



Tracker
Capture



Data Entry

Aggregation of tracker data values

Name	Program name	Last updated	Aggregation																		
TB_AGG - Laboratory confirmed MDR-TB cases (excluding...)	All tuberculosis cases registered																				
TB_AGG - Laboratory-confirmed RR-TB or MDR-TB ca...			<table> <thead> <tr> <th colspan="3">Previous anti-TB treatment status</th></tr> <tr> <th>New</th><th>Relapse</th><th>Previously treated (excludi...</th></tr> </thead> <tbody> <tr> <td>Pulmonary TB cases, bacteriologically confirmed</td><td>5</td><td>1</td><td>1</td></tr> <tr> <td>Pulmonary TB cases, clinically diagnosed</td><td>5</td><td>3</td><td>1</td></tr> <tr> <td>Extrapulmonary TB cases, bacteriologically confirmed or clinically diagnosed</td><td>5</td><td>3</td><td>7</td></tr> </tbody> </table>	Previous anti-TB treatment status			New	Relapse	Previously treated (excludi...	Pulmonary TB cases, bacteriologically confirmed	5	1	1	Pulmonary TB cases, clinically diagnosed	5	3	1	Extrapulmonary TB cases, bacteriologically confirmed or clinically diagnosed	5	3	7
Previous anti-TB treatment status																					
New	Relapse	Previously treated (excludi...																			
Pulmonary TB cases, bacteriologically confirmed	5	1	1																		
Pulmonary TB cases, clinically diagnosed	5	3	1																		
Extrapulmonary TB cases, bacteriologically confirmed or clinically diagnosed	5	3	7																		
TB_AGG - New and relapse TB cases - 0-4 years fema...																					
TB_AGG - New and relapse TB cases - 0-4 years male...																					
TB_AGG - New and relapse TB cases - 15-24 years fe...																					
TB_AGG - New and relapse TB cases - 15-24 years m...																					
TB_AGG - New and relapse TB cases - 25-34 years fe...																					
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TB_AGG - New and relapse TB cases - 45-54 years fe...																					
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TB_AGG - New and relapse TB cases - 5-14 years fema...																					
TB_AGG - New and relapse TB cases - 5-14 years ma...																					

All new and relapse cases (bacteriologically confirmed or clinically diagnosed) by age group and sex							
	Age (years)						
	0-4	5-14	15-24	25-34	35-44	45-54	55-64
Male	11	4	0	7	35	39	31
Female	43	9	1	0	0	31	34

Laboratory diagnostic activity	
Patients with presumptive TB undergoing bacteriological examination	2
Patient with presumptive TB with positive bacteriological examination results	3



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Overview: Data import app

- **Data Import Wizard App by HISP Uganda**

User friendly interface

Support of various import types

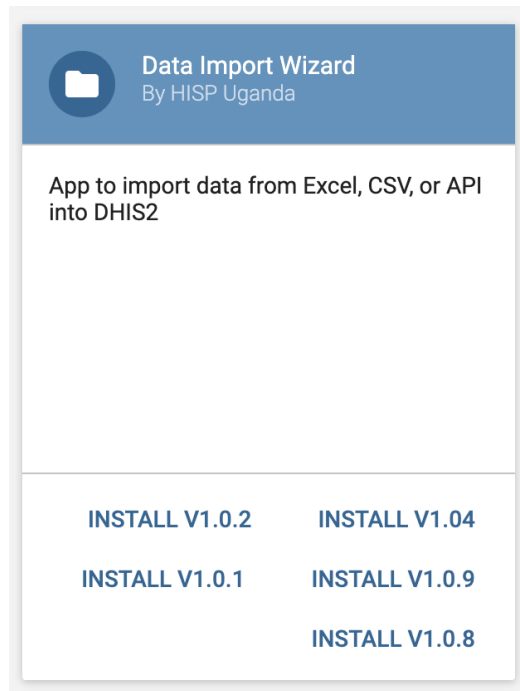
Saved mappings

Considerations: manual mapping process,

Best suited for small-scale data sets



Data Import
Wizard



Data Import Wizard

Install and start app on the aggregate instance

*Select **Aggregate** and create a **New Mapping***

*Specify relevant **Data Set, Import type** and **periods***

*Enter login information for the **source instance***

*Map **Organisation Units** (done automatically if Org Units match)*

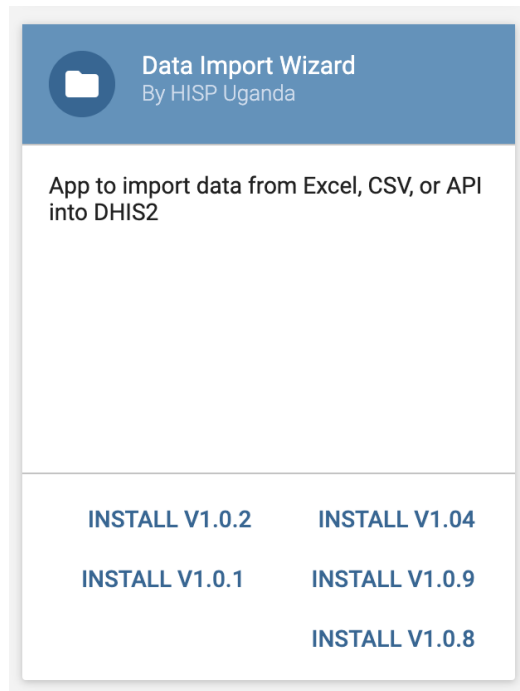
*Select relevant **program indicators***

*Map **data elements** and program **indicators***

*Proceed with **import of data***



Data Import
Wizard



Overview: Tracker to aggregate script

Script

Shell executable script

Script requires initial set up

Automated periodic export of data to aggregate with
eg. task scheduler

```
#DATA CONFIGURATION
#IDs of program indicators to be included in the export
PI="wq7bocILHfAv5dn12u6Mc"

#Export level at which data will be exported/imported
OU_LEVEL="5"

#Periods (relative) that are included in the export/import
PE="LAST_3_MONTHS"

#ID of the attribute used to specify which aggregate data element a program indicator is linked to
DATA_ATTRIBUTE="0v3mD1K1FX"

#SERVER CONFIGURATION
#Server with the program indicators data is exported from
SOURCEURL="https://play.dhis2.org/tracker"

#Server with the aggregate data elements data is imported into
TARGETURL="https://play.dhis2.org/aggregate"

#NAME/DATE
#Current date in ISO format
DATE_ISO="date -u +%Y-%m-%d"

#Filename used for saving the aggregate data values
FILENAME="example_tracker_aggregates_${DATE_ISO}.json"

#Comment added to each data value in the export
COMMENT="example_tracker_aggregates_${DATE_ISO}"

#EXPORT AND IMPORT DATA

SOURCE_REQUEST=$SOURCEURL/api/analytics/dataValueSet.json?dimensions=${PI}&dimensionOrder=${PE}&dimensionOrderLevel=${OU_LEVEL}&outputIdScheme=ATTRIBUTE.${DATA_ATTRIBUTE}
echo "Fetching: $SOURCE_REQUEST"
curl -s -u user:pwd -X GET -H "Content-Type:application/json" -d @${FILENAME} "$SOURCE_REQUEST" | sed s/"${COMMENT}"/g > $FILENAME

TARGET_REQUEST=$TARGETURL/api/dataValueSets/dataElementIdScheme=CODE&categoryOptionComboIdScheme=usd&importStrategy=CREATE_AND_UPDATE&dryRun=false
echo "Posting: $TARGET_REQUEST"
curl -s -X POST -u user:pwd -H "Content-Type:application/json" -d @${FILENAME} "$TARGET_REQUEST"
Collapse
```

Tracker to aggregate script

Mapping

Aggregate module:

Data elements and Category option combinations

have to be coded

Tracker: Program indicators have to be mapped:

Custom Attribute: Data element for aggregate data export

Category option combination for aggregate data export

Name (*)

TB - New pulmonary smear-positive TB cases by age and sex

Short name (*)

New pulm smear + by age/sex

Code

TB_NEW_SP_

Name

35-44 years, Female

Short name

35-44 years, Female

Code

TB-3544YF

Tracker to aggregate script

```
#!/bin/bash

#DATA CONFIGURATION
#UIDs of program indicators to be included in the export
PI="wq7bocILhfA;vz5dnl2wbNc"
#Orgunit level at which data will be exported/imported
OU_LEVEL="5"

#Periods (relative) that are included in the export/import
PE="LAST_3_MONTHS"

#UID of the attribute used to specify which aggregate data element a program
indicator is linked to
DATA_ATTRIBUTE="OviWiDiKlfx"

#SERVER CONFIGURATION
#Server with the program indicators data is exported from
SOURCEURL="https://play.dhis2.org/tracker"

#Server with the aggregate data elements data is imported into
TARGETURL="https://play.dhis2.org/aggregate"

#NAME/DATE
#Current date in ISO format
DATE_ISO=`date -u +%Y-%m-%d`
```

```
#Filename used for saving the aggregate data values
FILENAME="example_tracker_aggregates_`${DATE_ISO}`.json"

#Comment added to each data value in the export
COMMENT="example_tracker_aggregates_`${DATE_ISO}`"

#EXPORT AND IMPORT DATA

SOURCE_REQUEST=$SOURCEURL"/api/analytics/dataValueSet.json?dimension=dx:``$PI"&dimension=pe:``$PE"&dimension=ou:LEVEL-``$OU_LEVEL"&outputIdScheme=ATTRIBUTE:``$DATA_ATTRIBUTE
echo "Fetching: "$SOURCE_REQUEST
curl -k -u user:pwd "$SOURCE_REQUEST" | sed s/"\[aggregated\]"/"`${COMMENT}`"/g > $FILENAME

TARGET_REQUEST=$TARGETURL"/api/dataValueSets?dataElementIdScheme=CODE&categoryOptionComboIdScheme=uid&importStrategy=CREATE_AND_UPDATE&dryRun=false"
echo "Posting: "$TARGET_REQUEST
curl -k -X POST -u user:pwd -H "Content-Type:application/json" -d @"$FILENAME" "$TARGET_REQUEST"
Collapse
```