå

NY INNHOLD FOR Gjestende leder (CEO) i Idfy for betalingsgjørere vil gjøre bankene konkurrere med bank



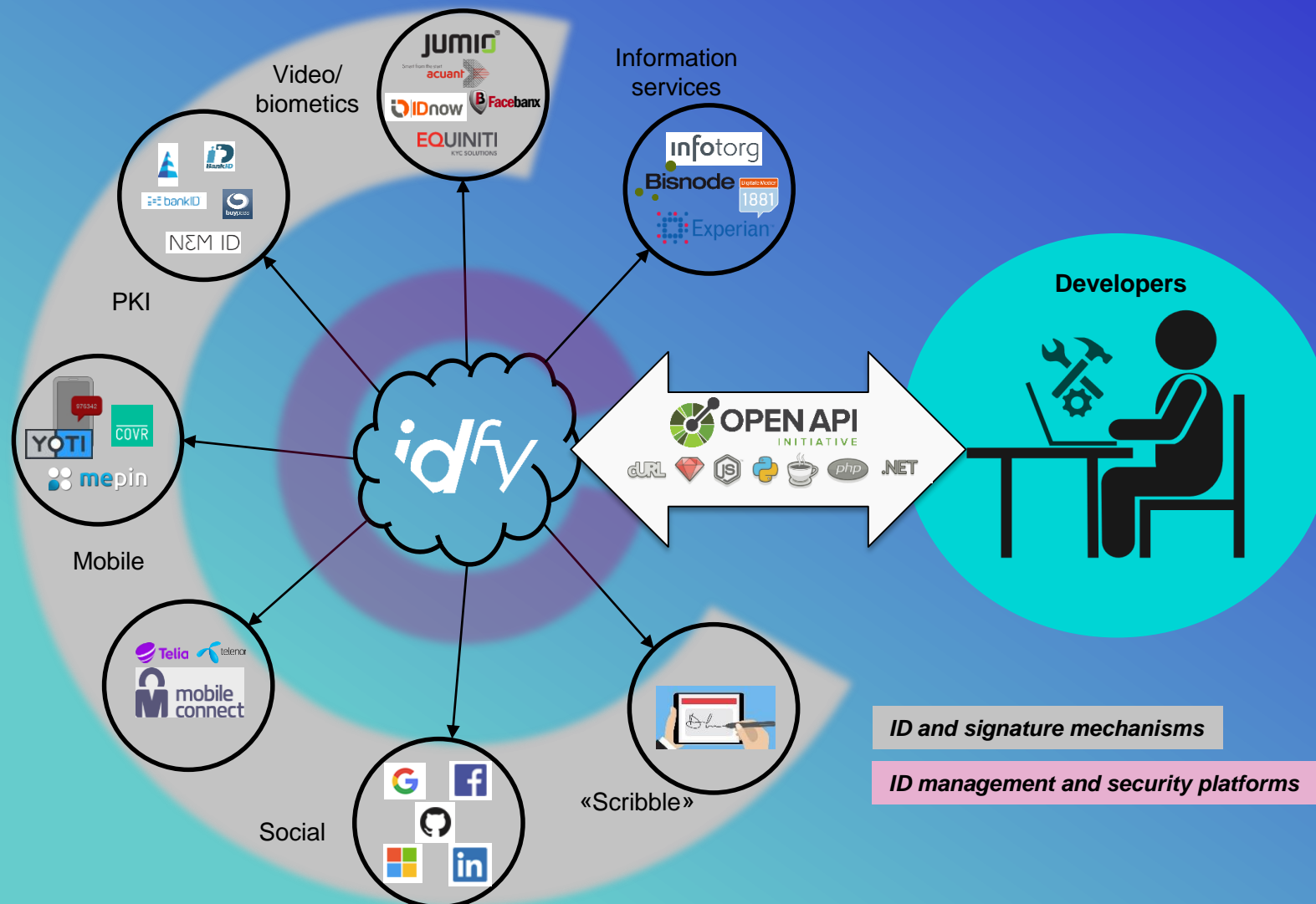


***“If developers are the new rock stars,  
**APIs** are their instruments”***





# Idfy APIs as platform for developers who need to build processes for identification, signing and other types of trust services across countries, use cases and security levels



## Portfolio of trust services

- Idfy IDENTIFY
- Idfy SIGN
- Idfy SEAL
- Idfy AUDIT
- Idfy TIMESTAMP
- Idfy PAY
- Idfy KYC/AML
- Etc.

# BUILDING BLOCKS FOR DEVELOPERS



COMPUTE & STORAGE



MAPS



COMMUNICATIONS



ANALYTICS



PAYMENTS



IDENTITY

# What are we doing to help you as a developer?

-> What's in it for you?





# We believe in self service

Do you want to set up a meeting with sales in order to get things done?...



Idfy Onboarding

Sign up for a Idfy API test account for free

Idfy delivers well-documented REST API's that allows you to integrate digital identification and signing. Here you can sign up for access to a free test account, where you can safely try out our API's for free. Please fill out the form below, and we will send you account credentials to your e-mail.

ORGANIZATION

COMPANY LOGO

CONTACT INFORMATION

ID TJENESTER

SUMMARY

Organization

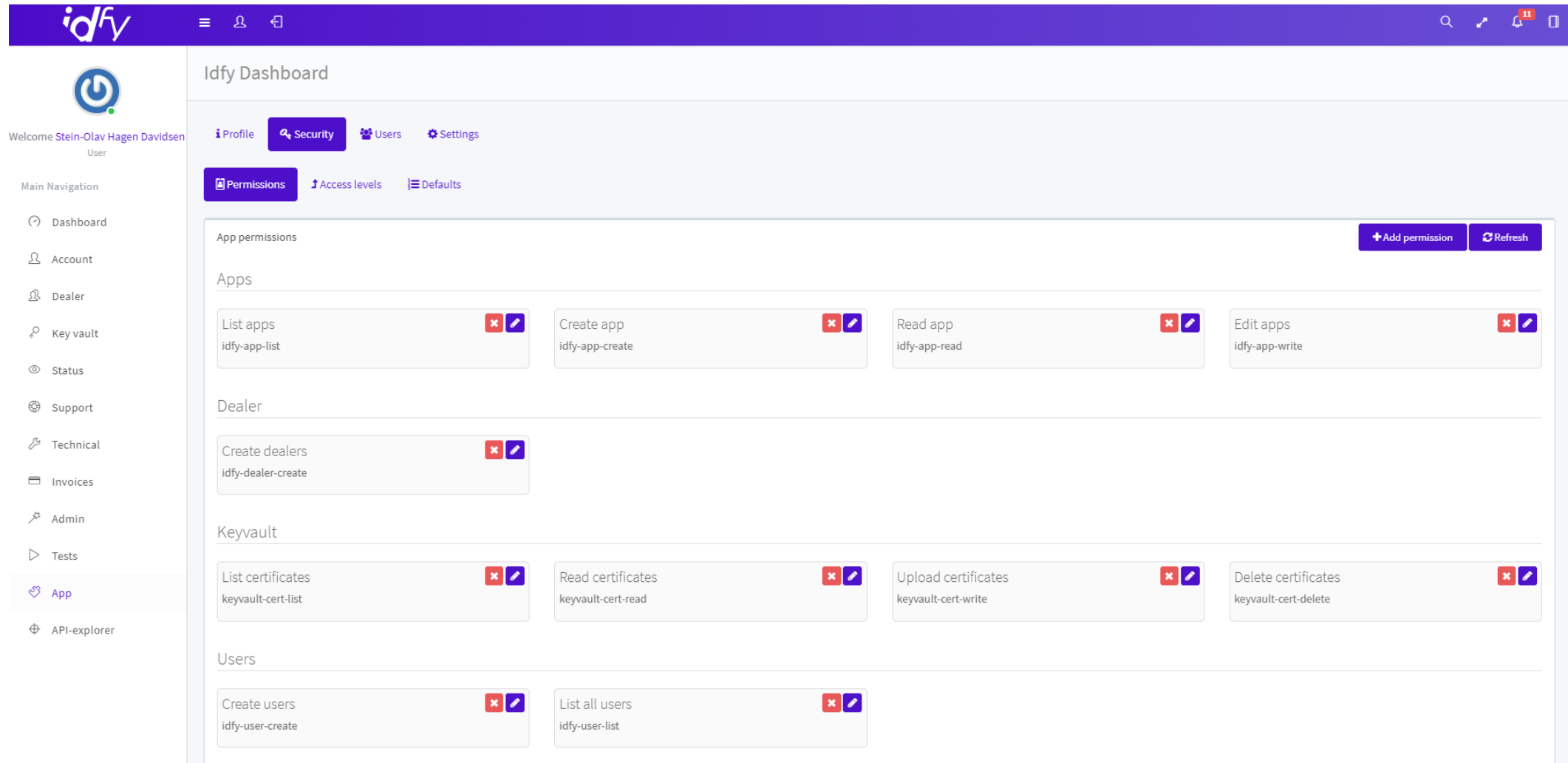
The name of the organization you represent \*  
IDFY NORGE AS

Organization number \*  
998303168



...or would you like to set up accounts, subscriptions etc. yourself?

# We are soon launching a developer dashboard, where you can get full overview and manage your API requests, OAuth clients, services etc.



The screenshot displays the idfy Developer Dashboard. The top navigation bar is purple with the idfy logo, a menu icon, a user icon, and a notification bell with 11 alerts. The left sidebar is light blue and contains a 'Welcome Stein-Olav Hagen Davidsen User' message, a 'Main Navigation' section with links to Dashboard, Account, Dealer, Key vault, Status, Support, Technical, Invoices, Admin, Tests, App (highlighted), and API-explorer. The main content area is titled 'Idfy Dashboard' and features a sub-navigation bar with 'Profile', 'Security' (active), 'Users', and 'Settings'. Below this is another sub-navigation bar with 'Permissions' (active), 'Access levels', and 'Defaults'. The 'Permissions' section is divided into four categories: 'App permissions', 'Dealer', 'Keyvault', and 'Users'. Each category contains a list of permissions with their names and IDs, and icons for delete and edit. The 'App permissions' section also includes '+ Add permission' and 'Refresh' buttons. The 'App permissions' list includes: 'List apps' (idfy-app-list), 'Create app' (idfy-app-create), 'Read app' (idfy-app-read), and 'Edit apps' (idfy-app-write). The 'Dealer' list includes: 'Create dealers' (idfy-dealer-create). The 'Keyvault' list includes: 'List certificates' (keyvault-cert-list), 'Read certificates' (keyvault-cert-read), 'Upload certificates' (keyvault-cert-write), and 'Delete certificates' (keyvault-cert-delete). The 'Users' list includes: 'Create users' (idfy-user-create) and 'List all users' (idfy-user-list).

idfy

Welcome Stein-Olav Hagen Davidsen  
User

Main Navigation

- Dashboard
- Account
- Dealer
- Key vault
- Status
- Support
- Technical
- Invoices
- Admin
- Tests
- App**
- API-explorer

Idfy Dashboard

Profile Security Users Settings

Permissions Access levels Defaults

App permissions

+ Add permission Refresh

Apps

- List apps  
idfy-app-list
- Create app  
idfy-app-create
- Read app  
idfy-app-read
- Edit apps  
idfy-app-write

Dealer

- Create dealers  
idfy-dealer-create


Keyvault

- List certificates  
keyvault-cert-list
- Read certificates  
keyvault-cert-read
- Upload certificates  
keyvault-cert-write
- Delete certificates  
keyvault-cert-delete

Users

- Create users  
idfy-user-create
- List all users  
idfy-user-list

# All APIs and services we build are REST based, and follow the OAuth2 authentication and authorization protocol



Search

INTRODUCTION >

GETTING STARTED >

FAQ

STATUSPAGE

API AUTHENTICATION

HISTORY >

IDENTIFY >

GET

Response

POST

Create

GET

IsComplete

PUT

Invalidate

NORWEGIANBANKID >

## Create

Create a new request to start the identification process

### PARAMETERS

Path Parameters ?

accountid

string <uuid> **Required**  
Your idfy accountid

### REQUEST BODY

A request object

IdentityProvider

string  
Valid values: "UNKNOWN" "NO\_BANKID\_MOBILE" "NO\_BANKID\_WEB" "SWE\_BANKID"  
"SWE\_BANKID\_MOBILE" "NO\_BUYPASS" "DA\_NEMID" "FI\_TUPAS"  
The identityprovider to use for the identification, if not set the user will get a list of all the e-ID associated with your account to choose from.

ReturnUrls

ReturnUrls **Required**  
Return urls for the identity request

POST

/api/identify/{accountid} >

REQUEST SAMPLES

```
{
  "IdentityProvider": "NO_BANKID_WEB",
  - "ReturnUrls": {
    "Error": "https://secure.wayneenterprises.com/auth/error.aspx?sta
    "Abort": "https://secure.wayneenterprises.com/auth/abort.aspx?req
    "Success": "https://secure.wayneenterprises.com/auth/success.aspx
  },
  - "iFrame": {
    "Domain": "secure.wayneenterprises.com",
    "WebMessaging": true
  },
  "Language": "NO",
  "GetSocialSecurityNumber": true,
  "ExternalReference": "765a7ed2d95c4000b14d7a48eb267546",
  - "Addonservices": {
    "no.personal.info": null
  }
}
```



# We provide SDKs in different languages, that also handle the API authentication/authorization part for you

- Languages available on our portal today:
  - C# (.NET)
  - Java
  - PHP
  - NodeJS
- Languages that can be added upon request:
  - Python
  - Ruby
  - Go
  - Objective C
  - Android (Gradle for Gingerbread and above)

The screenshot shows the Idfy Identification API portal. At the top, there is a navigation bar with icons for Java, PHP, Node.js, and an 'Export' dropdown. The main content area is titled 'Idfy Identification API' and includes a sidebar with a 'GETTING STARTED' section containing links like 'Last update', 'Get an account', 'Identification flow', 'Sdk', 'Statuspage', 'Authentication', 'How to Build', 'How to Use', 'How to Test', and 'Initialization'. The main content area for Java includes a 'Download SDK' button, an 'Introduction' section explaining the API's purpose, a 'Last update' section with the build date '11.07.2017', and a 'Getting started' section with a 'Get an account' link and instructions on how to obtain a test account from Signere.no.

API client can be initialized as following.

```
// Configuration parameters and credentials
String oAuthClientId = "oAuthClientId"; // OAuth 2 Client ID
String oAuthClientSecret = "oAuthClientSecret"; // OAuth 2 Client Secret

IdfyIdentificationClient client = new IdfyIdentificationClient(oAuthClientId, oAuthClientSecret);
```

# If you need assistance/guidance and best practice tips during integration, our developers are never far away

Teste signering-API via loca...  
#11571

+ Add

SAUSINVESTER AS

Nicolay Hvidsten

pending Ticket #11571

Assignee\*

idfy-supp.../Rune

CCs

search name or contact info

Type

-

Priority

-

Tags

nobankid × test ×

OrdreLinjeID

☐ Betalbar support

Antall timer

T

Conversations ▾

All 4

Rune

Today 19:59

Hei Nicolay,

Da har eg oppdatert API valideringen med støtte for også å slippe localhost:portnumber igjennom.  
Test gjerne og meld tilbake om dette løser problemet.

Mvh / Kind Regards  
RUNE SYNNEVÅG | CTO  
+47 99716935

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Kanalveien, N-5068 Bergen

[www.idfy.io](http://www.idfy.io)

# We also take care of monitoring the relevant infrastructures for you, so that you don't have to worry

About This Site	
Welcome to Idfy's status page. Here you will find information on the status of all our api and services.	
API (LEGACY) ?	Operational
Signature	Operational
Identification ?	Operational
Additional services	Operational
E-ID providers	
BankID (no) ?	Operational
BankID (sv) ?	Operational
NemID (da) ?	Operational
Tupas ?	Operational
MobileConnect ?	Operational
Buypass	Operational

- On our status pages, we have gathered statuses not only for our own services, but also for the infrastructures like BankID and so on
- For the services that have status APIs, the statuses are relayed, whereas for others we have scrapers on manual status pages
- Planned maintenance and other operational messages that are reported from us and external parties, are also relayed in our status service
- Developers can subscribe to status updates on a mailing list





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