WHO Anti-Tuberculosis Drugs Resistance Survey (DRS) - Tracker Installation Guide { #tb-drs-installation }

Package Version 1.0.1

System default language: English

Available translations: French, Spanish, Portuguese

Overview

The package metadata json files contain a "package" component that provides technical details on package version and content. The files available in the current version of the package are listed below.

DHIS2.35

=== "Complete Package"

```json
"package": {
    "DHIS2Build": "35d663a",
    "DHIS2Version": "2.35.11",
    "code": "TBDR00",
    "description": "Anti-Tuberculosis Drug Resistance Survey (DRS)",
    "lastUpdated": "20220124T083253",
    "locale": "en",
    "name": "TB_DRS_TKR_1.0.1_DHIS2.35.11-en",
    "type": "TKR",
    "version": "1.0.1"
}
```

DHIS2.36

=== "Complete Package"

```json
"package": {
    "DHIS2Build": "5d136cb",
    "DHIS2Version": "2.36.6",
    "code": "TBDR00",
    "description": "Anti-Tuberculosis Drug Resistance Survey (DRS)",
    "lastUpdated": "20220124T073407",
    "locale": "en",
    "name": "TB_DRS_TKR_1.0.1_DHIS2.36.6-en",
    "type": "TKR",
```

```
    "version": "1.0.1"
}
```

When importing this package into a new/blank instance, please refer to the DHIS2 installation guide.

Installation

Installation of the module consists of several steps:

1. Preparing the metadata file.
2. Importing the metadata file into DHIS2.
3. Configuring the imported metadata.
4. Adapting the program after being imported

It is recommended to first read through each section before starting the installation and configuration process in DHIS2. Sections that are not applicable have been identified, depending on if you are importing into a new instance of DHIS2 or a DHIS2 instance with metadata already present. The procedure outlined in this document should be tested in a test/staging environment before either being repeated or transferred to a production instance of DHIS2.

Requirements

In order to install the module, an administrator user account on DHIS2 is required. The procedure outlined in this document should be tested in a test/staging environment before being performed on a production instance of DHIS2.

Great care should be taken to ensure that the server itself and the DHIS2 application is well secured, to restrict access to the data being collected. Details on securing a DHIS2 system is outside the scope of this document, and we refer to the DHIS2 documentation.

Preparing the metadata file

NOTE: If you are installing the package on a new instance of DHIS2, you can skip the "Preparing the metadata file" section and move immediately to the section Importing a metadata file into DHIS2

While not always necessary, it can often be advantageous to make certain modifications to the metadata file before importing it into DHIS2.

Default data dimension

In early versions of DHIS2, the UIDs of the default data dimensions were auto-generated. Thus, while all DHIS2 instances have a default category option, data element category, category combination and category option combination, the UIDs of these defaults can be different. Later versions of DHIS2 have hardcoded UIDs for the default dimension, and these UIDs are used in the configuration packages.

To avoid conflicts when importing the metadata, it is advisable to search and replace the entire .json file for all occurrences of these default objects, replacing UIDs of the .json file with the UIDs from the instance in which

the file will be imported. Table 1 shows the UIDs which should be replaced, as well as the API endpoints to identify the existing UIDs

Object	UID	API endpoint
Category	`GLevLNI9wkl`	`../api/categories.json?filter=name:eq:default`
Category option	`xYerKDKCefk`	`../api/categoryOptions.json?` `filter=name:eq:default`
Category combination	`bjDvmb4bfuf`	`../api/categoryCombos.json?filter=name:eq:default`
Category option combination	`HllvX50cXC0`	`../api/categoryOptionCombos.json?` `filter=name:eq:default`

Identify the UIDs of the default dimesions in your instance using the listed API requests and replace the UIDs in the json file with the UIDs from the instance.

> **NOTE**
>
> Note that this search and replace operation must be done with a plain text editor, not a word processor like Microsoft Word.

Indicator types

Indicator type is another type of object that can create import conflict because certain names are used in different DHIS2 databases (.e.g "Percentage"). Since Indicator types are defined by their factor (including 1 for "numerator only" indicators), they are unambiguous and can be replaced through a search and replace of the UIDs. This method helps avoid potential import conflicts, and prevents the implementer from creating duplicate indicator types. The table below contains the UIDs which could be replaced, as well as the API endpoints to identify the existing UIDs:

Object	UID	API endpoint
Numerator only (number)	`CqNPn5KzksS`	`../api/indicatorTypes.json?` `filter=number:eq:true&filter=factor:eq:1`

Tracked Entity Type

Like indicator types, you may have already existing tracked entity types in your DHIS2 database. The references to the tracked entity type should be changed to reflect what is in your system so you do not create duplicates. The table below contains the UIDs which could be replaced, as well as the API endpoints to identify the existing UIDs:

Object	UID	API endpoint
Person	`MCPQUTHX1Ze`	`../api/trackedEntityTypes.json?filter=name:eq:Person`

Sort order for options

Check whether the sort order `sortOrder` of options in your system matches the sort order of options included in the metadata package. This only applies when the json file and the target instance contain options and option sets with the same UID.

After import, make sure that the sort order for options within an option set starts at 1. There should be no gaps (eg. 1,2,3,5,6) in the sort order values.

Sort order can be adjusted in the Maintenance app.

1. Go to the applicable Option Set
2. Open the "Options" section
3. Use "SORT BY NAME", "SORT BY CODE/VALUE" or "SORT MANUALLY" alternatives.

Dashboards and visualizations

The dashboards and visualizations in each dashboard cannot be hidden/unhidden by constants. Therefore the unapplicable dashboards/visualizations have to be manually removed during package installation based on the selection of tests/drugs.

Visualizations in the metadata file may contain a placeholder <OU_ROOT_UID>. This placeholder in the metadata.json file has to be replaced by the Root Organisation unit UID from the target instance before the package can be imported.

Some visualizations and maps may contain references to organisation unit levels. Maps that consist of several map views may contain vaious Organisation unit level references based on the configuration of the map layer. The table below provides an overview of such items included in the package. Adjust the organisation unit level references in the metadata json file to match the organisation unit structure in the target instance before importing the metadata file.

Example:

UID	Name	Type	Organisation unit levels	Mapping guidance
vgIrIjzONuV	Patients with Inh-resistant and Rif-susceptible TB (by health facility)	map (mapview)	3,2	District, Region
vgIrIjzONuV	Patients with Inh-resistant and Rif-susceptible TB (by health facility)	map (mapview)	4	Facility
JUbkmvmNxbB	RR-TB patients (by health facility)	map (mapview)	3,2	District, Region
JUbkmvmNxbB	RR-TB patients (by health facility)	map (mapview)	4	Facility
u4FxBzXoiml	RR-TB patients resistant to Fq (by health facility)	map (mapview)	3,2	District, Region
u4FxBzXoiml	RR-TB patients resistant to Fq (by health facility)	map (mapview)	4	Facility

UID	Name	Type	Organisation unit levels	Mapping guidance
CrxqCiQyhay	Enrolled patients by facility (cumulative)	visualization (pivot table)	4	Facility
PazB6GSITwK	Missing data report	visualization (pivot table)	4	Facility
GinRhTtdKnI	Percentage of samples rejected on arrival at NTRL	visualization (pivot table)	1,2,3,4	Country, Region, District, Facility

Importing metadata

Use Import/Export DHIS2 app to import metadata packages. It is advisable to use the "dry run" feature to identify issues before attempting to do an actual import of the metadata. If "dry run" reports any issues or conflicts, see the import conflicts section below. If the "dry run"/"validate" import works without error, attempt to import the metadata. If the import succeeds without any errors, you can proceed to configuring the module. In some cases, import conflicts or issues are not shown during the "dry run", but appear when the actual import is attempted. In this case, the import summary will list any errors that need to be resolved.

Handling import conflicts

> **NOTE**
>
> If you are importing the package into a new DHIS2 instance, you will not experience import conflicts, as there is no metadata in the target database. After import the metadata, proceed to the "Configuration" section.

There are a number of different conflicts that may occur, though the most common is that there are metadata objects in the configuration package with a name, shortname and/or code that already exist in the target database. There are a couple of alternative solutions to these problems, with different advantages and disadvantages. Which one is more appropriate will depend, for example, on the type of object for which a conflict occurs.

Alternative 1

Rename the existing object in your DHIS2 database for which there is a conflict. The advantage of this approach is that there is no need to modify the .json file, as changes are instead done through the user interface of DHIS2. This is likely to be less error prone. It also means that the configuration package is left as is, which can be an advantage for example when updates to the package are released. The original package objects are also often referenced in training materials and documentation.

Alternative 2

Rename the object for which there is a conflict in the .json file. The advantage of this approach is that the existing DHIS2 metadata is left as-is. This can be a factor when there is training material or documentation

such as SOPs of data dictionaries linked to the object in question, and it does not involve any risk of confusing users by modifying the metadata they are familiar with.

Note that for both alternative 1 and 2, the modification can be as simple as adding a small pre/post-fix to the name, to minimise the risk of confusion.

Alternative 3

A third and more complicated approach is to modify the .json file to re-use existing metadata. For example, in cases where an option set already exists for a certain concept (e.g. "sex"), that option set could be removed from the .json file and all references to its UID replaced with the corresponding option set already in the database. The big advantage of this (which is not limited to the cases where there is a direct import conflict) is to avoid creating duplicate metadata in the database. There are some key considerations to make when performing this type of modification:

- it requires expert knowledge of the detailed metadata structure of DHIS2
- the approach does not work for all types of objects. In particular, certain types of objects have dependencies which are complicated to solve in this way, for example related to disaggregations.
- future updates to the configuration package will be complicated.

Additional configuration

Once all metadata has been successfully imported, there are a few steps that need to be taken before the module is functional.

Sharing

First, you will have to use the *Sharing* functionality of DHIS2 to configure which users (user groups) should see the metadata and data associated with the programme as well as who can register/enter data into the program. By default, sharing has been configured for the following:

- Tracked entity type
- Program
- Program stages
- Dashboards

There are four user groups that come with the package:

- DRS - admin
- DRS - access
- DRS - data capture

By default the following is assigned to these user groups

Object	User Groups		
	TB access	TB admin	TB data capture

Object	User Groups		
Tracked entity type	**Metadata:** can view **Data:** can view	**Metadata:** can edit and view **Data:** can view	**Metadata:** can view **Data:** can capture and view
Program	**Metadata:** can view **Data:** can view	**Metadata:** can edit and view **Data:** can view	**Metadata:** can view **Data:** can capture and view
Program Stages	**Metadata:** can view **Data:** can view	**Metadata:** can edit and view **Data:** can view	**Metadata:** can view **Data:** can capture and view
Dashboards	**Metadata:** can view **Data:** can view	**Metadata:** can edit and view **Data:** can view	**Metadata:** can view **Data:** can view

You will want to assign your users to the appropriate user group based on their role within the system. You may want to enable sharing for other objects in the package depending on your set up. Refer to the DHIS2 Documentation for more information on configuring sharing.

User roles

Users will need user roles in order to engage with the various applications within DHIS2. The following minimum roles are recommended:

1. Tracker data analysis : Can see event analytics and access dashboards, event reports, event visualizer, data visualizer, pivot tables, reports and maps.
2. Tracker data capture : Can add data values, update tracked entities, search tracked entities across org units and access tracker capture

Refer to the DHIS2 Documentation for more information on configuring user roles.

Organisation units

The program and the data sets must be assigned to organisation units within existing hierarchy in order to be accessible via tracker capture/capture apps.

Duplicated metadata

> **NOTE**
>
> This section only applies if you are importing into a DHIS2 database in which there is already meta-data present. If you are working with a new DHIS2 instance, please skip this section and go to Adapting the tracker program. If you are using any third party applications that rely on the current metadata, please take into account that this update could break them.

Even when metadata has been successfully imported without any import conflicts, there can be duplicates in the metadata - data elements, tracked entity attributes or option sets that already exist. As was noted in the section above on resolving conflict, an important issue to keep in mind is that decisions on making changes to the metadata in DHIS2 also needs to take into account other documents and resources that are in different

ways associated with both the existing metadata, and the metadata that has been imported through the configuration package. Resolving duplicates is thus not only a matter of "cleaning up the database", but also making sure that this is done without, for example, breaking potential integrating with other systems, the possibility to use training material, breaking SOPs etc. This will very much be context-dependent.

One important thing to keep in mind is that DHIS2 has tools that can hide some of the complexities of potential duplications in metadata. For example, where duplicate option sets exist, they can be hidden for groups of users through sharing.

Constants

WHO Anti-Tuberculosis Drugs Resistance Survey (DRS) Tracker package includes a set of tests and a list of drugs that can be modified by the implementing country according to national context (e.g. which drugs and tests are used/available in country). The use of constants and corresponding program rules enables a system admin in an implementing country to easily 'turn on' or 'turn off' types of drugs and tests depending on availability. When the complete package is installed into a DHIS2 instance, all data elements for all tests and drugs included in this package are included in the system. All constant values are initially set to **1** (enabling the related data elements for data entry) and can be set to **0** by an implementer or system admin according to country context if not needed (disabling the related data elements for data entry). If a test or drug later becomes available, the admin can simply re-enable the data elements by changing the constant from a value of **0** to a value of **1**.

Cluster Sampling / Exhaustive Sampling of all Health Facilities

Configure whether the country is using Cluster Sampling or Exhaustive Sampling of all Health Facilities

Constant	Settings	UID
Cluster Sampling	Value "1" = Include Cluster Sampling for DRS. Value "0" = Exclude Cluster Sampling from DRS.	aYPQMlxAZsz

Number of DRS Samples sent to NRL

Configure the number of samples are sent to NRL processing

Constant	Settings	UID
Sample 2 for NRL Processing	Value "1" = Add DRS Sample 2 collected for NRL processing to program configuration Value "0" = Remove DRS Sample 2 from program configuration	rSS2dY6gwLJ
Sample 3 for NRL Processing	Value "1" = Add DRS Sample 3 collected for NRL processing to program configuration Value "0" = Remove DRS Sample 3 from program configuration	sqgp1l0s4wp

Constant	Settings	UID
Sample 4 for NRL Processing	Value "1" = Add DRS Sample 4 collected for NRL processing to program configuration Value "0" = Remove DRS Sample 4 from program configuration	NXr7RH56Q1R

Initial Screening Tests

Configure which initial screening tests are used for bacteriological confirmation of TB: **Sputum Smear Microscopy, Xpert MTB/RIF** or **both**.

Constant	Settings	UID
Bacteriological Confirmation of TB	Value "1" = Include both "Sputum Smear Microscopy" and "Xpert MTB/RIF" for Bacteriological Confirmation of TB. Value "2" = Include only "Sputum smear microscopy" for Bacteriological Confirmation of TB. Value "3" = Include only "Xpert MTB/RIF" for Bacteriological Confirmation of TB.	gYj2CUoep4O

SRL Sample Processing

Configure whether the country has an option of sending samples to SRL (supranational lab).

Constant	Settings	UID
SRL	Value "1" = include an option of sending Samples to SRL Value "0" = exclude an option of sending Samples to SRL	AUltNkQXzdm

Tests at NRL

Constant	Settings	UID
Sputum Smear Microscopy	Value "1" = include Sputum Smear Microscopy in the list of tests. Value "0" = exclude Sputum Smear Microscopy from the list of tests.	q1ah12sKfG3
Culture in Solid Media (e.g. LJ)	Value "1" = include Culture in Solid Media (e.g. LG) in the list of tests. Value "0" = exclude Culture in Solid Media (e.g. LG) from the list of tests.	iSKEqcuVAui
Culture in Liquid Media (e.g. MGIT)	Value "1" = include Culture in Liquid Media (e.g. MGIT) in the list of tests. Value "0" = exclude Culture in Liquid Media (e.g. MGIT) from the list of tests.	qpAseG5vJyS

Constant	Settings	UID
Xpert MTB/RIF	Value "1" = include Xpert MTB/RIF in the list of tests. Value "0" = exclude Xpert MTB/RIF from the list of tests.	H4ObQDbhnTA
Xpert MTB/RIF Ultra	Value "1" = include Xpert MTB/RIF Ultra in the list of tests. Value "0" = exclude Xpert MTB/RIF Ultra from the list of tests.	cFoFDkXKcXC
Initial Phenotypic DST in Solid Media (eg. LJ)	Value "1" = include Initial Phenotypic DST in Solid Media (eg. LJ) in the list of tests. Value "0" = exclude Initial Phenotypic DST in Solid Media (eg. LJ) from the list of tests.	HjN2Bgnusyy
Initial Phenotypic DST in Liquid Media (eg. MGIT)	Value "1" = include Initial Phenotypic DST in Liquid Media (eg. MGIT) in the list of tests. Value "0" = exclude Initial Phenotypic DST in Liquid Media (eg. MGIT) from the list of tests.	OQxeAlyQUeB
Subsequent Phenotypic DST in Solid Media (eg. LJ)	Value "1" = include Subsequent Phenotypic DST in Solid Media (eg. LJ) in the list of tests. Value "0" = exclude Subsequent Phenotypic DST in Solid Media (eg. LJ) from the list of tests.	BpRfvWQcvTo
LPA (Rif/Inh)	Value "1" = include LPA (Rif/Inh) in the list of tests. Value "0" = exclude LPA (Rif/Inh) from the list of tests.	ESUffSPwmju
LPA (Fq/2LI)	Value "1" = include LPA (Fq/2LI) in the list of tests. Value "0" = exclude LPA (Fq/2LI) from the list of tests.	govArZqiFzY
Subsequent Phenotypic DST in Liquid Media (eg. MGIT)	Value "1" = include Subsequent Phenotypic DST in Liquid Media (eg. MGIT) in the list of tests. Value "0" = exclude Subsequent Phenotypic DST in Liquid Media (eg. MGIT) from the list of tests.	W8Fm1pJuJPL
Targeted Gene Sequencing	Value "1" = include Targeted Gene Sequencing in the list of tests. Value "0" = exclude Targeted Gene Sequencing from the list of tests.	KkypNdLNW1f
Whole Genome Sequencing	Value "1" = include WGS in the list of tests. Value "0" = exclude WGS from the list of tests.	MC7QUDr9YKC

List of Available Drugs

Initial Phenotypic DST in Solid Media (eg. LJ)		
Constant	Settings	UID
Initial Phenotypic DST in Solid Media - Rifampicin	Value "1" = include Rifampicin in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Rifampicin from the list of drugs available for Initial Phenotypic DST testing in solid media.	Q67DDsupq7v
Initial Phenotypic DST in Solid Media - Isoniazid (CC)	Value "1" = include Isoniazid (CC) in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Isoniazid (CC) from the list of drugs available for Initial Phenotypic DST testing in solid media.	dAPAScvFPfX
Initial Phenotypic DST in Solid Media - Isoniazid (CB)	Value "1" = include Isoniazid (CB) in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Isoniazid (CB) from the list of drugs available for Initial Phenotypic DST testing in solid media.	anpSc1tmlft
Initial Phenotypic DST in Solid Media - Pyrazinamide	Value "1" = include Pyrazinamide in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Pyrazinamide from the list of drugs available for Initial Phenotypic DST testing in solid media. Pyrazinamide can only be tested using liquid media.	aCaNdqUIDZl
Initial Phenotypic DST in Solid Media - Ethambutol	Value "1" = include Ethambutol in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Ethambutol from the list of drugs available for Initial Phenotypic DST testing in solid media.	yxPHZFwMTN6
Initial Phenotypic DST in Solid Media - Levofloxacin	Value "1" = include Levofloxacin in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Levofloxacin from the list of drugs available for Initial Phenotypic DST testing in solid media.	NIOX3oV4gWe

Initial Phenotypic DST in Solid Media (eg. LJ)		
Initial Phenotypic DST in Solid Media - Moxifloxacin (CC)	Value "1" = include Moxifloxacin (CC) in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Moxifloxacin (CC) from the list of drugs available for Initial Phenotypic DST testing in solid media.	RJNE1o9cw7Y
Initial Phenotypic DST in Solid Media - Moxifloxacin (CB)	Value "1" = include Moxifloxacin (CB) in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Moxifloxacin (CB) from the list of drugs available for Initial Phenotypic DST testing in solid media.	m4c79OHEKCG
Initial Phenotypic DST in Solid Media - Amikacin	Value "1" = include Amikacin in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Amikacin from the list of drugs available for Initial Phenotypic DST testing in solid media.	XO1V9o5C95J
Initial Phenotypic DST in Solid Media - Bedaquiline	Value "1" = include Bedaquiline in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Bedaquiline from the list of drugs available for Initial Phenotypic DST testing in solid media.	UxcTzMRQsfa
Initial Phenotypic DST in Solid Media - Delamanid	Value "1" = include Delamanid in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Delamanid from the list of drugs available for Initial Phenotypic DST testing in solid media.	VUlsMrm4D8k
Initial Phenotypic DST in Solid Media - Linezolid	Value "1" = include Linezolid in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Linezolid from the list of drugs available for Initial Phenotypic DST testing in solid media.	CVQR2ZtZWxk

Initial Phenotypic DST in Solid Media (eg. LJ)		
Initial Phenotypic DST in Solid Media - Clofazimine	Value "1" = include Clofazimine in the list of drugs available for Initial Phenotypic DST testing in solid media. Value "0" = exclude Clofazimine from the list of drugs available for Initial Phenotypic DST testing in solid media. Clofazimine can only be tested using liquid media.	ZDpLleSK08x

Initial Phenotypic DST in Liquid Media (eg. MGIT)		
Initial Phenotypic DST in Liquid Media - Rifampicin	Value "1" = include Rifampicin in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Rifampicin from the list of drugs available for Initial Phenotypic DST testing in liquid media.	uOJYEwV7XfN
Initial Phenotypic DST in Liquid Media - Isoniazid (CC)	Value "1" = include Isoniazid (CC) in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Isoniazid (CC) from the list of drugs available for Initial Phenotypic DST testing in liquid media.	cRIdkiBh5xv
Initial Phenotypic DST in Liquid Media - Isoniazid (CB)	Value "1" = include Isoniazid (CB) in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Isoniazid (CB) from the list of drugs available for Initial Phenotypic DST testing in liquid media.	lqaf0KfpHGd
Initial Phenotypic DST in Liquid Media - Pyrazinamide	Value "1" = include Pyrazinamide in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Pyrazinamide from the list of drugs available for Initial Phenotypic DST testing in liquid media.	FDtk4otxDse
Initial Phenotypic DST in Liquid Media - Ethambutol	Value "1" = include Ethambutol in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Ethambutol from the list of drugs available for Initial Phenotypic DST testing in liquid media.	n9zOOsLO0QP

Initial Phenotypic DST in Liquid Media (eg. MGIT)		
Initial Phenotypic DST in Liquid Media - Levofloxacin	Value "1" = include Levofloxacin in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Levofloxacin from the list of drugs available for Initial Phenotypic DST testing in liquid media.	t7Okdm8VgDV
Initial Phenotypic DST in Liquid Media - Moxifloxacin (CC)	Value "1" = include Moxifloxacin (CC) in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Moxifloxacin (CC) from the list of drugs available for Initial Phenotypic DST testing in liquid media.	dgjpdQO2Iva
Initial Phenotypic DST in Liquid Media - Moxifloxacin (CB)	Value "1" = include Moxifloxacin (CB) in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Moxifloxacin (CB) from the list of drugs available for Initial Phenotypic DST testing in liquid media.	UL61U78GWCg
Initial Phenotypic DST in Liquid Media - Amikacin	Value "1" = include Amikacin in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Amikacin from the list of drugs available for Initial Phenotypic DST testing in liquid media.	x6v8O6EZo0U
Initial Phenotypic DST in Liquid Media - Bedaquiline	Value "1" = include Bedaquiline in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Bedaquiline from the list of drugs available for Initial Phenotypic DST testing in liquid media.	KjvwSybuWJU
Initial Phenotypic DST in Liquid Media - Delamanid	Value "1" = include Delamanid in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Delamanid from the list of drugs available for Initial Phenotypic DST testing in liquid media.	BJTzi3WWjhT

Initial Phenotypic DST in Liquid Media (eg. MGIT)		
Initial Phenotypic DST in Liquid Media - Linezolid	Value "1" = include Linezolid in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Linezolid from the list of drugs available for Initial Phenotypic DST testing in liquid media.	aZq11UuXPP6
Initial Phenotypic DST in Liquid Media - Clofazimine	Value "1" = include Clofazimine in the list of drugs available for Initial Phenotypic DST testing in liquid media. Value "0" = exclude Clofazimine from the list of drugs available for Initial Phenotypic DST testing in liquid media.	GL5JTtBvbEC

Subsequent Phenotypic DST in Solid Media (eg. LJ)		
Constant	Settings	UID
Subsequent Phenotypic DST in Solid Media - Rifampicin	Value "1" = include Rifampicin in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Rifampicin from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	zJoEjvstp2d
Subsequent Phenotypic DST in Solid Media - Isoniazid (CC)	Value "1" = include Isoniazid (CC) in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Isoniazid (CC) from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	eM3UfUO7W8O
Subsequent Phenotypic DST in Solid Media - Isoniazid (CB)	Value "1" = include Isoniazid (CB) in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Isoniazid (CB) from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	s8WPR943gGS

Subsequent Phenotypic DST in Solid Media (eg. LJ)		
Subsequent Phenotypic DST in Solid Media - Pyrazinamide	Value "1" = include Pyrazinamide in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Pyrazinamide from the list of drugs available for Subsequent Phenotypic DST testing in solid media. Pyrazinamide can only be tested using liquid media.	bHPYGfrFNV2
Subsequent Phenotypic DST in Solid Media - Ethambutol	Value "1" = include Ethambutol in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Ethambutol from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	wNxsAieLWYc
Subsequent Phenotypic DST in Solid Media - Levofloxacin	Value "1" = include Levofloxacin in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Levofloxacin from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	Fw8wOlTETPt
Subsequent Phenotypic DST in Solid Media - Moxifloxacin (CC)	Value "1" = include Moxifloxacin (CC) in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Moxifloxacin (CC) from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	Czx5FuOqF9i
Subsequent Phenotypic DST in Solid Media - Moxifloxacin (CB)	Value "1" = include Moxifloxacin (CB) in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Moxifloxacin (CB) from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	NvA1K4hFJbc
Subsequent Phenotypic DST in Solid Media - Amikacin	Value "1" = include Amikacin in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Amikacin from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	dTwKm1u2VhY

Subsequent Phenotypic DST in Solid Media (eg. LJ)		
Subsequent Phenotypic DST in Solid Media - Bedaquiline	Value "1" = include Bedaquiline in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Bedaquiline from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	r70ONQRhaHY
Subsequent Phenotypic DST in Solid Media - Delamanid	Value "1" = include Delamanid in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Delamanid from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	RFqmLP5W5di
Subsequent Phenotypic DST in Solid Media - Linezolid	Value "1" = include Linezolid in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Linezolid from the list of drugs available for Subsequent Phenotypic DST testing in solid media.	KIeI2d8xalG
Subsequent Phenotypic DST in Solid Media - Clofazimine	Value "1" = include Clofazimine in the list of drugs available for Subsequent Phenotypic DST testing in solid media. Value "0" = exclude Clofazimine from the list of drugs available for Subsequent Phenotypic DST testing in solid media. Clofazimine can only be tested using liquid media.	bywBn5DxVdi

Subsequent Phenotypic DST in Liquid Media (eg. MGIT)		
Subsequent Phenotypic DST in Liquid Media - Rifampicin	Value "1" = include Rifampicin in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Rifampicin from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	IeIJEADYpeI

Subsequent Phenotypic DST in Liquid Media (eg. MGIT)		
Subsequent Phenotypic DST in Liquid Media - Isoniazid (CC)	Value "1" = include Isoniazid (CC) in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Isoniazid (CC) from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	ZBpqH7xJLBO
Subsequent Phenotypic DST in Liquid Media - Isoniazid (CB)	Value "1" = include Isoniazid (CB) in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Isoniazid (CB) from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	F9DTb5zl8rS
Subsequent Phenotypic DST in Liquid Media - Pyrazinamide	Value "1" = include Pyrazinamide in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Pyrazinamide from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	VY15auehssY
Subsequent Phenotypic DST in Liquid Media - Ethambutol	Value "1" = include Ethambutol in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Ethambutol from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	Ic5asMdbpH8
Subsequent Phenotypic DST in Liquid Media - Levofloxacin	Value "1" = include Levofloxacin in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Levofloxacin from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	b1KgVOel21P
Subsequent Phenotypic DST in Liquid Media - Moxifloxacin (CC)	Value "1" = include Moxifloxacin (CC) in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Moxifloxacin (CC) from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	HhKitGif8RV

Subsequent Phenotypic DST in Liquid Media (eg. MGIT)		
Subsequent Phenotypic DST in Liquid Media - Moxifloxacin (CB)	Value "1" = include Moxifloxacin (CB) in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Moxifloxacin (CB) from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	xfltmyqC3p0
Subsequent Phenotypic DST in Liquid Media - Amikacin	Value "1" = include Amikacin in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Amikacin from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	a4PpEfSutcV
Subsequent Phenotypic DST in Liquid Media - Bedaquiline	Value "1" = include Bedaquiline in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Bedaquiline from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	QaioqMbO0TX
Subsequent Phenotypic DST in Liquid Media - Delamanid	Value "1" = include Delamanid in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Delamanid from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	Xt5GU9kBD7q
Subsequent Phenotypic DST in Liquid Media - Linezolid	Value "1" = include Linezolid in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Linezolid from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	mU5iEABeF2K
Subsequent Phenotypic DST in Liquid Media - Clofazimine	Value "1" = include Clofazimine in the list of drugs available for Subsequent Phenotypic DST testing in liquid media. Value "0" = exclude Clofazimine from the list of drugs available for Subsequent Phenotypic DST testing in liquid media.	Nb6oHqjCCZq

LPA (Fluoroquinolones / Second-line Injectables)		

LPA (Fluoroquinolones / Second-line Injectables)		
LPA (Fq/2Li) - Ethambutol	Value "1" = include Ethambutol Result in LPA (Fq/2LI) Test. Value "0" = exclude Ethambutol Result from LPA (Fq/2LI) Test.	AiyTLOJHMkl

Please note, that the constants help to hide certain sections and data element from the data entry without the need to delete them from the system/metadata.json file. However, the elements are still assigned to the program and will be included when exporting all data into eg. csv files.

Configuring tracker capture interface, widgets and top bar

You must configure tracker capture dashboard after the package has been installed. This configuration includes data entry forms, widgets and top bar.

Data entry forms

- After registering the first (test) case, access the **Settings** menu in the tracker capture form and select **Show/Hide Widgets**
- Switch from **Timeline Data Entry** to **Tabular Data Entry**
- Make sure that **Enrollment**, **Feedback** and **Profile** widgets are selected. Click **Close**.
- Adjust the widgets on the screen.

Top Bar

- Access the **Settings** menu and select **Top bar settings**
- Select **Activate top bar**
- Select required information fields and assign their **Sort order**

Recommended fields	Sort order
Attributes	
Sex	5
Indicators	
DRS ID (Attribute)	1
DRS ID (concatenated)	2
Patient's age (months)	3
Patient's age (years)	4
Treatment History	6
Resistance	7

- Click **Save**

- Return to the **Settings** menu. Click **Saved dashboard layout as default**. Lock layout for all users.

Adapting the tracker program

Once the programme has been imported, you might want to make certain modifications to the programme. Examples of local adaptations that *could* be made include:

- Adding additional variables to the form.
- Adapting data element/option names according to national conventions.
- Adding translations to variables and/or the data entry form.
- Modifying program indicators based on local case definitions.

However, it is strongly recommended to take great caution if you decide to change or remove any of the included form/metadata. There is a danger that modifications could break functionality, for example program rules and program indicators.