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**Zimbabwe Ministry of Health**

**Health Network Quality Improvement System**

**(HNQIS)**

**Server Technical Specification Document**

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## Background

* Dedicated DHIS2 instance for the Zimbabwe Ministry of Health to collect data from supportive supervision visits conducted with Population Services International (PSI)’s HNQIS[[1]](#footnote-2) app
* PSI/Zimbabwe is the supporting implementing partner
* In-country DHIS2 System Admin:
  + Rangarirai Gava: [rgava@psi.org.zw](mailto:rgava@psi.org.zw)
* Remote PSI Global Business Systems (GBS) support:
  + Doreen Wamiti: [dwamiti@psi.org](mailto:dwamiti@psi.org)
  + Ruth Mwende: [rmwende@psi.org](mailto:rmwende@psi.org)

## Servers

* Development server: <https://clone-zw.hnqis.org> (dhis version 2.30)
  + Server hosted by BAO Systems on a ST-4 plan started in Sep 2018
  + Analytics run hourly
* Production: <https://zw.hnqis.org> (dhis version 2.30):
  + Server hosted by BAO Systems on a ST-4 plan started in Sep 2018
  + Analytics run hourly

## User roles

|  |  |
| --- | --- |
| Name | Details |
| \_Admin - Data Elements (Private) | Create and edit DEs (private sharing) |
| \_Admin - Data Elements (Public) | Create and edit DEs (public sharing) |
| \_Admin - Data Quality | Run Validation rules |
| \_Admin - Indicators management (Private) | Create, edit and manage Indicators |
| \_Admin - Legends | Create, edit and manage Legends and Legend items |
| \_Admin - Option Set Management (Private) | Create, edit and manage Option sets |
| \_Admin - Org Unit admin advanced | Create, edit and manage OU levels and perform OU hierarchy operations |
| \_Admin - Org Units (Basic) | Create, edit and manage OUs |
| \_Admin - Program Management (Private) | Create, edit and manage Event Programs |
| \_Admin - Program Org Units | Assign and manage OUs to Programs |
| \_Admin - Tracker Management | Create, edit and manage Tracker Programs |
| \_Admin - User Management advanced | Create, edit and manage Users |
| \_Analytics - Dashboard only | Access to DHIS2 dashboards, only |
| \_Analytics - Services (all) | Full access to all of DHIS2 analytical tools |
| \_App - Browser cache cleaner | Clear DHIS2 browser cache |
| \_User - Data Entry Tracker | Data entry for Event and Tracker Programs (Event Capture, Tracker Capture, DHIS2 Android Capture) |
| Superuser | Full access to all DHIS2 roles |

## Users

* Demo account for HNQIS Data entry and Analytics (all HNQIS Programs):
  + <https://zw.hnqis.org>
  + ZWdemo; Zimbabwedemo1!
* HNQIS users to add to the relevant User group(s) based on what type of Data entry they are expected to do:
  + Example: in case a user is expected to conduct supportive supervision visits on Cervical Cancer, s/he needs to be added to the User group ZW HNQIS CC. Also, he needs to be assigned to the right OUs for Data capture and maintenance org units
* For more information on HNQIS System Admin, refer to the HNQIS System Admin manual loaded as a Resource in the server (Reports -> Resource)
* Here are links to user manuals for creating a [data entry](https://teams.microsoft.com/l/file/E74553FD-BD7F-41C4-B308-9B904D8D61BB?tenantId=cd9cb8ec-e621-472a-979a-549ab5ba2470&fileType=docx&objectUrl=https%3A%2F%2Fpsiorg.sharepoint.com%2Fsites%2FZW_HNQIS%2FShared%20Documents%2FGeneral%2FData%20Entry%20User%20Management%20Acess%20Model%20(1).docx&baseUrl=https%3A%2F%2Fpsiorg.sharepoint.com%2Fsites%2FZW_HNQIS&serviceName=teams&threadId=19:e52bcedebc0043b99cbf167cd6025235@thread.skype&groupId=ef353b9e-bc2f-4a1b-92a9-34f3bf7c0a14) account and [analytics user](https://teams.microsoft.com/l/file/DB9294AF-30E0-4338-8D60-A98483C325D0?tenantId=cd9cb8ec-e621-472a-979a-549ab5ba2470&fileType=docx&objectUrl=https%3A%2F%2Fpsiorg.sharepoint.com%2Fsites%2FZW_HNQIS%2FShared%20Documents%2FGeneral%2FData%20Analytics%20%20User%20Management%20Acess%20Model.docx&baseUrl=https%3A%2F%2Fpsiorg.sharepoint.com%2Fsites%2FZW_HNQIS&serviceName=teams&threadId=19:e52bcedebc0043b99cbf167cd6025235@thread.skype&groupId=ef353b9e-bc2f-4a1b-92a9-34f3bf7c0a14).

## User groups

|  |  |
| --- | --- |
| Name | Details |
| ZW - HNQIS Admin | User group for HNQIS Admins: metadata = edit and view, data = capture and view |
| ZW HNQIS MASTER | User group for data entry to all HNQIS programs: metadata = view, data = capture and view |
| ZW HNQIS ART | User group for HNQIS ART Data entry: metadata = view, only, data = capture and view |
| ZW HNQIS CC | User group for HNQIS CC Data entry: metadata = view, only, data = capture and view |
| ZW HNQIS FP | User group for HNQIS FP Data entry: metadata = view, only, data = capture and view |
| ZW HNQIS HTS | User group for HNQIS HTS Data entry: metadata = view, only, data = capture and view |
| ZW HNQIS STI | User group for HNQIS STI Data entry: metadata = view, only, data = capture and view |
| ZW HNQIS VMMC | User group for HNQIS VMMC Data entry: metadata = view, only, data = capture and view |
| ZW HNQIS VWAG | User group for HNQIS GBV Data entry: metadata = view, only, data = capture and view |
| ZW HNQIS WEA | User group for HNQIS WEA Data entry: metadata = view, only, data = capture and view |
| \_PROGRAM\_ZW HNQIS ifoche | User group for BAO developers to troubleshoot: metadata = edit and view, data = capture and view |

## OUs

Number of Organization units for the various levels:

* Subnational Level 1 Country – 1
* Subnational Level 2 Province – 10
* Subnational Level 3 District – 61
* Subnational Level 4 Sub – Districts/Wards/Municipalities/Health Facilities – 2263
* Subnational Level 5 IPC agents. Health Providers – 81

## OU tree

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Root** | **Subnational level 1** | **Subnational level 2** | **Subnational level 3** | **Subnational level 4** | **Subnational level 5** |
| Region | Country | Province | District | Sub-districts / Wards / Municipalities / Health facilities | IPC agents / Health providers |
| Ex: |  |  |  |  |  |
| Southern Africa | Zimbabwe | Harare | Harare | Kuwadzana Phase 4 -101851- Clinic | DFO - Samanatha Kumbula (ZW\_101470) |

## HNQIS Programs

All HNQIS Programs are shared with the User group ZW – HNQIS Admins (metadata = edit and view, data = capture and view) and ZW HNQIS Master (metadata = view only, data = capture and view).

Also, HNQIS Programs are shared with the relevant User group(s) for Data entry as per table below: e.g For **ZW HNQIS Family Planning Counseling** program it should be shared with the user groups **ZW – HNQIS Admin**, **ZW – HNQIS Master** and **ZW HNQIS FP**. If a Quality Assurance Officer (QAO) is working on the FP program, the QAO should be added to the **ZW HNQIS FP** User group, so that they s/he is able to access the FP HNQIS Programs.

|  |  |  |
| --- | --- | --- |
| Health Area | Program Name | User group for Data entry |
| CC | ZW HNQIS Cervical Cancer | ZW HNQIS CC |
| FP CFC | ZW HNQIS Family Planning Counseling | ZW HNQIS FP |
| FP LAM | ZW HNQIS Family Planning Long Acting Methods | ZW HNQIS FP |
| FP SAM | ZW HNQIS Family Planning Short Acting Methods | ZW HNQIS FP |
| HIV ART | ZW HNQIS HIV ART Nurse Counselor Supervision Tool | ZW HNQIS ART |
| HIV CAT | ZW HNQIS HIV Care and Treatment | ZW HNQIS ART |
| GBV | ZW HNQIS HIV Gender Based Violence | ZW HNQIS VWAG |
| HIV ICT | ZW HNQIS HIV Index Case Tracing Supervision Tool-Index Nurse Supervision | ZW HNQIS HTS |
| HIV LSNC | ZW HNQIS HIV Laboratory Scientist/Nurse Counselor Tool | ZW HNQIS HTS |
| HIV NOD | ZW HNQIS HIV New Start Office Assistant/Driver Supervision Tool | ZW HNQIS HTS |
| HIV NRD | ZW HNQIS HIV New Start Receptionist/Driver Supervision Tool | ZW HNQIS HTS |
| HIV TCSV | ZW HNQIS HIV Testing and Counseling Supervision Tool | ZW HNQIS HTS |
| HIV TCSA | ZW HNQIS HIV Testing and Counselling Site Assessment | ZW HNQIS HTS |
| STI v2 | ZW HNQIS Sexually Transmitted Infections v2 | ZW HNQIS STI |
| VMMC CRR | ZW HNQIS VMMC: Client Record Review | ZW HNQIS VMMC |
| VMMC COM | ZW HNQIS VMMC: Communication to Clients | ZW HNQIS VMMC |
| VMMC FAC | ZW HNQIS VMMC: Facilities, Supplies, Equipment, and Emergency Management | ZW HNQIS VMMC |
| VMMC SOP | ZW HNQIS VMMC: SOPs, Guidelines, Policies, Job Aids and Adequacy of Staffing | ZW HNQIS VMMC |
| VMMC PRC | ZW HNQIS VMMC: Surgical Equipment and Procedures, and Prepex Device Procedures | ZW HNQIS VMMC |
| WEA | ZW HNQIS Work Environment Assessment | ZW HNQIS WEA |

## HNQIS Configuration

* Prioritization matrix:
  + Server dependent and customizable. For the server <https://zw.hnqis.org>, the prioritization matrix used by the HNQIS app to schedule the date of the next supportive supervision visit is as follows:
    - +1 month in case the Quality of Care (QoC) score is below 90%
    - +6 months in case the Quality of Care (QoC) score is equal to or greater than 90%

## HNQIS Analytics

* For each HNQIS Program, we have:
  + **Event data items** by health area: these are Data elements (DEs) and they compose the HNQIS Programs. They store the values collected during supportive supervision visits.

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Description automatically generated

* + **Program indicators:**
    - **Count**: they store the number of assessments conducted by Health Area

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* + - **% Class A, B and C**: they store the percentage of assessments which fall in Class A, B and C based on the QoC score, where Class A is

A screenshot of a cell phone

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* Note on Maps:
  + Users are now able to analyze data on maps thanks to the availability of shape files for Zimbabwe administrative regions. A close up of a map

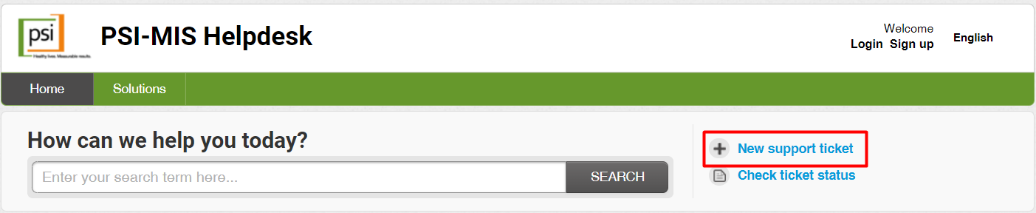
    Description automatically generated

## Helpdesk

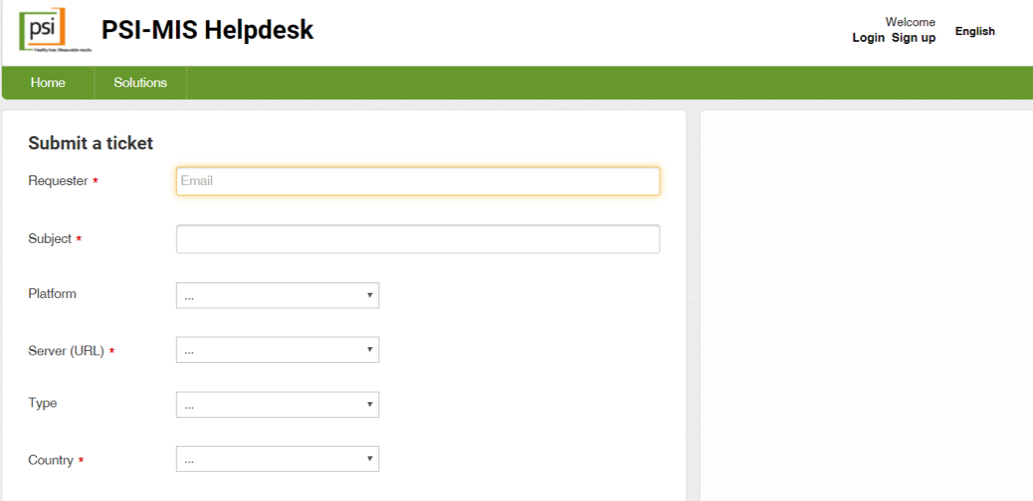
* The **Helpdesk** is a platform that allows users to get assistance in issues they come across in the server and the HNQIS app. PSI-MIS Helpdesk will help users to:
  + Submit any issue they are experiencing to get timely support
  + View the status of your submitted tickets to track progress on their resolution
  + Request for new features and functionality
  + Learn how to handle tasks through the knowledge base articles from the solutions page
  + Search for answers for frequently asked questions (FAQs)

## How do I get help from Helpdesk?

* Go to the **PSI-MIS Helpdesk page** at: <https://helppsi.freshdesk.com/>
* Click on the new support ticket



* Fill in the ticket details as per the form



* + Requester - your email address
  + Subject - the subject of your ticket
  + Server - choose the server on which you are experiencing the issue on, e.g. <https://zw.hnqis.org>
  + Country - specify your country or select **NA** if not applicable
  + Ticket type - choose **Configuration, Maintenance, Question, Bug, Other** depending on the ticket type
  + Describe your issue in details and be as specific as possible
  + Attach a file – Use this to add any relevant files or screenshots of the full screen to assist in resolving the issue
  + Click on **Submit**
* A screenshot of a cell phone

  Description automatically generatedAnother option to access the PSI-MIS Helpdesk page is from the DHIS2 ‘**Help**’ app from your account menu:

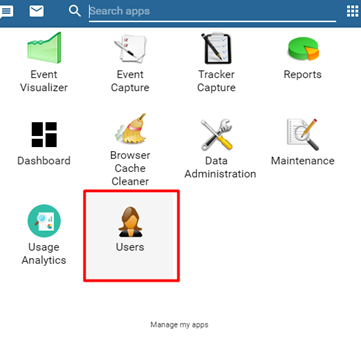
## Known bugs

* Users app: Users cannot see / edit users they have created themselves
  + This bug has been fixed. This occurs if you do not select an OU for the user.
  + As a consequence of this bug, we have several users in the server with the same name and surname and different usernames. Ranga to clean up
* Dashboard app: Unable to add items to a dashboard
  + Weird behavior, not always replicable. The University of Oslo is working to fix it.

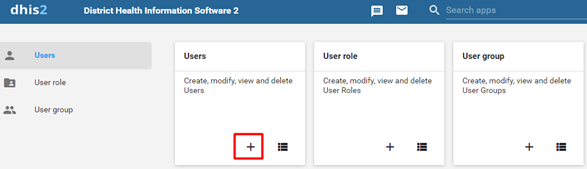
- Multiple legends not rendering in PT

## Annex 1 – How to create User account for Data Analytics

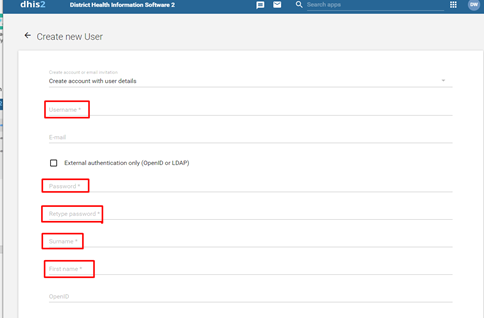
Open **DHIS2 App**. Select **Users app**



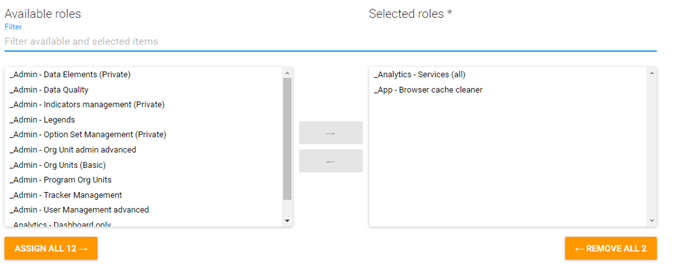
Click on the **+ add** on the Users Card.



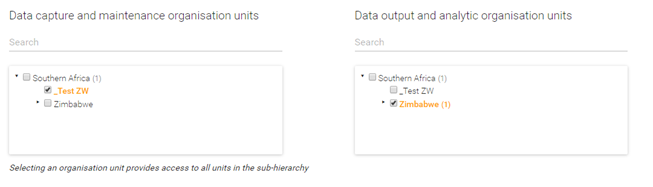
Fill in the mandatory fields as shown below i.e **Username, Password, Surname** and **First name.**



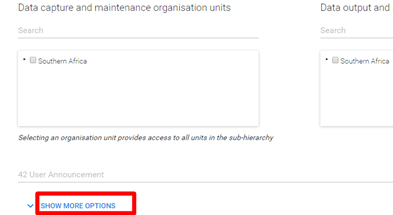
In the **Available roles** section, double-click on the **Analytics – Services (all)** role to assign the role



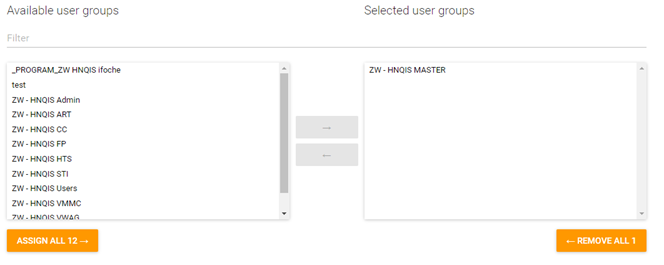
From the **Data capture and maintenance organization units**, select the relevant OUs for Data Entry (or \_Test ZW) and relevant OUs for data analysis from Zimbabwe.



Click on **Show more options** at the bottom of the page to display additional options



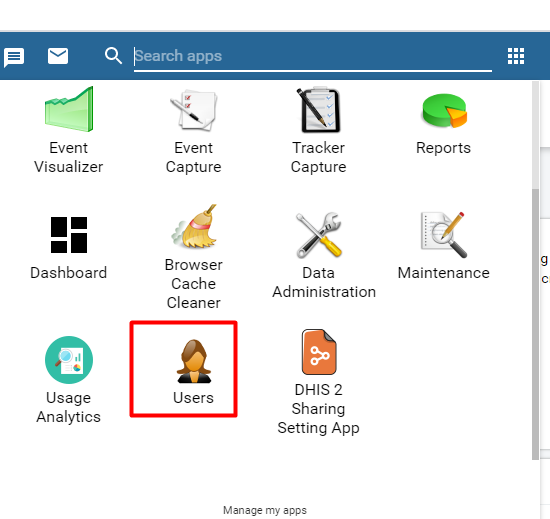
From **Available user groups** section, select the relevant user groups as per Access model.



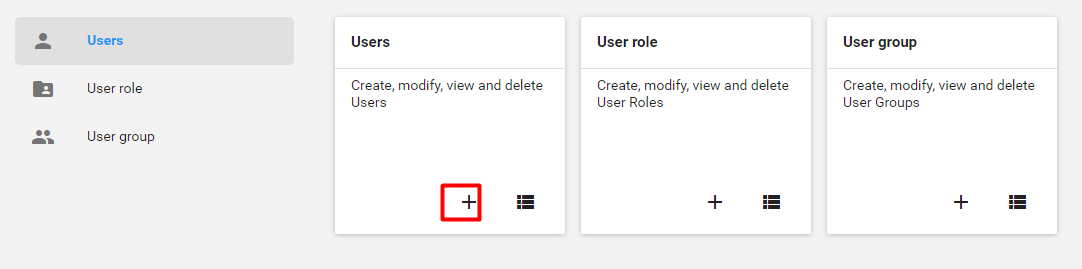
Click **Save.**

## Annex 2 – How to create User account for Data Entry

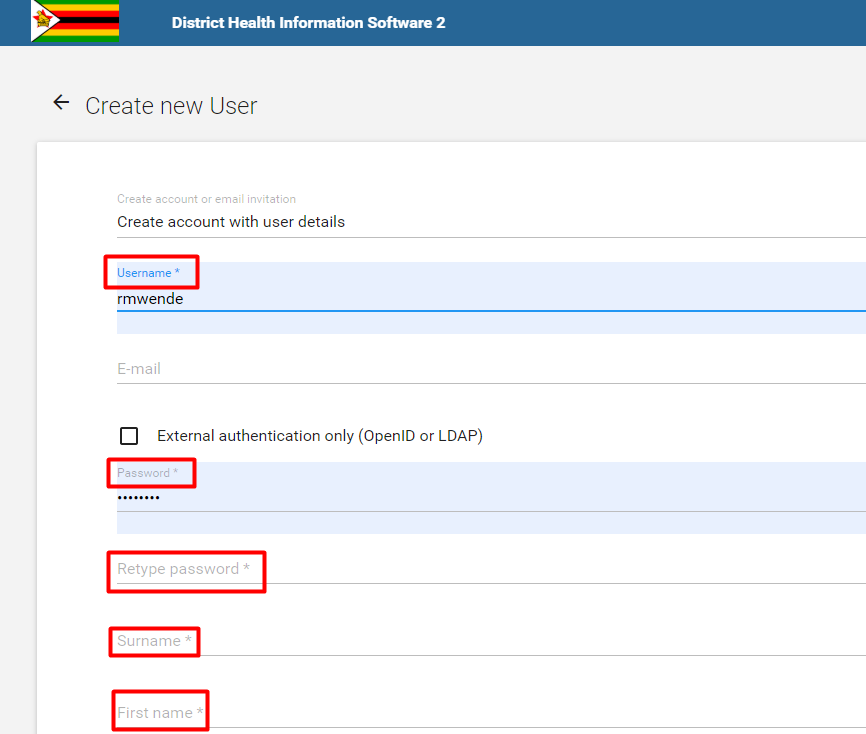
Open **DHIS2 App**. Select **Users app**.



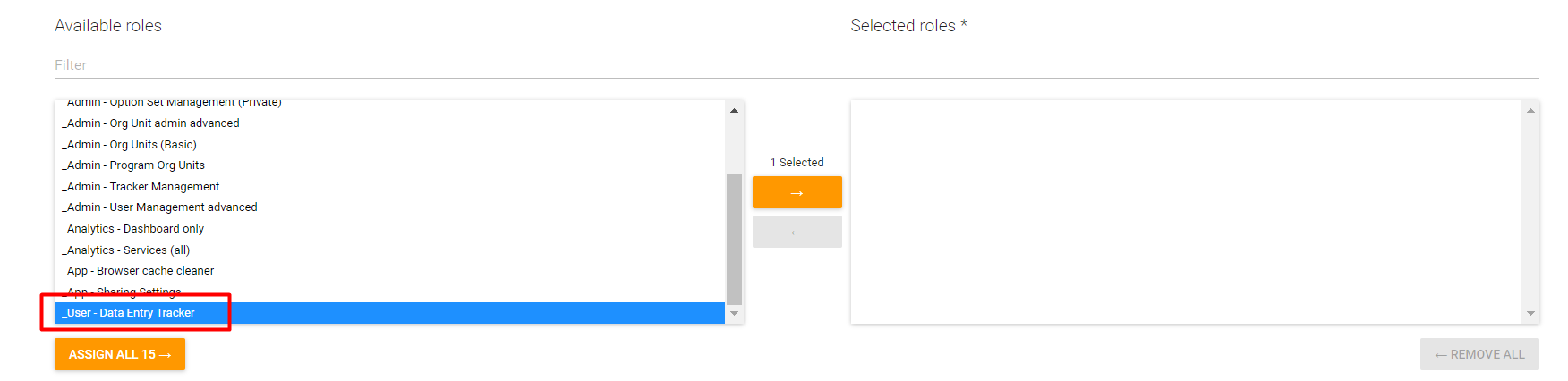
Click on the **+ add** on the Users Card.



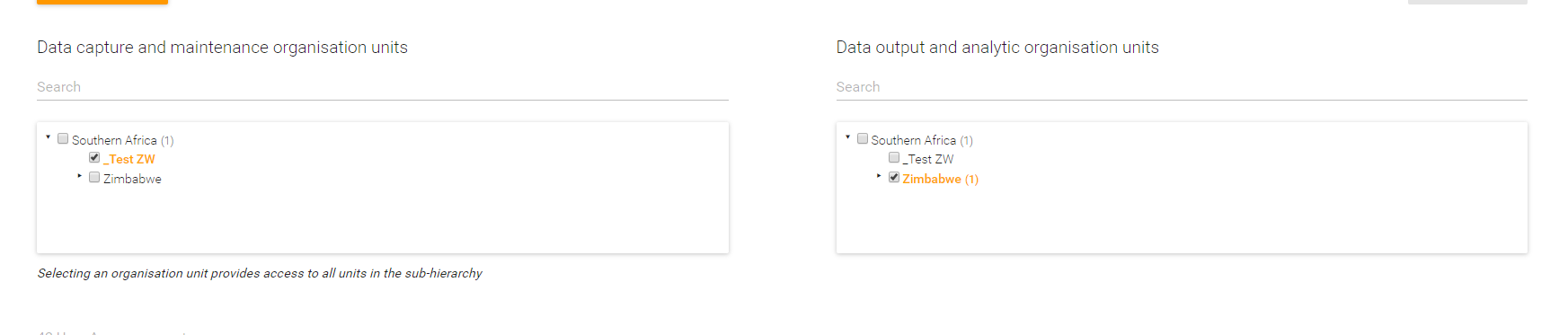
Fill in the mandatory fields as shown below i.e **Username, Password, Surname** and **First name.**



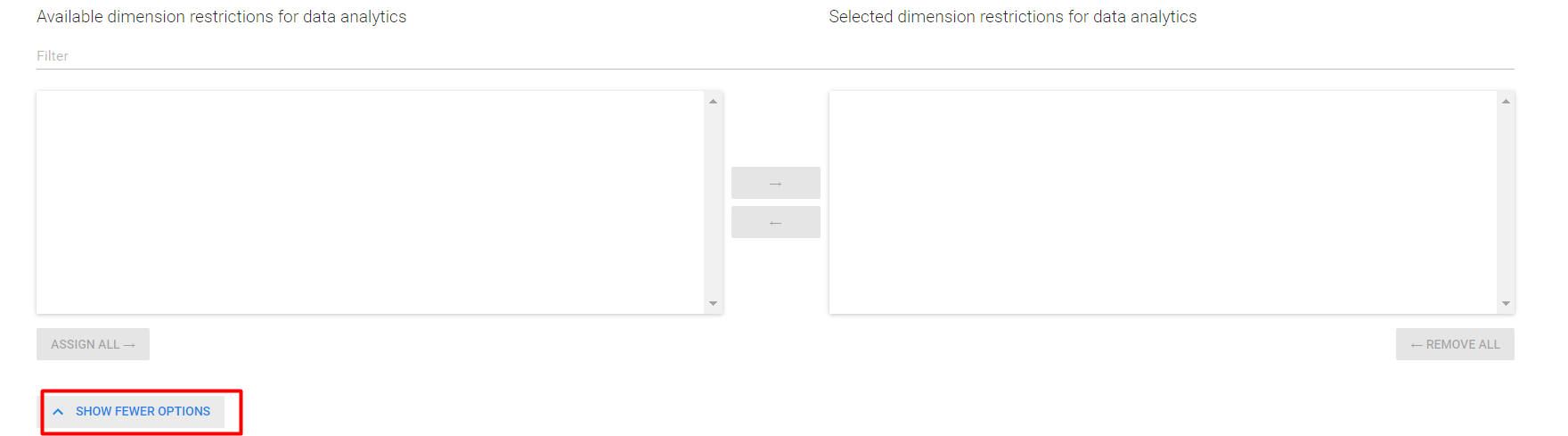
In the **Available roles** section, double-click on the **\_User - Data Entry Tracker** role to assign the role (this is for Data entry for Tracker programs, like HNQIS Programs).



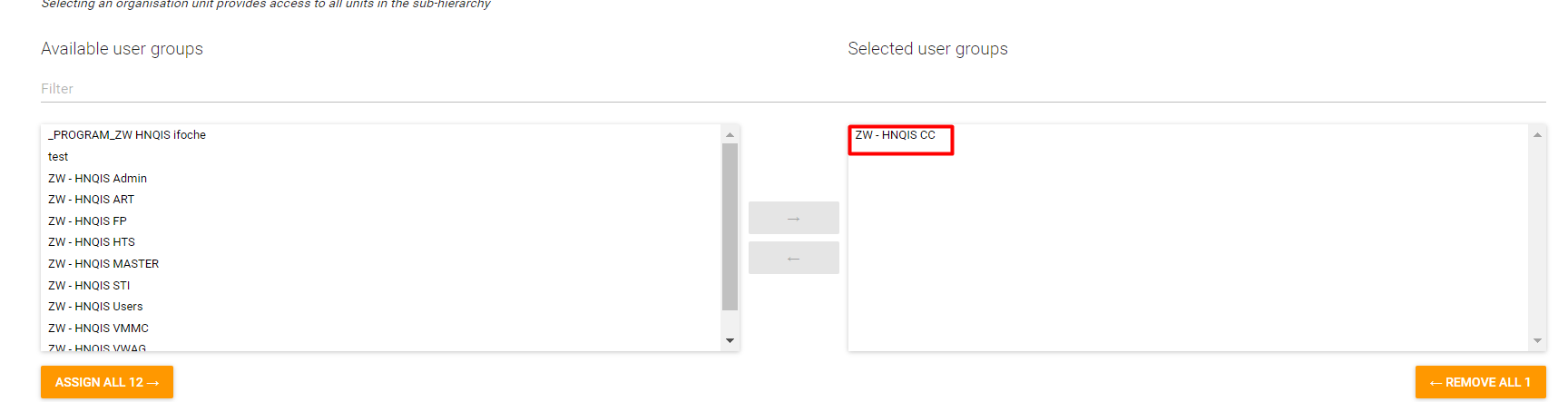
From the **Data capture and maintenance organization units**, select the relevant OUs for Data Entry.



Click on **Show more options** at the bottom of the page to display additional options.



From **Available user groups** section, select the relevant user groups as per Access model.



Click **Save.**

1. <https://play.google.com/store/apps/details?id=org.eyeseetea.malariacare.hnqis_ng> [↑](#footnote-ref-2)