WEBSERVICE
PE-ONLINE/GAIA / CPD ONLINE

-PROCES ATTENDANCE-

Date : 08-22-2019
Version : 4.0

Date	Version number	Explanation	*Xaurum* *Charles Petitweg 37-2* *4827 HJ Breda* *Tel. 076 - 549 99 99*
21-08-2019	4.0	DvdM: New format 2019	

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INTRODUCTION

Automatic processing of attendance can be realized by the use of a webservice.
The webservice can be used real-time. For example directly after an e-learning course has been finished.
Besides this, it can also be used to process multiple attendances at a time.

The webservice processes the attendance in the same way as they would be entered manually in the system.
The attendance data which is stored through the webservice can be found amongst the processed attendances in PE-online/GAIA.

The webservice is suitable for e-learning and optionally too for courses with physical sessions. If the webservice is used for courses with physical sessions the user needs to sign an agreement with Xaurum for support from Xaurum.

The correct configuration is set up for you in consultation with the support department.

Necessary for the webservice is

- an account (free) in PE online with;
  - the webservice is set up only for one account
- a course with accreditation;
  - necessary for testing

NB, if you have any questions for support, we kindly request you te send us an XML file. Please, you must log this XML file yourself.

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1 ADDRESSING THE WEBSERVICE

1.1 LOCATION

The webservice runs on a SSL-secures location. The URL of the webservice is:

Live: https://www.pe-online.org/pe-services/pe-attendanceelearning/WriteAttendance.asmx
Test: https://test.pe-online.org/pe-services/pe-attendanceelearning/WriteAttendance.asmx

1.2 OPERATIONS EN PARAMETERS

The webservice has one operation: named ProcessXML. This operation expects 1 parameter which is the XML string. See chapter 2 for a description of the XML.

1.3 WEBSERVICE DEFINITION LANGUAGE (WSDL)

The WSDL of the webservice which gives a uniform description of how the webservice can be accessed, can be requested by:
Live: https://www.pe-online.org/pe-services/pe-attendanceelearning/WriteAttendance.asmx?WSDL
Test: https://test.pe-online.org/pe-services/pe-attendanceelearning/WriteAttendance.asmx?WSDL

1.4 TESTING

Xaurum delivers a webservice interface in test-modus. This webservice will check all incoming data and will report errors if necessary. However, it will not process the incoming data (PE points) into the files of the professionals.

When testing of the webservice interface is ready, Xaurum can activate the webservice on request to live-modus. After activation, the incoming data (PE points) will actually be processed into the files of the professional.

Alternatively, on request it is possible to deliver the webservice interface in a test-environment. This test-environment will be outdated at least one week. Therefore, Xaurum prefers to deliver the webservice in test-modus in the live-environment. This alternative option of the webservice interface in a test-environment is used when a webservice for e learning live-modus is expanded with webservice for courses with physical sessions.

2 INPUT / XML STRUCTURE

The webservice expects a fixed XML structure. The different parts of the webservice are covered in the paragraphs below.

PE-online has several professional group organizations, characterized by the orgID. KNMG/GAIA is an example of such an organization with orgID 19. If you want to use the webservice for Pharmacists you need another orgID.

A call: - can only be used for processing attendance for one organization at a time. A survey or list of all different professional group organizations and their individual orgID's can be found on www.pe-online.org/download/org_lijst.pdf
- contains 1 attendance with a max of 1000 attendances each call

Example (e-learning):

```
<?xml version="1.0" standalone="yes"?>
<Entry>
  <Settings>
    <userID>[delivered to you]</userID>
    <userRole>EDU</userRole>
    <userKey>[delivered to you]</userKey>
    <orgID>[organization from org_list.pdf]</orgID>
    <settingOutput>1</settingOutput>
    <emailOutput>s.peek@xaurum.nl</emailOutput>
    <languageID>1</languageID>
    <defaultLanguageID>1</defaultLanguageID>
  </Settings>
  <Attendance>
    <PECourseID>9471</PECourseID>
    <externalPersonID>39054148101</externalPersonID>
    <externalmoduleID>Module_A</externalmoduleID>
    <endDate>2008-06-09T13:08:13.9422087+02:00</endDate>
  </Attendance>
  <Attendance>
    <PECourseID>8001</PECourseID>
    <externalPersonID>39054148101</externalPersonID>
    <endDate>2008-06-08T13:08:13.9422087+02:00</endDate>
  </Attendance>
  <Attendance>
      <PECourseID>8001</PECourseID>
      <externalPersonID>59059671101</externalPersonID>
      <endDate>2008-06-08T13:08:13.9422087+02:00</endDate>
  </Attendance>
</Entry>
```

Example (physical session):

```
<?xml version="1.0" standalone="yes"?>
<Entry>
       <Settings>
              <userID>[delivered to you]</userID>
              <userRole>EDU</userRole>
              <userKey>[delivered to you]</userKey>
              <orgID>[organization from org_list.pdf]</orgID>
              <settingOutput>1</settingOutput>
              <emailOutput>s.peek@xaurum.nl</emailOutput>
              <languageID>1</languageID>
              <defaultLanguageID>1</defaultLanguageID>
       </Settings>
       <Attendance>
              <externalPersonID>1234567890</externalPersonID>
              <PECourseID>203040</PECourseID>
              <PEEditionID>12345</PEEditionID>
       </Attendance>
</Entry>
```

2.1 SETTINGS

```
<Settings>
  <userID>[delivered to you]</userID>
  <userRole>EDU</userRole>
  <userKey>[delivered to you]</userKey>
  <orgID>[organization from org_list.pdf]</orgID>
  <settingOutput>1</settingOutput>
  <emailOutput>support@pe-online.org</emailOutput>
  <languageID>1</languageID>
  <defaultLanguageID>1</defaultLanguageID>
 </Settings>
```

If you want to use the webservice for multiple educational institute accounts in PE online you have to do a separate call for each account in PE online in combination with the access keys (userID and userkey) for each individual account.

Field	Description	Format	Example
userID	The ID of the educational institute for whom the attendance is processed. This ID is given by Xaurum when the webservice is required by the specific educational institute.	Numeric	538
userRole	The role within the webservice. For attendance this is always for the educational institute, so EDU	String	EDU
userKey	Unique key, belongs to the userID. This key is send to the educational institute together with the userID.	Numeric	1234567890
orgID	Unique ID of the organization for which you process attendance with this XML file	Numeric	19 for KNMG / GAIA
settingOutput	Indicates whether an error report will be mailed at the end of the process. 1= Yes 0= No	Integer (0 of 1)	1
emailOutput	The e-mail address of the receiver of the error report	String	noreply@xaurum.nl
defaultLanguageID en languageID	The language ID in which the XML gives back the messages. Both fields must have the same value: 1 : NL 3 : FR	Integer	1

	6 : EN		

2.2 ATTENDANCE

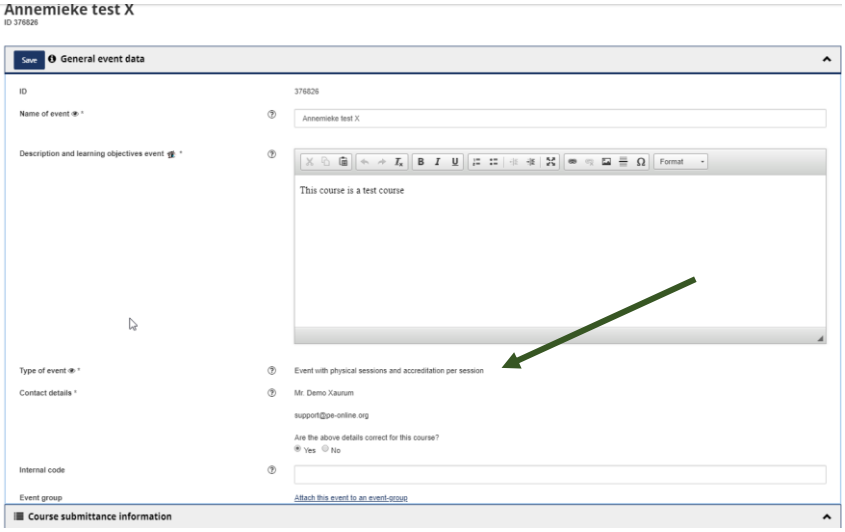
```
<Attendance>
  <PECourseID>9471</PECourseID>
  <externalPersonID>39054148101</externalPersonID>
  <externalmoduleID>Module_A</externalmoduleID>
  <endDate>2019-06-09T13:08:13.9422087+02:00</endDate>
</Attendance>
<Attendance>
  <PECourseID>8001</PECourseID>
  <externalPersonID>39054148101</externalPersonID>
  <endDate>2019-06-08T13:08:13.9422087+02:00</endDate>
</Attendance>
<Attendance>
    <PECourseID>8001</PECourseID>
    <externalPersonID>59059671101</externalPersonID>
    <endDate>2019-06-08T13:08:13.9422087+02:00</endDate>
</Attendance>
```

A course in PE-online has a specific type:

1. Course with physical session, accreditation points for each meeting separately
2. E-learning
3. Expertise groups ICO/ ICT
4. Course with physical session, accreditation points for attending the complete course only

Type 2 and 3 have no dates set in the course, for Type 1 en 4 dates have to be adjusted to the course in advance of the meetings.

In PE-online the course type (type of event) is visible in the section General event data of the course:



Below are the settings needed for each type of course (type of event). For each type of course is indicated if the field is Obligatory (O).

Field	Beschrijving	Format	Voorbeeld	Type cursus 1	2	3	4	
PECourseID	The courseID in PE-online (if this ID is unknown in your system, you can use externalCourseID, see below)	Integer	8001	O	O	O	O	PECourseID **or** externalCourseID is **obligated**
externalCourseID	If this PECourseID is not known to your system, you can add a field externalCourseID instead of the field PEMeetingID. You can add your own course code. Your own course code has to be the **same in the course itself in PE online** as (internal) code.	String	IC_0091	O	O	O	O	
externalPersonID	The unique registration-number of the professional known in PE-online (i.e. BIG number) See also www.pe-online.org/download/org_lijst.pdf	String	59059671101	O	O	O	O	123435678901 (without BIG- for the number)
PEModuleID	If the course in PE-online exists of more than one module, you have to fill in the • PEModuleID **or** • externalmoduleID (see below) as well as the PECourseID PEModuleID is the ID of the module in PE-online.	Integer	1000		O			If the E-learning in PE-online exists of more modules than one module, one of both fields (PEModuleID **or** externalmoduleID) is obligated
externalmoduleID	If the course in PE-online exists of more than one module, you have to fill in the the PECourseID as wel as • a PEModuleID **or**	String	Module_A		O			

Field	Beschrijving	Format	Voorbeeld	Type cursus 1	2	3	4	
	• an externalmoduleID If this PEmoduleID is not known to your system, you can add a field externalmoduleID instead of the field PEModuleID. You can add your own module code. Your own module code has to be the **same in the course itself in PE online** as the (internal) code of the specific module.							
endDate	Date on which the e-learning or expertise group is completed. It is the date the professional will see in his file in PE-Online.	Date/time	2008-06-08T13:08:13.9422087+02:00		O	O		
PEEditionID	This ID number is the number of an edition of the course (course with physical presence) . (if this number is not in your system you can use the externalEditionID)	Integer	45324	O			O	PEEditionID **or** externalEditionID is obligated
externalEditionID	If the PEEditionID is not known to you can add a field externalEditionID instead of the field PEEditionID. You can add your own code in the field externalEditionID. Your own code has to be the **same in the course itself in PE online** as (internal) code for this specific edition .	String	123AB32	O			O	
PEMeetingID	The ID number of the meeting of the course (course with physical presence). (If this PEmeetingID is not known to your system, you can add a field externalMeetingID, see below)	Integer	4033321	O				

Field	Beschrijving	Format	Voorbeeld	Type cursus 1	2	3	4	
externalMeetingID	If this PEmeetingID is not known to your system, you can add a field externalMeetingID instead of the field PEMeetingID. You can add your own meeting code. Your own code has to be the **same in the course itself in PE online** as (internal) code for this specific meeting.	String	XYZ-01	O				PEMeetingID **or** externalMeetingID is verplicht

For courses type 2 and 3 the combination of externalPersonID, PECourseID (and **obligatory** PEModuleID if more modules are present in the course) and endDate is an unique combination. Attendance will therefore be processed only once for this combination. If a professional ends the course twice on the same day, only one line will be processed.

3 OUTPUT

Depending on the setting *settingOutput*, the web service might send an e-mail. This e-mail only contains the errors (!). An XML-file will also be returned.

3.1 ERRORS

The webservice can report the following errors:

- Invalid XML-structure; in this case no attendance will be processed at all.
- Each line is checked for compliance. If an error occurs a message follows see https://www.pe-online.org/download/BijlageErrorPresentie.pdf) for each error. Lines which are correct will be processed

The incorrect lines can be corrected for the next batch. It is also possible to send in an incomplete processed batch for a second time without reporting attendances in PE-online twice.

3.2 PROCESS TO PE - ONLINE

If the XML-structure is correct, the correct lines (registration number is valid, course is valid and accredited on the given date) will be processed. The processing of the correct lines will not take place real-time. The actual processing into PE-online finds place outside the web service and will take approximately 5 minutes.

3.3 XML OUTPUT EXAMPLE

E-learning

```
<?xml version="1.0" standalone="yes"?>
<Summary>
  <Results>
    <rejected_rows>1</rejected_rows>
    <accepted_rows>2</accepted_rows>
    <total_rows>3</total_rows>
  </Results>
  <Error>
    <errorNR>100</errorNR>
    <errorMsg>Course 9471 on row 2 is not (correct) accreditated; Date 09-06-2008
is not within accreditated period </errorMsg>
  </Error>
  <Accepted>
    <person>01234567890</person>
    <course>8001</course>
    <date>2008-06-08T13:08:13.9422087+02:00</date>
  </Accepted>
  <Accepted>
    <person>39054148101</person>
    <course>8001</course>
    <date>2008-06-08T13:08:13.9422087+02:00</date>
  </Accepted>
</Summary>
```

Physical session

```
<?xml version="1.0" standalone="yes"?>
<Summary xmlns="">
  <Results>
    <rejected_rows>0</rejected_rows>
    <accepted_rows>1</accepted_rows>
    <total_rows>1</total_rows>
  </Results>
  <Accepted>
    <person>01234567890</person>
    <course>349521</course>
    <meeting>382017</meeting>
    <date>2019-09-02T10:01:08.974+02:00</date>
  </Accepted>
</Summary>
```

For a course with physical sessions the meeting id is always send back. NB for a course with one meeting only the meeting id which is send back, can be ignored because there is no meeting id send in the first place.

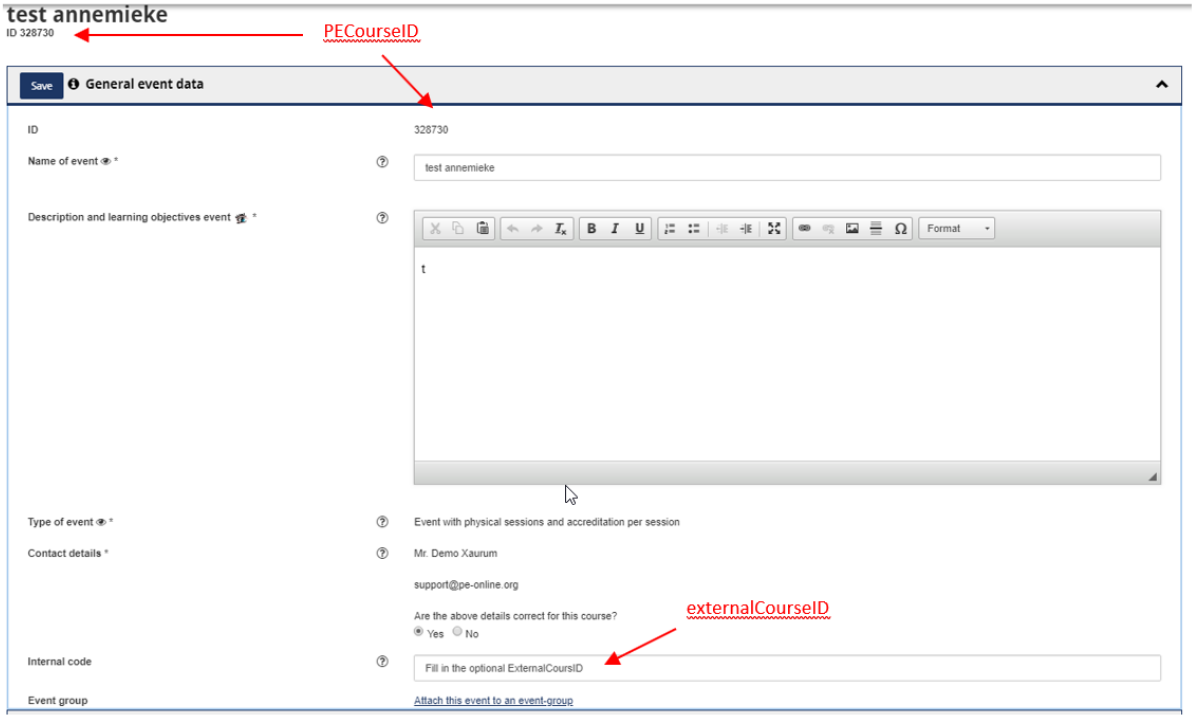
The list with error codes can be found:
https://www.pe-online.org/download/BijlageErrorPresentie.pdf

ATTACHEMENT 1 SCREENSHOTS

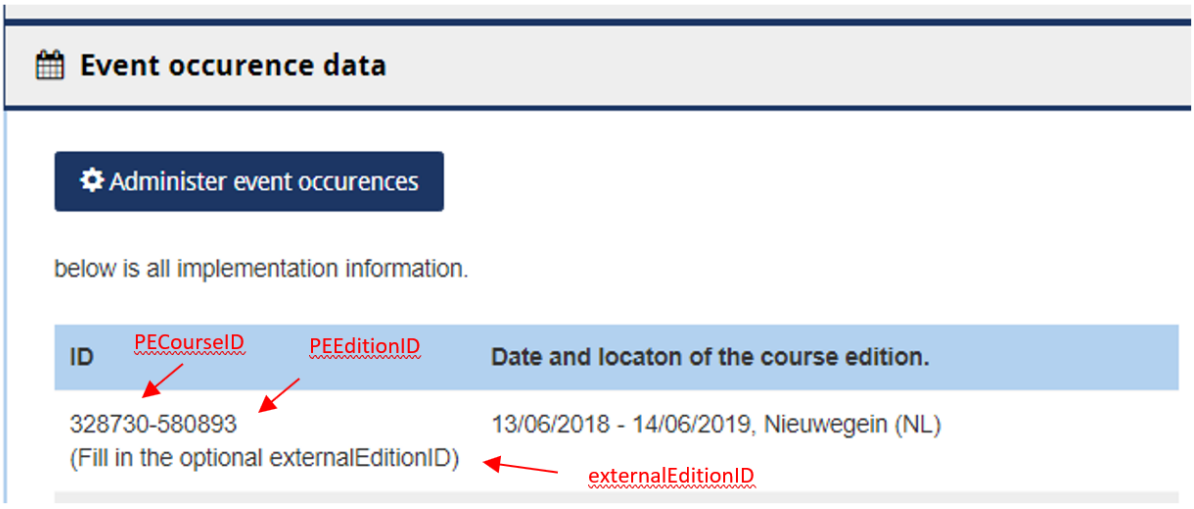
GENERAL EVENT DATA OF THE COURSE

This is the page you see as educational institute checking the details of a course.

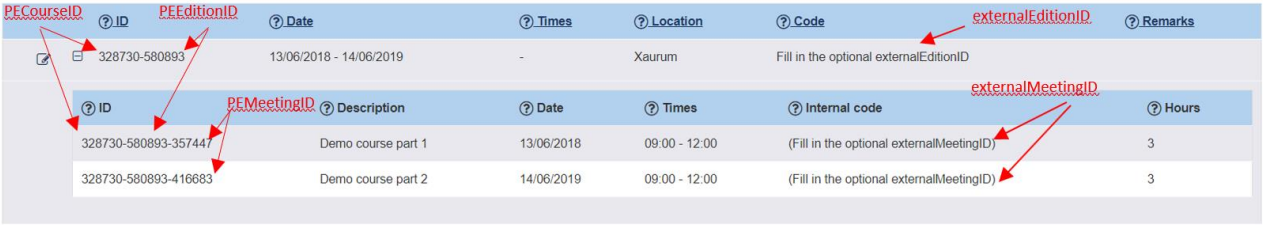
General event data:



Course with physical sessions:

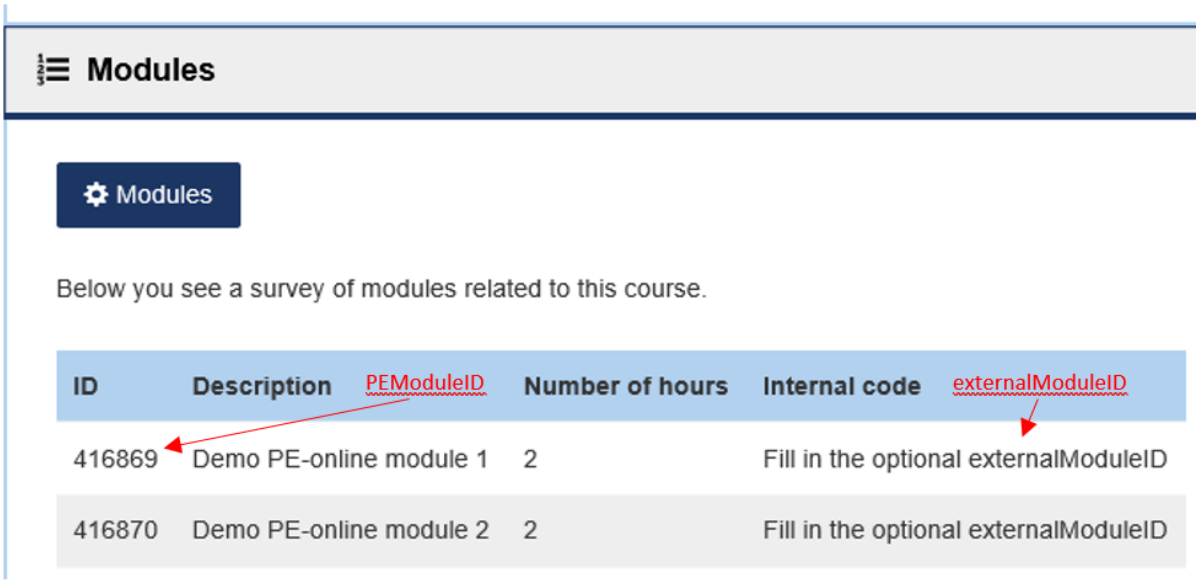


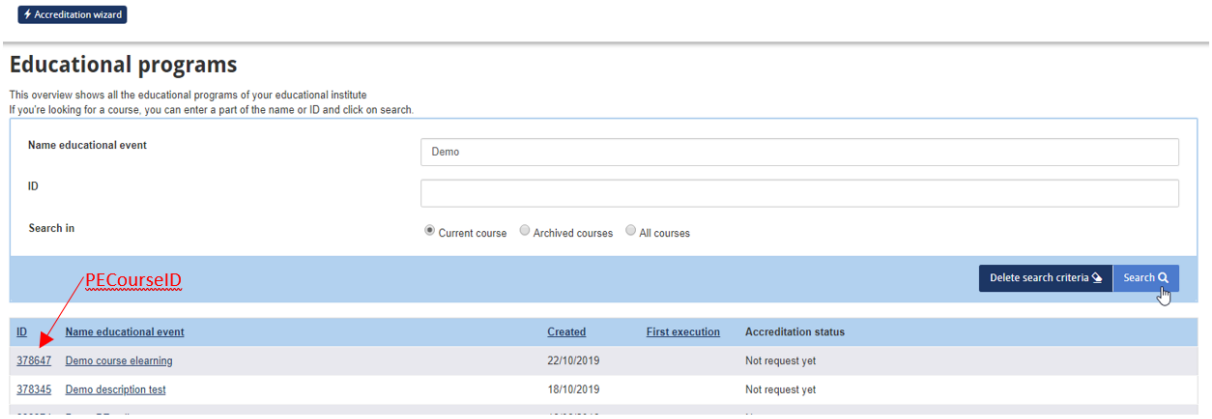
Click on “Administer event occurence” and see the information below:



E-learning

See “Modules”.



COURSE SURVEY

This page shows your courses as educational institute: