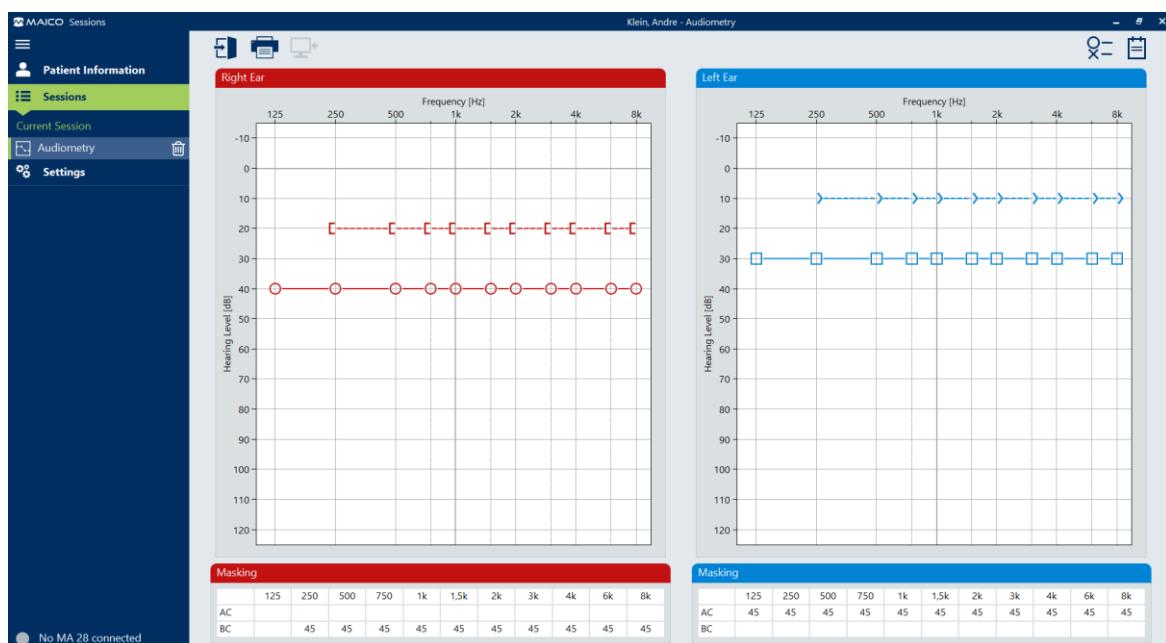


# Technical Specification B2B

## MAICO Sessions –

## Integration Interface



**Table of Contents**

<b>1 Introduction .....</b>	<b>3</b>
1.1 General .....	3
1.2 Version History .....	3
<b>2 Integration .....</b>	<b>4</b>
2.1 Connection via XML or GDT Interface (Standalone Version) .....	4
2.2 GDT Interface.....	7
2.3 XML Interface .....	12
<b>3 Ownership and Disclaimer.....</b>	<b>16</b>
3.1 Ownership .....	16
3.2 Copyrights .....	16
3.3 Restrictions .....	16
3.4 Disclaimer .....	16

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## 1 Introduction

### 1.1 General

MAICO Sessions is designed and manufactured to meet all quality and safety requirements. When designing MAICO Sessions MAICO placed particular importance on making it a user-friendly software. The intent was to make its operation easy-to-learn, thus making the software simple and easy to operate.

This document describes the GDT (Gerätedatentransfer) and XML (Extensible Markup Language) integration interfaces implemented for MAICO Sessions version 1.1.0 and newer. Both interfaces are part of standalone version of MAICO Sessions and no extra tool needs to be installed. All measurements and devices which are supported by MAICO Sessions are working via the integrated integration interface.

### 1.2 Version History

Revision	Date	Description
1.0	17.08.2020	First Revision

## 2 Integration

Sessions, in standalone mode, can be integrated without an additional database via the file based data interfaces to an existing EMR/EMR database. Sessions can be integrated via GDT or XML.

### 2.1 Connection via XML or GDT Interface (Standalone Version)

**NOTE:** Once the connection between MAICO Sessions and the practice management software has been successfully established, the data exchange is updated each time MAICO Sessions is started or ended.

Proceed as follows to connect MAICO Sessions as standalone version to your existing practice management software:

1. Install MAICO Sessions.
2. Open MAICO Sessions as a standalone version by navigating to the MAICO folder in the **Start menu** or entering **Sessions** via the Windows® search function.
3. Select **Settings – Integration Type**.
4. Follow the instructions below.

## Integration Type – GDT or XML

In order to use MAICO sessions with an external database via GDT or XML interface, the import and export settings must be made. Select GDT or XML (Figure 1, 1) and make the settings as described below.

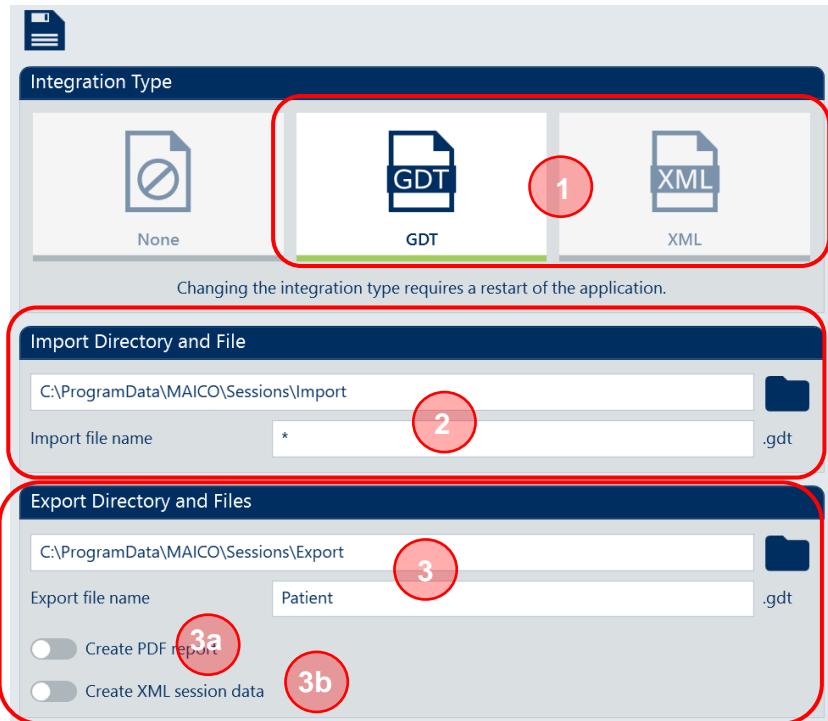


Figure 1: Integration Settings

**Import Directory and File (Figure 1, 2):** Click  to select the directory for the data based communication with the Practice Management Software. Changes will be activated after restart of the application.

**NOTE:** By default, an asterisk \* is selected in the **Import file name** field. This means that the first valid XML file in the selected folder is automatically selected.

**Export Directory and Files (Figure 1, 3):** Click  to select an export file. **Patient** is automatically offered as **Export File Name** and can be changed if necessary.

If you activate the **Create PDF report** (3a) or the **Create XML session data** (3b, GDT only) function, you can make further settings for file name and PDF page format (Figure 2).

**NOTE:** The PDF report is based on the report settings.

<input checked="" type="checkbox"/> Create PDF report	Report file name	Report.pdf
	Page size	A4
<input checked="" type="checkbox"/> Create XML session data	Session data file name	Session.xml

Figure 2: Export settings

**NOTE:** During startup MAICO Sessions checks if a GDT or XML file is available. When no file was found a message box appears and MAICO Sessions is started in standalone mode without integration.

## Save and Exit Button

Once started via GDT or XML interface the **Delete**  icon is replaced by the **Save and exit**  icon as shown in Figure 3. After the measurement is transferred from the device to MAICO Sessions and the **Save and exit** button is pressed the export files are created and MAICO Sessions will be closed and ready for the next patient.

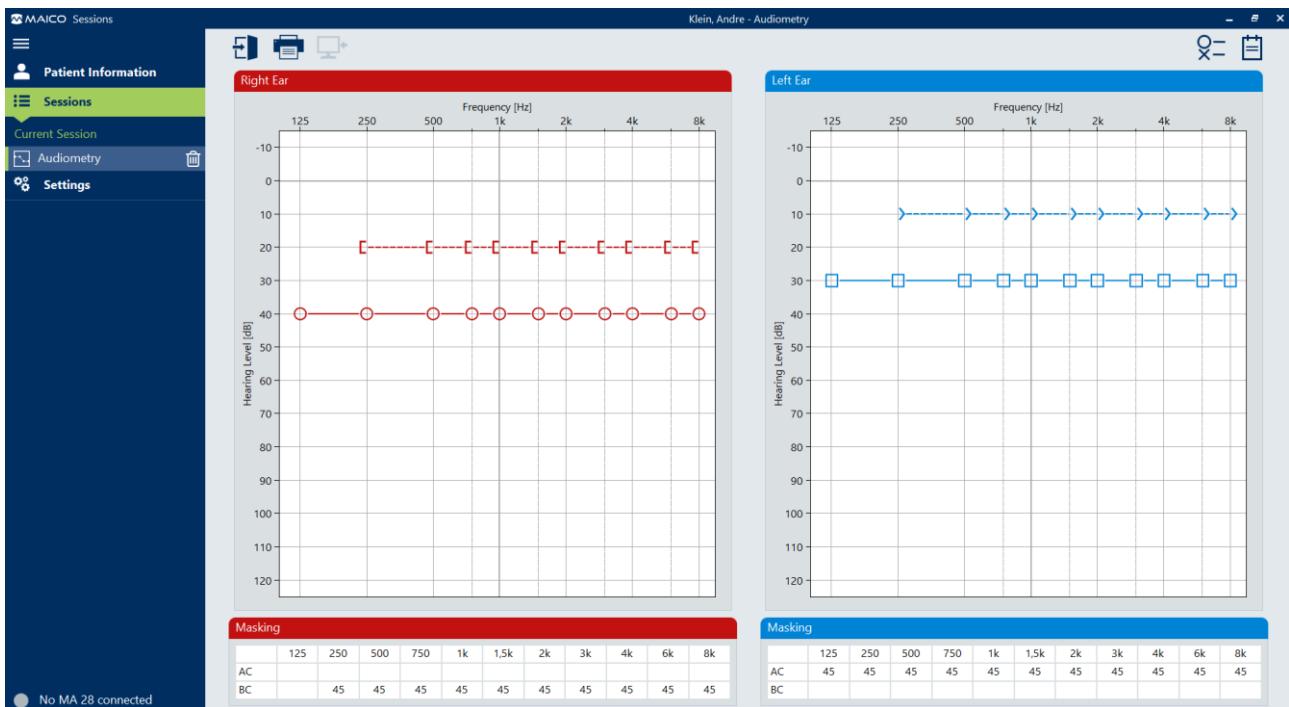


Figure 3: Sessions in integration mode

## 2.2 GDT Interface

MAICO Sessions supports GDT Standard version 2.1, 3.0 and 3.1. The supported message types are New Test Request „6302“ and Test Data Transfer „6310“. Figure 4 shows the workflow between the EMR/EHR database and Sessions. Before Sessions is started an import gdt-file need to be created and copied to the defined exchange folder. During startup Sessions checks for the availability of an import file and reads it.

After the measurement is performed and Sessions is closed (e.g. by using the **Save & Exit** button) the import file is deleted and the exports files is created. Example gdt files for import and export are included in the integration package.

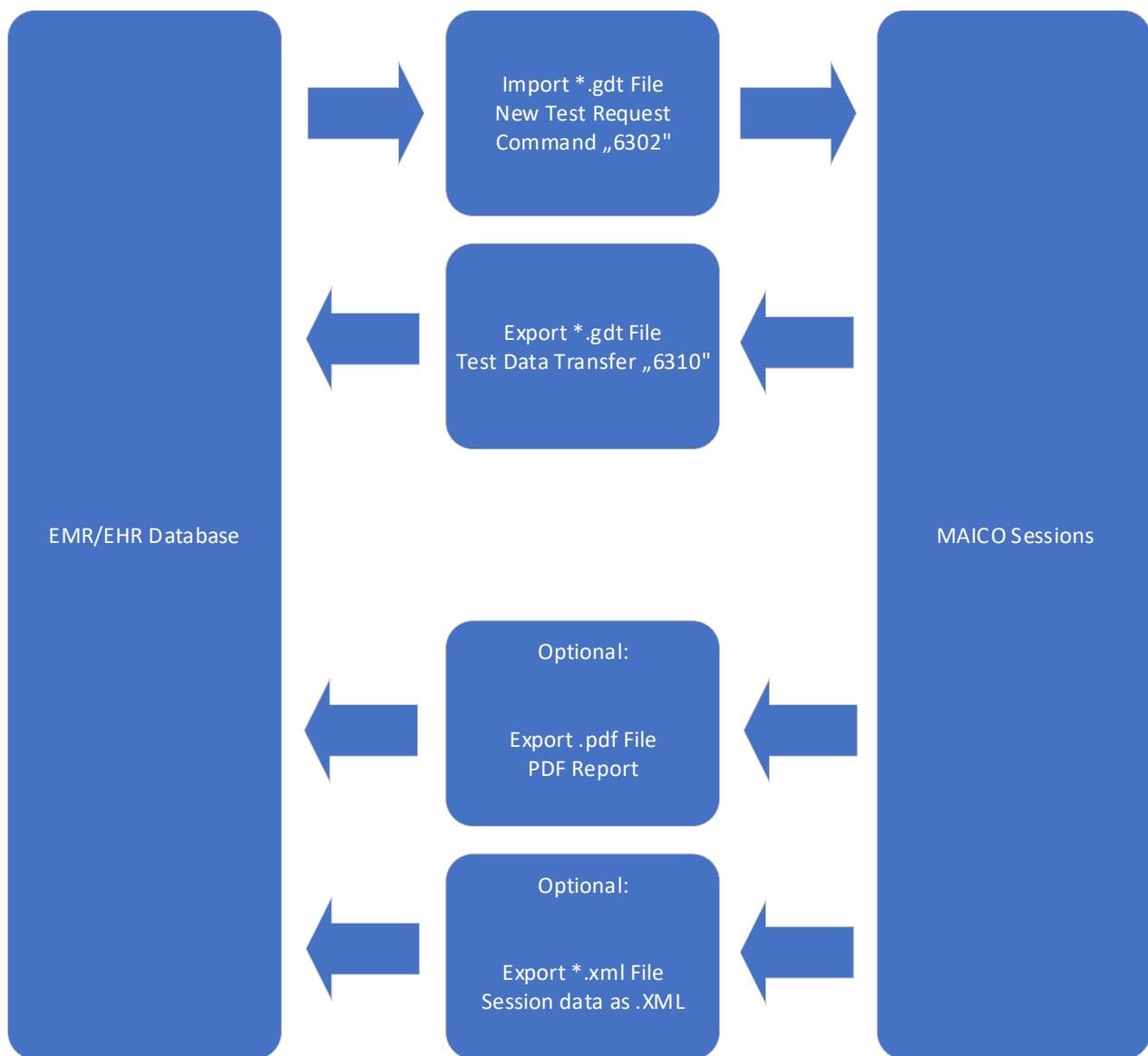


Figure 4: GDT Workflow

**2.2.1 New Test Request „6302“**

In the following Table 1 the supported GDT commands for Sentence ID 6302 are listed.

**Table 1: GDT Fields for command “6302”**

<b>FIELD LABEL</b>	<b>DESCRIPTION</b>
8000	Sentence ID
8004	Sentence length for GDT version 3.1
<b>8100</b>	Sentence length for GDT version 2.1 and 3.0
<b>9206</b>	Set Type used
<b>9218</b>	GDT Version
<b>3000</b>	Patient ID
<b>3101</b>	Patient Last Name
<b>3102</b>	Patient First Name
<b>3103</b>	Date of Birth
<b>3104</b>	Patient Title
<b>3105</b>	Insurance number
<b>3106</b>	Residence
<b>3107</b>	Street
<b>3110</b>	Gender
<b>3112</b>	Zip Code
<b>3113</b>	City
<b>3114</b>	Country Code
<b>3618</b>	Mobile number
<b>3619</b>	E-Mail
<b>3626</b>	Phone number
<b>0201</b>	Establishment number
<b>0202 or 2002</b>	Insurer – If booth fields are available 0202 is used
<b>0212</b>	Physician number
<b>4104/2001</b>	No. of health insurance – If booth fields are available 4104 is used
<b>4111/2003</b>	Health-insurance number – If booth fields are available 4111 is used
<b>4112</b>	Insurance Status
<b>4113</b>	Status Addition

**Example:**

013**8000**6302

014**81000**0505

015**3000**ABCDEF

014**9218**03.10

010**3110**1

013**3104**Herr

014**3101**Klein

014**3102**Andre

017**3103**19990101

017**8402**Sessions

029**3106**12169 Berlin Germany

024**3107**Kleine Straße 2

014**3112**12169

015**3113**Berlin

012**3114**GER

021**3626**+49 30 55555

022**3618**+49 177 55555

036**3619**Test-Andre.Klein @maico.biz

018**0201**123456789

021**0202**Insure\_1-New

021**2002**Insure\_2-Old

018**0212**123456789

030**3105**Insurance Number 1234

014**4104**12345

014**2001**54321

016**4111**1234567

016**2003**7654321

013**4112**0001

010**4113**1

## 2.2.2 Test Data Transfer „6310“

In the following Table 2 the supported GDT commands for Sentence ID 6302 are listed.

Table 2: GDT Fields for command „6310“

FIELD LABEL	FIELD CONTENTS	DESCRIPTION
3626	„6310“	Phone number
8100		Sentence length for GDT version 2.1 and 3.0
8004		Sentence length for GDT Version 3.1 and later
8316	“Sessions”	GDT Sender
9206		Set Type used. Same type which were used for the input file 6302
9218		GDT Version. Same type which were used for the input file 6302.
0102	“MAICO”	Company
0103	“Sessions”	Software
0132	“1.*.”	Software Version
3000		Patient ID
3101		Patient Last Name
3102		Patient First Name
3103		Date of Birth
6200		Date of Session
6201		Time of Session
6303	“PDF”	File Format. If .pdf export is activated.
6304	“Datei: C:\ProgramData\MAICO\ Sessions\Export\Report.pdf”	File content. If .pdf export is activated.
6305	“C:\ProgramData\MAICO\ Sessions\Export\Report.pdf”	File path. If .pdf export is activated.
6227		Comment
6332		Examiner
8410*	“MAICO”	Test Ident
8411*	“Audiometrie LL/KL [HW]”	Test description
8437*	„Seite, Wandler, Signal, Hz, dB, MaskdB“	Units
8438*	„(LI, LL, T, 1000, 10,-20), (LI, LL, T, 1500, 20, -20), (RE, LL, T, 1000, 10,-20), (RE, LL, T, 1500, 20, -20)“	Datastream (LI, LL, T, 1000, 10,-20) Ear: LI/RE = Left/Right Type: LL/KL = Air Conduction/ Bone conduction Signal: T/N = Heard, N = Not heard Frequency: Hz dBHL hearing level dB Masking level: -20 = no Masking
8402	“AUDI00”	Device and Method specific field
8001	6310	End Command. GDT 3.0 and later

\*This fields are only available for Tone Audiometry. For the following commands repeating blocks are available: LL (Air conduction), KL (Bone Conduction) and HW(LL only): 8410, 8411, 8437, 8438.

**Example:**

013**8000**6310

014**8004**00378

014**9218**03.10

017**8316**Sessions

014**0102**MAICO

017**0103**Sessions

014**0132**1.1.0

015**8402**AUDIO00

010**9206**2

018**3000**ASDFGHJKL

012**3101**Eva

014**3102**Smith

017**3103**19721204

017**6200**20200331

015**6201**083600

013**6332**todi

012**6303**PDF

063**6304**Datei: C:\ProgramData\MAICO\Sessions\Export\Report.pdf

056**6305**C:\ProgramData\MAICO\Sessions\Export\Report.pdf

013**8001**6310

## 2.3 XML Interface

Figure 5 shows the workflow between the EMR/EHR database and Sessions. Before Sessions is started an import xml-file need to be created and copied to the defined exchange folder. During startup Sessions checks for the availability of an import file and reads it.

After the measurement is performed and Sessions is closed (e.g. by using the **Save & Exit** button) the import file is deleted and the exports files are created. Example xml files for import and export are included in the integration package.



**Figure 5 XML Workflow**

### 2.3.1 XML Patient Import

This chapter describes the XML structure used. The following patient fields can be used to be transferred to Sessions.

Table 3: XML Patient Import

XML Tag	Description
PatientId	Patient ID
AlternateId	Alternate Patient ID
Gender	Gender in the format: "Male", "Female", "Unknown"
LastName	Patient last name
FirstName	Patient first name
DateOfBirth	Date of birth in the format: yyyy-MM-dd
Insurer	Insurer
InsuranceNumber	Insurance number
ReferredBy	ReferredBy
Occupation	Occupation
BillingNumber	Billing number
Address	Address field 1
Address2	Address field 2
ZipCode	Zip code
City	City
State	State
Municipality	Municipality
Telephone	Telephone
Mobile	Mobile
Email	Email
Fax	Fax

**Example:**

<Patient>

```
    <PatientId>ASDFGHJKL</PatientId>
    <AlternateId>125.254-155\659 5548</AlternateId>
    <Gender>male</Gender>
    <LastName>Smith</LastName>
    <FirstName>Eva</FirstName>
    <DateOfBirth>1972-12-04</DateOfBirth>
    <Insurer>Insure </Insurer>
    <InsuranceNumber>999811-465-45455</InsuranceNumber>
    <ReferredBy>Dr. Watson</ReferredBy>
    <Physician>Dr. Smith</Physician>
    <Occupation>Occupation</Occupation>
    <BillingNumber>132684784</BillingNumber>
    <Address>Sickingenstr. 70-71</Address>
    <Address2>10553 Berlin</Address2>
    <ZipCode>D-10553</ZipCode>
    <City>Berlin</City>
    <State>Berlin</State>
    <Municipality>Pankow</Municipality>
    <Telephone>+4930555555</Telephone>
    <Mobile>+49157777777</Mobile>
    <Email>E-Mail@E-Mail.com</Email>
    <Fax>FAX NO 0030022155</Fax>
</Patient>
```

### 2.3.2 XML Patient Export

This chapter describes the XML structure used. The following patient and data fields are used to transfer the data from Sessions to any EMR database.

Table 4: XML Patient Export

XML Tag	Description
PatientId	Patient ID
LastName	Patient last name
FirstName	Patient first name
DateOfBirth	Date of birth in the format: yyyy-MM-dd
Session	Session with screener name and create date of the session
TestData	All session and test related information. See XSD (XML Schema definition) and sample files for more information.

#### Example:

```
<Patient>
  <LastName>Smith</LastName>
  <FirstName>Eva</FirstName>
  <DateOfBirth>1972-12-04</DateOfBirth>
  <PatientId>ASDFGHJKL</PatientId>
  <Session ScreenerName="mikk" CreateDate="2020-03-31T10:05:48.8988649+02:00">
    <TestData>
      ...
    </TestData>
  </Session>
</Patient>
```

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