Infopad API

Short description

The web-service is URL based and it allows external applications to get completed forms in Xml format.

Get the forms

Url

https://www.infopad.no/admin/api/ form?<parameters >

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication
startingId	No	If provided will return the next records with Id > startingId; otherwise will return the first records
Records	No	How many records will return. Default and maxim value is 25
Date	No	If provided, will return only the records from this day. The format has to be ISO YYYYMMDD
journalId	No*	Will provide the records for only one client
birthYear	No*	Will provide the records for only one client
projectid	No	It will show the forms from the specified project. If it's not provided, it will return a list of projects for the username

* The journalId and birthYear are mandatory together.

Result overview:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<forms projectnumber="" firstid="" lastid="" totalforms="">
        <form Name="" Project="" projectid="" taskid="" id="" start="" end="">
                <patient medicalOffice="" journalId="" birthYear="" />
                <scores>
                        <score points="">Score text</score>
                        .............
                </scores>
                <groups>
                        <group name="" nameAsForm="0">
                                <question name="" nameAsGroup="0">
                                        <answer selected="">Answer text</answer>
                                        .............
                                        <bodymap>
                                                <square x="" y="" side="" />
                                        </bodymap>
                                </question>
                                .............
                        </group>
                        .............
```
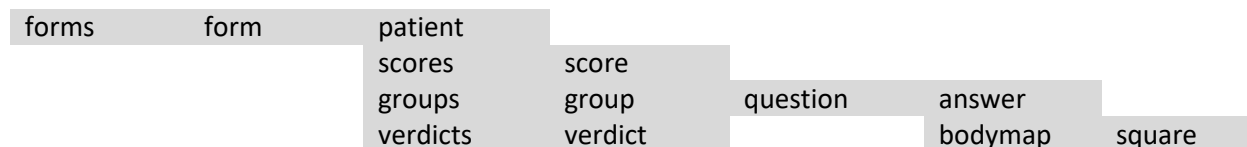
```
            </groups>
        </form>
            .............
</forms>
```

Entities

projects	
+project[]	List of project elements

project	
id	numeric
name	string
+task[]	List of task elements

| task	
id	numeric
name	string

Any project is identified in the application by an unique ID and a name. Projects are split in tasks (Konsultasjon)

forms   form   patient

scores   score

groups   group   question   answer

verdicts   verdict   bodymap   square

forms		
projectnumber	numeric	
firstid	numeric	
lastid	numeric	
totalforms	numeric	
+form[]	List of form elements	
form		
Name	string	
Project	string	*The name of the project and consultation as it is showed in the tablet application*
Tag	String	*Some text info regarding the form*
projectid	numeric	*Unique key of the project*
taskid	numeric	*Unique key of the consultation*
id	numeric	*Unique key of the form. Can be used with [startingId] parameter*
start	dateTime	*The time when the patient started to complete the form*
end	dateTime	*The time when the patient ended the form*
preweb	String	*This Is the base link to the preweb graphs*
+patient	Patient element	*Patient who completed the form*
+scores	Scores element	*Calculated scores*
+verdicts	Vericts element	
+groups	Groups element	
patient		
medicalOffice	String	
journalId	Numeric	
birthYear	Numeric	
scores		

+score[]	List of scores elements
score	
points	Numeric (the result is rounded to 2 decimals)
verdicts	
+verdict[]	List of verdict elements
verdict	
groups	
+groups[]	List of group elements
group	
name	string
nameAsForm	"true" / "false"
+question[]	List of question elements
question	
name	string
nameAsGroup	"true" / "false"

+answer[]	List of answers elements	*Answers and bodymap are mutually exclusive. If we have "answer" element we don't have "bodymap" element and the other way: if we have "bodymap" element we don't have "answer" element*
+bodymap	Bodymap element	

answer	
selected	"true" / "false"
Text	Represents the answer text. Text fields, numeric, stop watch or any other input by patient will be presented as is *Note: Stopwatch number represents the number of seconds*
Tag	Some text info regarding the answer line
bodymap	
+square[]	List of square elements
square	

x	numeric	*X position of the square on the bodymap; 0 based*
y	numeric	*Y position of the square on the bodymap; 0 based*
Side	numeric	*0 if it's front, 1 if it's back*

Bodymap coordinates
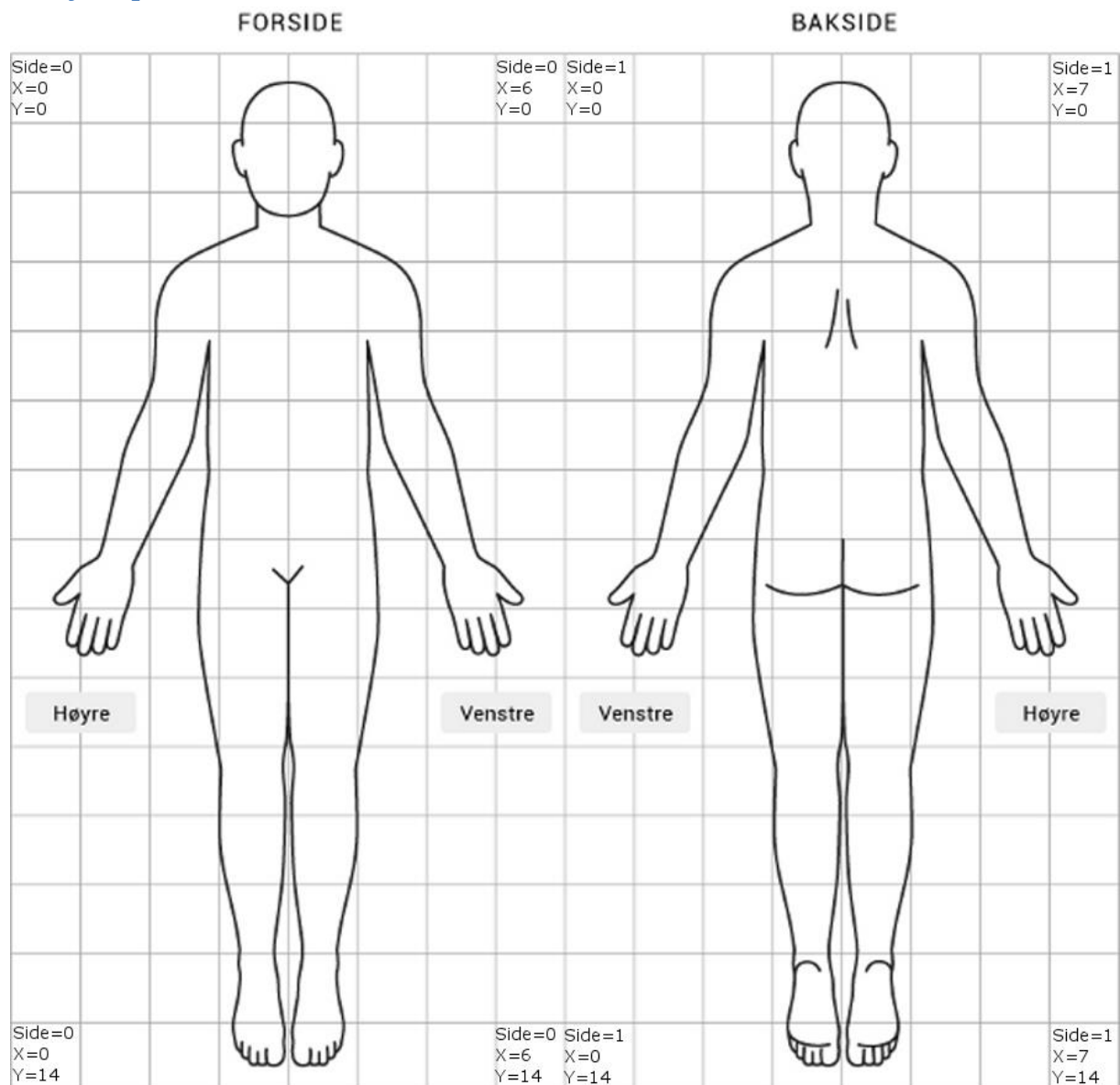
The image has two sides:

- Front side
- Backside

The side is specified by the attribute "side" which can take two values: 0 for front and 1 for back

Front side is 7 squares wide and 14 squares high.

Backside is 8 squares wide and 14 squares high.

The origin of each side is in the top left corner and starts with X: 0 and Y: 0 (X is horizontal ax and Y is the vertical ax)

Examples

Get the list of projects

https://www.infopad.no/admin/api/form?username=drnils&password=drnils
Get the list of projects for one patient
https://www.infopad.no/admin/api/form?username=drnils&password=drnils&journalId=33&birthYear=1985
Get the first 25 forms from one project
https://www.infopad.no/admin/api/form?username=drnils&password=drnils&projectid=1407
Get the next 25 after 25191 ID
https://www.infopad.no/admin/api/form?username=drnils&password=drnils&projectid=1407&startingId=25191
Get only 2 forms completed after 25191
https://www.infopad.no/admin/api/form?username=drnils&password=drnils&projectid=1407&startingId=25191&records=2
Get forms only for one patient
https://www.infopad.no/admin/api/form?username=drnils&password=drnils&journalId=33&birthYear=1985&projectid=1407

Login

Url

https://www.infopad.no/admin/api/login?<parameters>

Parameters

Name	Mandatory	Description
username	Yes	The loginname for website
password	Yes	Password for authentication

Result

In case of success the client is redirected to the main infopad dashboard

The only message error you get is and XML response with Access denied:

<?xml version="1.0" encoding="UTF-8"?>
<error>Access denied.</error>

Example

https://www.infopad.no/admin/api/login?username=demo&password=demo

Error codes

Error	Description
Access denied.	Username / password check failed
License expired.	License expired.
Service disabled.	Web service is not enabled in the admin panel

Preweb redirect

Url

https://www.infopad.no/api/PrewebRedirect?<parameters>

Parameters

Name	Mandatory	Description
username	Yes	The login name for website
password	Yes	Password for authentication
formId	Yes	The ID of the form we want to see

Result

In case of success the client is redirected to the page with the graphs of the specified form

Error codes

Error	Description
Access denied.	Username / password check failed or the user does not have access to the specified fom
License expired.	License expired.
Service disabled.	Web service is not enabled in the admin panel
No graphs	The form has not preweb page
The form is missing	Wrong ID or form was deleted

Patient List

Url

https://www.infopad.no/admin/api/ PatientList?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication

Result

```
<patientList>
     <patient id="109034" JournalId="1" BirthYear="2012"/>
     <patient id="109035" JournalId="2" BirthYear="2013"/>
     <patient id="109070" JournalId="3" BirthYear="2013"/>
     <patient id="109073" JournalId="4" BirthYear="2013"/>
</patientList>
```

Add patient

Url

https://www.infopad.no/admin/api/addpatient?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication
Journalid	Yes	The journalId of the patient
Birthyear	Yes	Birth year for the patient
Projectid	Yes	The id of the project.

Error codes

Error	Description
Wrong projectid	The project does not exist
Not authorized	The username is authorized to use the project
Insert patient error: 1	Invalid journalId – is not a numeric value
Insert patient error: 2	Invalid BirthYear– is not a numeric value
Insert patient error: 3	There is already a customer with that journalId
Client already in this project	The client is already part of the specified project

Example

https://www.infopad.no/admin/api/addpatient?username=demo&password=demo&journalid=1&birthyear=1980&projectid=32151

Update patient

Url

https://www.infopad.no/admin/api/updatepatient?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication
Journalid	Yes	The journalId of the patient
Birthyear	Yes	Birth year for the patient

Description

This method will try to find the specified patient (by "journalid") in the doctors list of patients. If the patient exists then the "birthyear" will be changed to the one sent as a parameter. If the patient isn't found then it will be added. This method works only with the current doctor list of patients.

Error codes

Error	Description
Wrong journalid	Invalid journalId – is not a numeric value
Wrong birth year	Invalid BirthYear– is not a numeric value

Notifications

Url

https://www.infopad.no/admin/api/notifications?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication

Description

Returns a XML with the infopad notifications: new emails to approve, web-forms to save, project invitations etc

Reports

PatientReports

Url

https://www.infopad.no/admin/api/ PatientReports?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication
journalId	Yes	Patient journal id
birthYear	Yes	Patient birth year

Result

<reportList>
    <report id="109034" generated="2017-06-12 13:05:22">
      Report 1 Name
    </report>

      ….
</reportList>

Error codes

Error	Description
Access denied.	Username / password check failed
License expired.	License expired.
Service disabled.	Web service is not enabled in the admin panel
Wrong journalId.	The journal id is not numeric or is null
Patient is missing.	The patient with journal id and provided birth year is missing

ReportPage

Url

https://www.infopad.no/admin/api/ ReportPage?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication
`reportId`	Yes	The report id – this one is coming from ***PatientReports***

Result

Opens the specified report page

Error codes

Any error will result in a redirect to the infopad.no front page.

PatientPage

Url

https://www.infopad.no/admin/api/ PatientPage?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
Password	Yes	Password for authentication
journalId	Yes	The journalId of the patient
birthYear	Yes	The birthYear of the patient
command	No	Represents a string command to be executed in web browser after the page was loaded Available options are: os – Opens "Åpne og besvare skjema" oal – Opens "Aktive legemidler" oe – Opens "Effektregistrering" oai – Opens "Aktive bivirkninger/ interaksjoner" oil – Opens "Ikke aktive legemidler" oti – Opens "Tidligere bivirkninger/ interaksjoner" obd – Opens "Besvarte skjema (skjemavisning)" or – Opens "Rapporter"

Result

Opens the specified patient page and optionally can execute one command after page is loaded

Error codes

Any error will result in a redirect to the infopad.no front page.
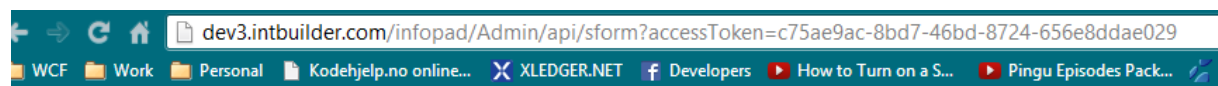
Access Token

Getting forms, adding and updating patients can be done without sending the username and password, but using a unique accessToken.

Url mapping

User name url	Token url
../api/form?username=&password=	../api/sform?accessToken=
../api/addpatient?username=&password=	../api/saddpatient?accessToken=
../api/updatepatient?username=&password=	../api/supdatepatient?accessToken=
../api/patientlist?username=&password=	../api/spatientlist?accessToken=

Every call it's made to the server uses a token to access the data. The token it's connected with one user and it's valid for only one use. Every time a call with an access token is made, a new token will be returned in the XML result and the old one will be disabled.
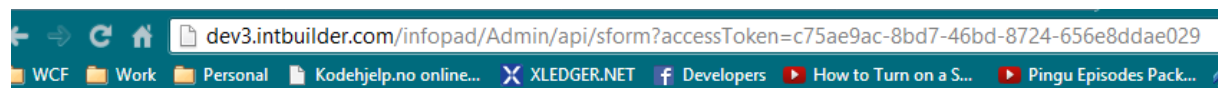
Ex.:


```
dev3.intbuilder.com/infopad/Admin/api/sform?accessToken=c75ae9ac-8bd7-46bd-8724-656e8ddae029
WCF   Work   Personal   Kodehjelp.no online...   XLEDGER.NET   Developers   How to Turn on a S...   Pingu Episodes Pack...

This XML file does not appear to have any style information associated with it. The document tree is shown below.

▼<projects NextToken="ca7628a9-a0d3-4dc0-aa24-79b23c8ce3f5">
```

First call of "sform" page with the token "c75ae9ac-8bd7-46bd-8724-656e8ddae029" will return the list of projects and "NextToken". By trying to use again the code, the server will return the "Acess denied".


```
dev3.intbuilder.com/infopad/Admin/api/sform?accessToken=c75ae9ac-8bd7-46bd-8724-656e8ddae029
WCF   Work   Personal   Kodehjelp.no online...   XLEDGER.NET   Developers   How to Turn on a S...   Pingu Episodes Pack...

This XML file does not appear to have any style information associated with it. The document tree is shown below.

<error NextToken="">Access denied.</error>
```

Manage token

Work places

Any user of infopad can use the API from different location at the same time. For this to be possible the user has to define each location in the administration website.

In the section API-innstillinger the user can press the "Ny plass", add a descriptive name in the form and create a new work location – a sms will be sent with a new short token and the ID of the new location. The Id can be used with the ResetToken method to get a new from the API if needed. The new token will generate new series of tokens for that specified location

Reset token trough API

Url

https://www.infopad.no/admin/api/resettoken?<parameters>

Parameters

Name	Mandatory	Description
Username	Yes	The loginname for website
extUid	No	The ID of the location

Result

<?xml version="1.0" encoding="UTF-8"?>
<result>Code sent</result>

Note
The 6 characters unique code will be sent on SMS to "Username" phone number

Error codes

Error	Description
Access denied.	Username / password check failed
License expired.	License expired.
Service disabled.	Web service is not enabled in the admin panel
No work place defined.	If "extUid" is missing and there is no work place defined in the website settings page.
Work place ID is mandatory when there are more than 1 defined	If "extUid" is missing and there is are many work places defined in the website settings page.
Wrong work place ID	The provided "extUid" does not exist in the database

Login to website using tokens

1. Make a call to "../LoginLink?accessToken=" – this call will return an XML document containing the "NextToken" and an unique login link.
2. Access the link to login. The link will be disabled after it's used once.

```xml
▼<loginLink NextToken="847c322c-7beb-438f-8ed4-2bd326c2016e">
    http://dev3.intbuilder.com/infopad/Admin/Api/SLogin?accessToken=f70623b0-df98-49be-b952-bc5c86b95b57
  </loginLink>
```

Login to PatientPage and ReportPage

In order to access those pages with an access token a call to **SPatientPageToken** is necessary

Url

https://www.infopad.no/admin/api/ SPatientPageToken?<parameters>

Parameters

Name	Mandatory	Description
accessToken	Yes	A valid Token

Result

<token NextToken="xxxxxxxxxx" PatientPageToken="xyxyxyyxyxyxx" />

"NextToken" will be used in the next API call

"PatientPageToken" has to be used only on **SPatientPage** or **SReportPage**

Ex:

Step 1: https://www.infopad.no/admin/api/ SPatientPageToken=aaaa-1111111

<token NextToken="aaaa-22222222" PatientPageToken="bbbb-3333333333" />

Step 2: https://www.infopad.no/admin/api/ SPatientPage?accessToken= bbbb-3333333333&journalId=1&birthYear=1970&command=or

Step 3 (open report page): https://www.infopad.no/admin/api/ SPatientPageToken=aaaa-22222222

<token NextToken="cccc-44444444" PatientPageToken="dddd-555555555555" />

Step 4: https://www.infopad.no/admin/api/ SReportPage?accessToken=dddd-555555555555&reportId=11970

Notes

All the parameters can also be sent using POST method, embedded in the request body which is recommended.

Encrypted data

Getting the key

Url

https://www.infopad.no/admin/api/SGetK?<parameters>

Parameters

Name	Mandatory	Description
accessToken	Yes	A valid token

Result

<result NextToken="xxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx">

    WIOEUOlksjldfkj39048ujkldflksdjfsldkfjl=

</result>

Note

The key is encrypted using AES and password that only the owner of the key has

Getting the ID mapping

Url

https://www.infopad.no/admin/api/ SGetPrivateMap?<parameters>

Parameters

Name	Mandatory	Description
accessToken	Yes	A valid token

Result

<map NextToken="021fd13a-21ad-4525-9b19-51560a38f1cb">

    U2FsdGVkX1+2VmiK3FFlNaxAUSrOQtRJJsVrptjNes0LPFr2LgYERlS+PE9LSzvvGVuoAJig==

</map>

Saving the ID mapping

Url

https://www.infopad.no/admin/api/ SUpdateMap?<parameters>

Parameters

Name	Mandatory	Description
accessToken	Yes	A valid token
map	Yes	The encrypted data

- The request must be done using POST
- The parameters should be included in the body of the request

Result

<result NextToken="021fd13a-21ad-4525-9b19-51560a38f1cb">

OK

</result>

Getting private data

Url

https://www.infopad.no/admin/api/ SGetPrivateData?<parameters>

Parameters

Name	Mandatory	Description
accessToken	Yes	A valid token
obj	Yes	The ID of the private data object

Result

<personalData NextToken="355c2c3f-c941-4c03-bf2f-ec317f547bfc">

U2FsdGVkX180MD63YU8IcfHm+zW5aq/IAdvhvsIFIANR8jdvGRgXwEhja3Tgf3q0jlC9dlU=

</personalData>

Saving private data

Url

https://www.infopad.no/admin/api/ SUpdatePrivateData?<parameters>

Parameters

Name	Mandatory	Description
accessToken	Yes	A valid token
obj	No	The ID of the private data object. If this parameter is not provided, then the method will create a new record and it will return the new id
privateData	No	The encrypted data. If this parameter is not provided then the method will delete the object corresponding to [obj]

Result

<result NextToken="xxxxxxxx-xxxx-xxxx- xxxx xxxx xxxx" RecordID="xxxxx">

[Request status]

</result>

[RecordID] – it's returned only when a new record is added

[Request status]:

- Deleted
- Updated
- New record added

Get unique links for webforms

Getting new link

https://www.infopad.no/admin/api/ UniqueUrl?<parameters>

Parameters

Name	Mandatory	Description
username	Yes	The loginname for website
password	Yes	Password for authentication
journalId	Yes*	Will create the link for this patient
birthYear	Yes*	Will create the link for this patient
consultation	Yes	It will create the webform for this consultations forms

Result

<result>

https://infopad.no/webskjema/index/xxxxx-xxxxx

</result>

Error codes

Error	Description
Wrong journalId.	If the journal ID is not in the right format
Patient is missing.	If the Patient does not exist
Wrong consultation ID.	If the consultation does not exist
XML generation error:	Different unexpected errors
Access denied.	Infopad authentication error
License expired.	User is disabled
Service disabled.	User does not have access to API