DHIS version 2.26 is out with many new features, apps and improvements.

Log in with admin/district on the [demo](#) system.

ANALYTICS FEATURES

Enrollment analytics: Program indicators can now utilize a new aspect of the analytics engine for program enrollments. This implies that you can compare data values and dates from different stages and events within the an enrollment. This allows for calculation of indicators such as "average inpatient bed days" and "Hemoglobin improvement since first visit".

[Demo](#) | [Screenshot](#) | [Docs](#)

Daily relative periods: You can now use daily relative periods in the analytics apps. This is particularly useful when looking at aggregate event data through the pivot table app, as you can see daily aggregates of events, such as today, yesterday, and last 3, 7, 14 days.

[Demo 1](#) | [2](#) | [Screenshot](#)

Data element event clustering in GIS: Using the event layer in the GIS app, you can now specify which data element or attribute to use as basis for event analytics and clustering. The data item must be of value type coordinate. As an example, for a malaria case program, you can have data elements of type coordinate for *place of infection* and *household location*, and visualize those locations on the map for the malaria cases.

[Demo](#) | [Screenshot](#) | [Docs](#)

Pivot table cell background coloring: You can now specify whether to color the cell text or cell background of pivot tables based on legend sets. This allows e.g. for creating scorecards, where high and low values easily can be identified. Go to Pivot table > Options > Legend display style.

[Demo](#) | [Screenshot](#) | [Docs](#)

Analytics group sub-hierarchy inclusion: Org unit group sets have a new option for including the sub-hierarchy of organisation units in groups when aggregating data in analytics apps. This can simplify org unit management when there are many org units at the bottom of the hierarchy which should all belong to an org unit higher up in the hierarchy. As an example, you can create additional hierarchies by grouping all facilities in multiple districts together in a group, then assign the new groups to an org unit group set.

[Demo 1](#) | [2](#) | [Screenshot 1](#) | [2](#) | [Docs 1](#) | [2](#)

GIS improvements: Labels are positioned smarter on the map to avoid collisions. Interactivity on boundary layer is disabled when combined with thematic layer. Automatic color scales for thematic maps can be flipped (i.e. low to high vs high to low).

Demo | Screenshot

Most viewed favorites: The opening screen of the pivot table apps now displays link to the top 10 most viewed favorites for the current user. This provides you with quick access to your most relevant data.

Demo | Screenshot

Expected reports in analytics: In reporting rate analytics in pivots and charts, the number of expected reports are always shown even if no completeness registrations exist.

Demo | Screenshot

Analytics performance improvements: Analytics table generation and analytics queries performance has been significantly improved. Depending on the system configuration, the improvement is in the range of 20 to 40%.

Demo

Better interpretations: The interpretations app has been rewritten and now provides support for event reports and event charts, using the dynamic visualization plugins and provides a better commenting solution.

Demo | Screenshot

GENERAL FEATURES

Explicit open periods for data entry: You can now specify explicitly which periods should be open for data entry per data set. You can also specify when those periods will be made available for data entry. This is useful when you need finer control over which periods should be possible to enter data for and when you need to schedule these periods to become open at specific times.

Screenshot | Docs

Validation notification templates: You can now specify templates for notifications which are to be sent for data validation violations. The templates gives you full control over the notification text and supports variables for injecting the org unit name, period, validation rule and current date.

Demo | Screenshot | Docs

Event data in validation rules: You can now use program data elements, tracked entity attributes and program indicators inside validation rules. Aggregated values from the event analytics engine will be utilized when the validation rules expressions are evaluated. This allows for combining routine data and event data in the same validation rule. This is useful e.g. in order to compare thresholds collected as routine data with disease cases reported as events. Validation rule management is now available in the maintenance app.

Demo | Screenshot | Docs

Translations app: A new app for translation database content in bulk has been included. This app makes translating lots of metadata much faster as you can select the object type, then translate all objects from within a list. Open it from Apps > Translations.

Demo | Screenshot

Category combination metadata export: The metadata export with dependencies now supports export of category combos, which will include all related category objects. This is useful when exchanging metadata between instances.

Demo | Screenshot

Auto-select single options in data entry: In Data Entry app, when the data set or category selections only have one option, that option will be automatically selected. This can make data entry more efficient.

Screenshot

Automatic totals in section forms: Section forms can be configured to display totals for columns and rows in aggregate data entry. Set it up from maintenance > data sets > sections. Check out the "reproductive health" data set on demo.

Demo | Screenshot | Docs

Assign message to user: In the Messaging app, a message can now be assigned to a DHIS 2 user. This allows you to treat messages as support tickets and assign them to users (agents). Only users part of the "feedback recipient" user group have access to this feature.

TRACKER FEATURES

Age value type: Data elements and attributes supports a new value type "Age". This will render as a widget in event / tracker capture apps which allows for specifying the age in weeks, months or years. The selected input will be converted to a date of birth. This is useful e.g. to simplify input of age at point of care.

Screenshot

Google base maps for coordinate picker: When capturing coordinates in event capture and tracker capture you can now switch between using Google Maps and OpenStreetMap as base map.

Screenshot

Hide program stage program rule action: Program rules now support an action for hiding program stages. This is useful e.g. for disease case investigations, where various stages are relevant only for certain diseases.

Screenshot

SYSTEM ADMINISTRATION FEATURES

Analytics cache of old data: A new system setting for caching of analytics data is introduced, where data older than a specified number of years will be cached. This is useful as you can avoid caching of the latest data, while older data which never change can be cached.

Docs

Public/private analytics cache setting: A new system setting for controlling whether cached analytics data should be public or private, meaning whether proxies should be able to cache the content. This is useful for improving security of sensitive data while still allowing web browsers to cache the content.

Docs

Approval in analytics threshold setting: A system setting which defines for how many years back in time approval should be relevant is available. After the specified number of years, all data becomes

available in analytics even if unapproved. This means data will automatically be approved and visible after a given number of years, allowing for pruning the approval table and ensure system performance is not degrading.

[Docs](#)

Env variables in config: Environment variables are now supported in the dhis.conf configuration file. This allows for externalizing e.g. database connection information such as URL, user and password instead of storing it directly in the config file. This is useful for server administration and for cloud environments.

[Docs](#)

User account lockout: The system now supports locking user account for 15 minutes after five successive failed login attempts. This is useful to prevent brute-force authentication attacks.

[Docs](#)

Configurable session timeout: The session timeout can now be configured from the dhis.conf configuration file. This is useful to comply with specific security regulations.

[Docs](#)

WEB API FEATURES

Analytics raw data: A new resource for retrieving analytical data without aggregation is introduced at */api/analytics/rawData*. This resource lets you retrieve raw data denormalized across any data dimension. This is useful when integrating third-party BI / analytics tools, as you will get data values with all data dimensions "flattened out" without any pre-aggregation, allowing the external tool to perform the aggregation and filtering.

[Docs](#)

Pre-aggregation measures in analytics: The analytics API lets you specify measure criteria to be applied before data aggregation takes place. This allows for better filtering of data before aggregating.

[Docs](#)

Filter operators in SQL views: You can now use the fields filtering syntax known from the metadata API on SQL views. This allows you to fetch only the fields (columns) you are interested in from large SQL views.

Demo | Docs

Prune data element: Data elements with corresponding data and audit values can be pruned using the */api/maintenance/dataPruning* resource.

Docs

Data set completeness exchange: The API resource for import and export of data set completeness records has been rewritten and is now a lot more scalable and supports more features for controlling what to exchange.

Docs

Soft event delete: Events are now deleted "softly", meaning marked as deleted instead of being removed in the database. The events resource can include deleted events in the response, allowing clients to handle events which have been deleted on the server.

Demo | Docs

TESTIMONIALS

Contribution to this release was made by PSI (interpretations app) and BAO Systems (translations app). Thank you!

RELEASE INFO

Get the **release** here:

https://www.dhis2.org/downloads

You will find **documentation** and Javadocs here:

https://www.dhis2.org/documentation

You can read the **upgrade notes** and find upgrade script here:

https://www.dhis2.org/226-upgrade

The details about each feature on **JIRA** here:

https://jira.dhis2.org/issues/?filter=10251

You can find the **source code** on Github here:

https://github.com/dhis2

The **demo instance** can be found here:

https://play.dhis2.org/demo

Instructions for signing up for the DHIS 2 **mailing lists** here:

https://www.dhis2.org/contact

Enjoy the new release.

best regards,

the DHIS 2 development team