



Vigilo

IMS OneRoster certification as a door-opener to the European EdTech market

Vigilo is a Norwegian SIS-vendor for schools, after-schools and kindergartens. In this presentation we tell why and how we use API's to provide SIS-data from Vigilo to a variety of data consumers within the Digital Learning Ecosystem. We will demonstrate how an IMS OneRoster API-based integration via few clicks supports a seamless and automated flow of rostering data from SIS to LMS, and how this has a direct impact for students and teachers in the digital classroom.

Frode Utvik, Systems Integration Manager at Vigilo

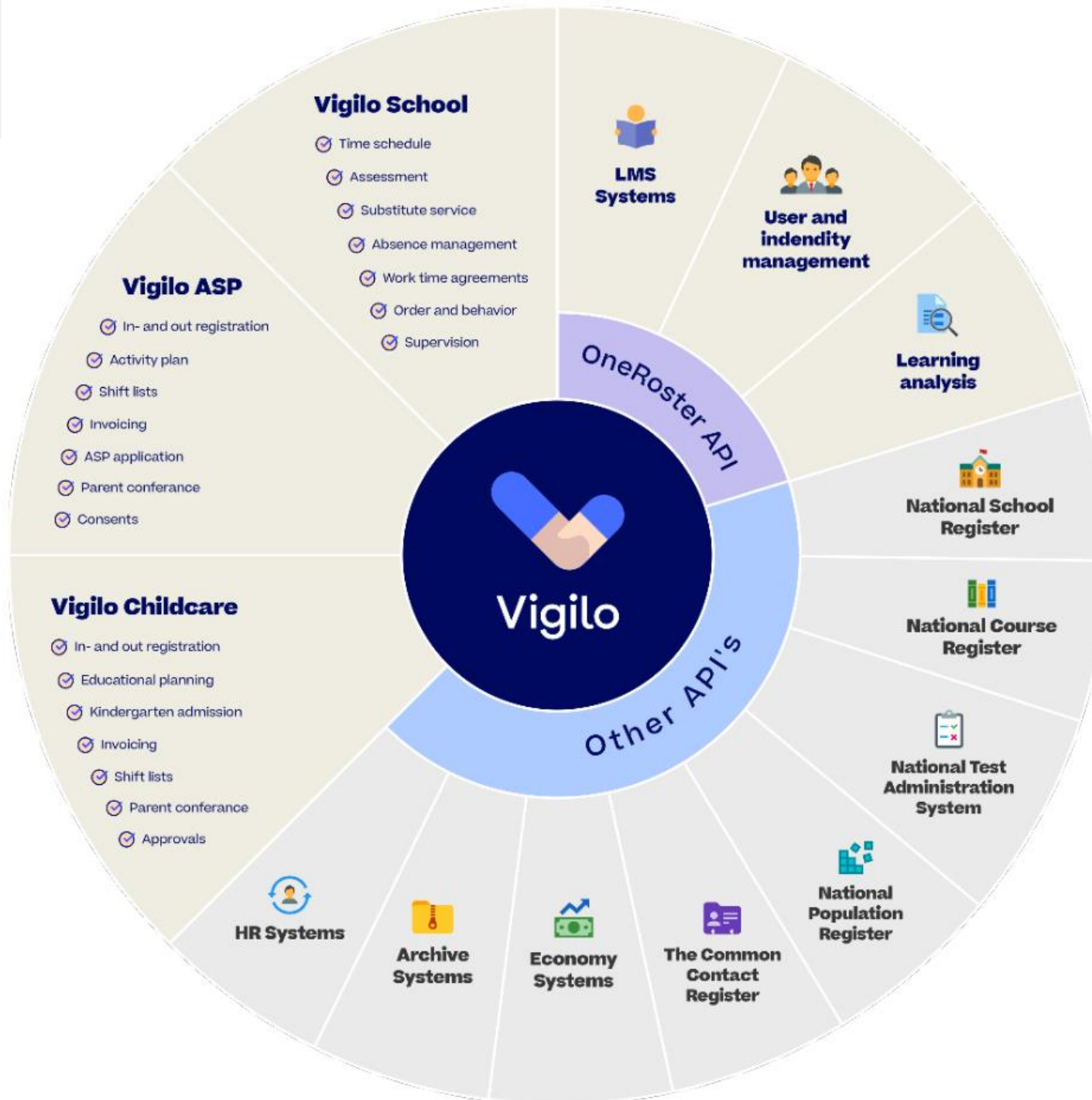
9.nov. 2020

frode@vigilo.no

<https://vigilo.no/en/om-oss/>

https://site.imsglobal.org/certifications/vigilo-as/vigilo-api#cert_pane_nid_402736





- 2008: A communication tool for kindergartens
- 2018: We need to share class rosters !



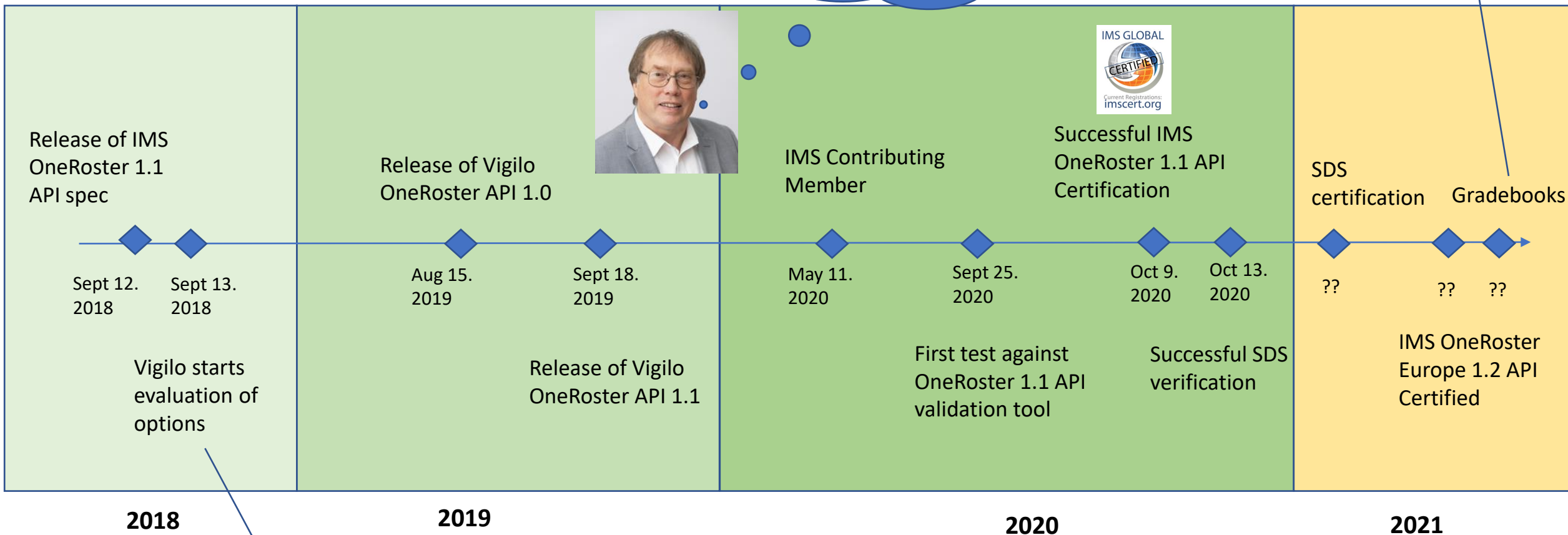


The Vigilo OneRoster timeline

You ain't compliant
until you're certified!

Oslo, 31.oct 2019, Colin Smythe,
IMS Global

Summative and formative
assessments in Vigilo available via
IMS OneRoster API



1. Implementing Norwegian national standard for data exchange in school sector (called «Pifu»), based om IMS Enterprise from 2002
2. Start implementation of OneRoster API, based on REST/JSON.
3. Start implementation of OneRoster 1.1. CSV (file export / import)



Demo – kind of...

*How to Use OneRoster API
and
Microsoft School Data Sync
to
populate and maintain groups and members
in
LMS*





Step 1: We have class rosters / enrolments for a given school year for a set of schools..

>

Hauge skole8A

Search

Search

School year 2020/2021

English

Log out

8A

Homeroom class

Contact teacher

Class teacherHelen Andersen

Class name8A

Room-

Number of students15

Students>

Absence registration

Absence overview

Consents

Conference

Assessment

Order and conduct

Schedule

Lessons

Class teacher

Students

Standard li... x

Print

Last name	First name	Birth date	Phone number	Email	Class	Check all
KL Larsen	Kari	4/22/2007			8A	<input type="checkbox"/>
IO Olsen	Inger	9/19/2007			8A	<input type="checkbox"/>
IP Pedersen	Ingrid				8A	<input type="checkbox"/>
AJ Johansen	Anne	1/7/2006			8A	<input type="checkbox"/>
LN Nielsen	Liv				8A	<input type="checkbox"/>
MA Andersen	Marit	5/25/2007			8A	<input type="checkbox"/>
EK Kristiansen	Eva	5/28/2006			8A	<input type="checkbox"/>
AJ Jensen	Anna	3/26/2007			8A	<input type="checkbox"/>
HP Pettersen	Hilde				8A	<input type="checkbox"/>



Hauge skole

Engelsk 8A

Search

Search



School year 2020/2021

English

Log out



Engelsk 8A

Scheduled class
(Subject group)

Subject teacher

Class 8A
Subject teacher Helen Andersen
Subject name Engelsk

Room -
Number of students 14
Subject code ENG0008



Students



Absence
registration



Consents



Formative
assessment



Assessment



Schedule



Lessons

Students

Standard li... x

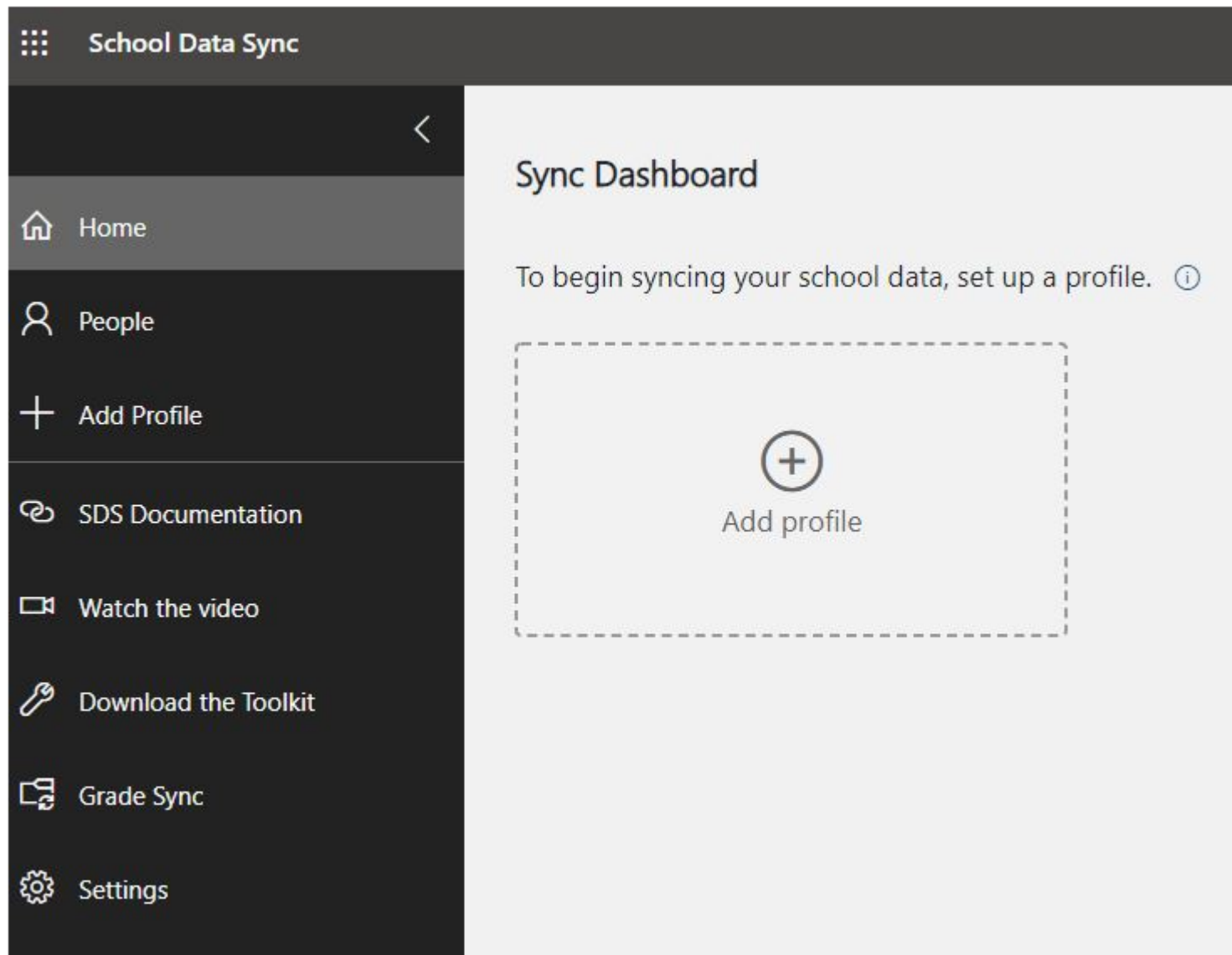
+ Students

Print

	Last name	First name	Birth date	Phone number	Email	Class	Check all
KL	Larsen	Kari	4/22/2007				<input type="checkbox"/>
AJ	Johansen	Anne	1/7/2006				<input type="checkbox"/>
IO	Olsen	Inger	9/19/2007				<input type="checkbox"/>
LN	Nilsen	Liv					<input type="checkbox"/>
IP	Pedersen	Ingrid					<input type="checkbox"/>
MA	Andersen	Marit	5/25/2007				<input type="checkbox"/>
MK	Karlsen	Maria	4/25/2006				<input type="checkbox"/>
AJ	Jensen	Anna	3/26/2007				<input type="checkbox"/>



Step 2: We configure School Data sync with a few clicks



Choose connection type

Before you begin you need to choose a set of options that defines how your data will be synchronized. These options are stored in a Profile. Most organisations just need one profile to sync all the students, teachers and roster data.

By making school data available, you represent that you are authorized to share this data with Microsoft.

Enter a name for your profile

Hauge Skole

Choose your sync method

☐ Upload CSV files
Upload CSV files created from your SIS.

☒ Connect via an API ✓
Make a direct connection and sync your schools' data directly with your SIS

Please choose service you use

☐ PowerSchool API
Make a direct connection to PowerSchool and sync your schools' data directly with your SIS.
[Learn more](#)

☒ OneRoster® API ✓
Sync your school data directly from your SIS through OneRoster® APIs.
[Learn more](#)

Other (OAuth 2)

Start



School Data Sync

Home

People

Add Profile

School Data Sync

Watch the video

Download the Tool

Grade Sync

Settings

Choose connection

Before you begin you need to choose a connection. These options are available to sync all the students, teachers and staff.

By making school data available to Microsoft.

Enter a name for your profile

Hauge Skole

Choose your sync method

Upload CSV files

Upload CSV files created by Microsoft

Connect via an API

Make a direct connection to your school data

Please choose service you want to sync

PowerSchool API

Make a direct connection to your SIS. [Learn more](#)

OneRoster® API ✓

Sync your school data via OneRoster API. [Learn more](#)

Other (OAuth 2)

Start

Step 1: Sync options

Select new or existing users

☐ **Existing users** - Selecting this option matches students and teachers in your source data with users already existing in Office 365 / Azure Active Directory, and adds more attributes to those users.

☒ **New users** - Selecting this option creates a new teacher or student account in Office 365 / Azure Active Directory for each user specified by your source data.

Import data

You've chosen to sync your data via OneRoster® API : Other (OAuth 2).
In order to proceed, please enter your API connection details.

web access URL

https://integrations.prod.vigilo-oas.no/api/5dc307123/ims/oneroster/v1p1/

client Id

5dc307123

client secret

.....

token endpoint URL

https://integrations.prod.vigilo-oas.no/oauth/token

Test Connection

Looks good

School Data Sync

Home

People

Add Profile

SDS Documenta

Watch the video

Download the T

Grade Sync

Settings

Choose connection type

Before you begin you need to choose, sync all the st

By making sd Microsoft.

Enter a nar
Hauge Skole

Choose yo

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Uplc

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Please cho

Pow
Make
your
Learn

One
Sync
Learn
Out

Start

Step 1: Syn

Select new or

Existing user

New users - !
Azure Active I

Import data
You've chosen to s
In order to proce

web access URL
https://integratic

client id
5dc30

token endpoint URI
https://integratic

Test Connect

Looks good

Step 4: Review

Profile name Hauge Skole

Data source OneRoster® API

OneRoster® Provider Other (OAuth 2)

New or existing users New users

Profile expiration date 07/01/2021 at 00:00 UTC

Domain for teachers vigilooas.onmicrosoft.com

Domain for students vigilooas.onmicrosoft.com

SKU to assign licenses for teachers STANDARDWOFFPACK_FACULTY (97 of 100 licenses available)

SKU to assign licenses for students STANDARDWOFFPACK_STUDENT (97 of 100 licenses available)

Filter inactive entries Enabled ⓘ

Team Creation Option Enabled ⓘ

Replace unsupported special characters Enabled ⓘ

Sync option for section group display name Section display names are synced only on first sync ⓘ

Delay student access Students will be enrolled in classes immediately

When does your school year end? 2020

Selected schools to sync

▸ Schools

Selected properties to sync

▸ School Properties

▸ Section Properties

▸ Teacher Properties

▸ Student Properties

If everything looks right, create your profile to begin sync

Back

Create profile



School Data Sync

Home

People

Add Profile

School Data Sync

Watch the video

Download the T

Grade Sync

Settings

Choose connection type

Before you begin you need to choose a set of options that defines how your data will be synchronized. These options are stored in a Profile. Most organisations just need one profile sync all the st

By making sch

Microsoft.

Step 1: Sync options

Select new or exist

☐ Existing users - S

with users already

to those users.

☒ New users - Sele

Azure Active Dire

Import data

You've chosen to sync

In order to proceed, pl

web access URL

https://integrations.p

client id

5dc30

token endpoint URL

https://integrations.p

Test Connection

Looks good

Start

One Sync

Learn

Out

Create profile

Hauge Skole

✓ Sync is complete and ready for more data

Last updated : 03/11/2020, 11:28:34

Pause Sync Reset Sync Edit Delete

Data source OneRoster® API

OneRoster® Provider Other (OAuth 2)

New or existing users New users

Domain for teachers vigilooas.onmicrosoft.com

Domain for students vigilooas.onmicrosoft.com

Filter inactive entries Enabled

Team Creation Option Enabled

Replace unsupported special characters Enabled

Sync option for section group display name Section display names are synced only on first sync

Delay student access Students will be enrolled in classes immediately

Intune for Education Intune for Education licenses will not be assigned to teachers and students

When does your school year end? 2020

Profile expiration date 01/07/2021 at 00:00 UTC

Profile Id / Instance Id 41628994



Step 3: Teacher log into M365 Education and verify that Teams-groups and Teams members are synchronized

Microsoft Teams interface showing a list of teams under the heading "Team". The interface includes a search bar with the text "Søk" and a button "Bli med i eller opprett et team".

The list of teams is titled "Teamene dine" and includes the following teams:

- U8: Utdanningsvalg 8A
- S8: Samfunnsfag 8A
- 8A: 8A (highlighted with an orange box and labeled "Homeroom")
- K8: Kroppsøving 8A
- N8: Naturfag 8A
- E8: Engelsk 8A (highlighted with an orange box and labeled "Scheduled group")
- Ko: Kunst og håndverk 8A



Microsoft Teams

Søk

HA



Aktivitet



Chat



Team



Oppgaver



Kalender



Anrop



Filer



< Alle team



8A



Generelt



8A ...

Team

Medlemmer

Ventende forespørsler

Kanaler

Innstillinger

Analyse

Apper

Søk etter medlemmer



Legg til medlem

Eiere (1)

Navn

Stilling

Sted

Tagger ⓘ

Rolle



Helen Andersen

Eier ▾

Medlemmer og gjester (15)

Navn

Stilling

Tagger ⓘ

☐ Demp kursdeltakere

Rolle



Marit Andersen



Medlem ▾ ×



Anne Johansen



Medlem ▾ ×



Eva Kristiansen



Medlem ▾ ×



Kari Larsen



Medlem ▾ ×



Ingrid Pedersen



Medlem ▾ ×



Maria Karlsen



Medlem ▾ ×



Microsoft Teams

Søk



Aktivitet



Chat



Team



Oppgaver



Kalender



Anrop



Filer



...



Apper



Hjelp



...



...



...



...



...



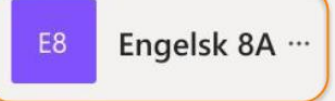
...

< Alle team



Engelsk 8A

Generelt



Team

Medlemmer Ventende forespørsler Kanaler Innstillinger Analyse Apper

Søk etter medlemmer



Legg til medlem

Eiere (1)

Navn	Stilling	Sted	Tagger	Rolle
HA Helen Andersen				Eier

Medlemmer og gjester (15)

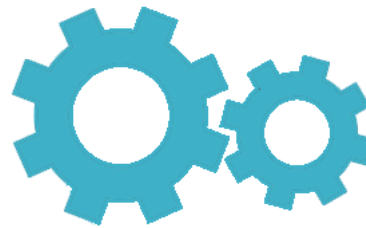
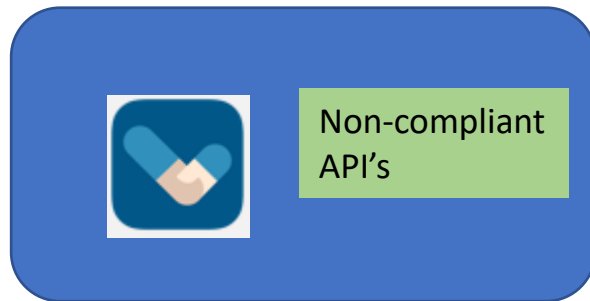
Navn	Stilling	Tagger	<input type="checkbox"/> Demp kursdeltakere	Rolle
MA Marit Andersen			<input type="checkbox"/>	Medlem
AJ Anne Johansen			<input type="checkbox"/>	Medlem
EK Eva Kristiansen			<input type="checkbox"/>	Medlem
KL Kari Larsen			<input type="checkbox"/>	Medlem
IP Ingrid Pedersen			<input type="checkbox"/>	Medlem
MK Maria Karlsen			<input type="checkbox"/>	Medlem
LN Liv Nilsen			<input type="checkbox"/>	Medlem
IJ Ida Johnsen			<input type="checkbox"/>	Medlem
AJ Anna Jensen			<input type="checkbox"/>	Medlem



Why does this really matter?

To be IMS OneRoster certified as first SIS-system in Europe to deliver rostering data by «REST Data Provider Core» means:

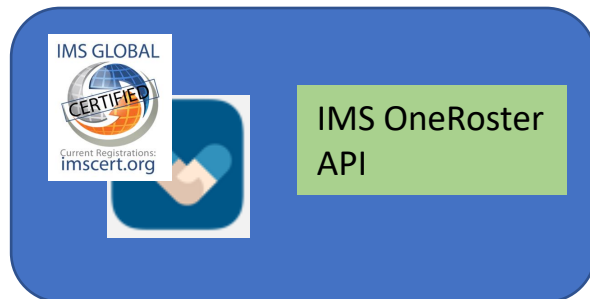
Complex implementation



Integration software /
3rd party integrator /
“project-based integration”

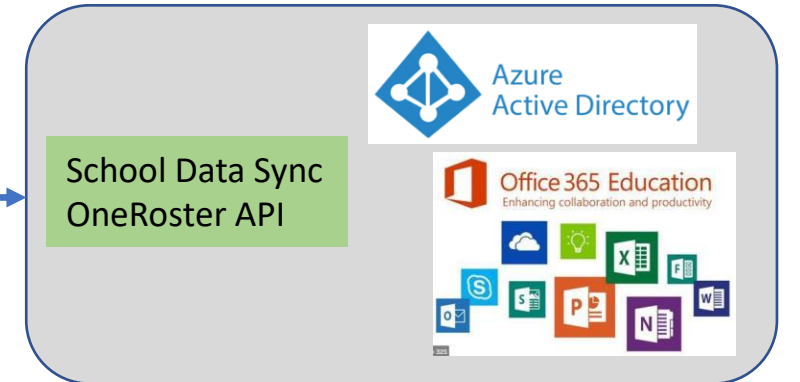


«Out-of-the-box» implementation



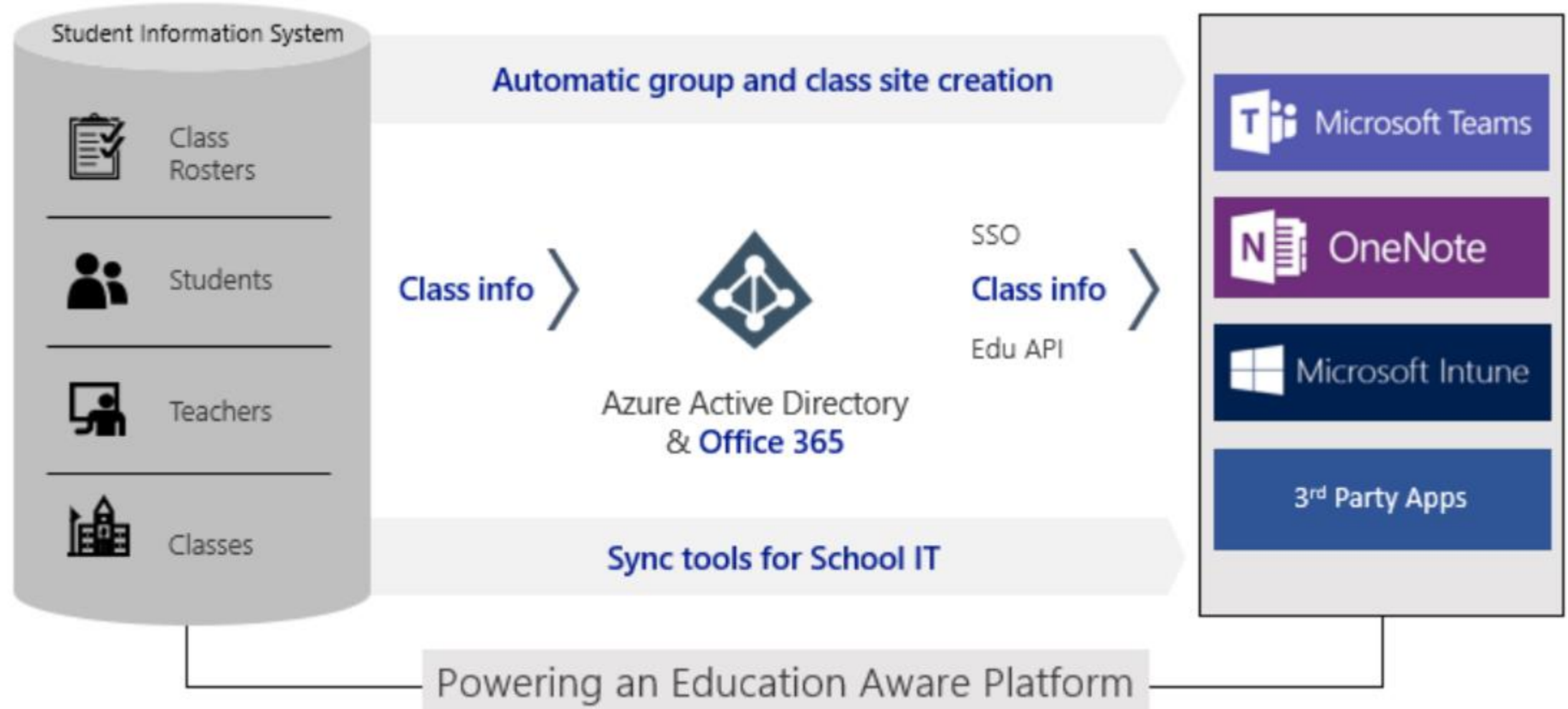
Ease of use for
school administrators

Integrity, confidentiality and availability to the digital learning ecosystem for teachers and students





<https://docs.microsoft.com/en-us/microsoft-365/education/deploy/school-data-sync>





Final remarks

- ✓ It's doable
- ✓ OneRoster 1.2 Europe profile seems to fit even better – and fix some issues
- ✓ OneRoster has a practical approach
 - Good documentation and relevant examples with JSON payloads
 - Good validation tools
- ✓ Helpful supporters
 - IMS Global
 - Norwegian Directorate for Education
- ✓ The relevance in Europe is dependant on the market adoption – data providers as well as data consumers
- ✓ National standards and regulations can still be a challenge...
- ✓ IMS Global is not ISO – challenge for adoption in Europe?
 - ISO/IEC 19788

Operation Name	Compliance (OAuth 2.0)
getAllAcademicSessions	Yes
getAcademicSession	Yes
getAllClasses	Yes
getClass	Yes
getAllCourses	Yes
getCourse	Yes
getAllEnrollments	Yes
getEnrollment	Yes
getAllGradingPeriods	Yes
getGradingPeriod	Yes
getAllOrgs	Yes
getOrg	Yes
getAllSchools	Yes
getSchool	Yes
getAllStudents	Yes
getStudent	Yes
getAllTeachers	Yes
getTeacher	Yes
getAllTerms	Yes
getTerm	Yes
getAllUsers	Yes
getUser	Yes
getAllRepresentations	No

