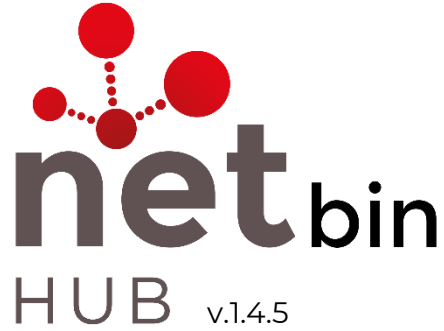# netBin HUB v1.4.5 - New features

A major new release of the netBin HUB designated version 1.4.5 is now available incorporating a host of features that improve on the manageability of live systems in long term use. The release also permits smooth transition from sensor less bins to bins fitted with nPods in a seamless way to ease deployment of a netBin system. Time saving features reduce the maintenance requirements of the netBin system whilst also improving the functionality of the system.

Sensor less bins integrated into netBin

Bins without sensors fitted (dumb bins) can now be collected alongside bins with nPod sensors (smart bins) and their required collection frequency configured. This means collection routes can be automatically generated for just dumb bins, or a mixture of smart and dumb bins or just smart bins as before. This greatly simplifies transition from a network of dumb bins to a smart bin network as the whole of the bin network can be configured on the netBin system from the start and collection routes dynamically created for all bins whilst the move from dumb to smart bins is made over time.

Automatic fallback for smart bins with connection failures

Smart bins where the sensor stops connecting due to for example a cellular network fault can optionally automatically switched to use it's predicated fill rate so that the bin can continue to be collected using fill information from it's fill rate history until the problem is rectified. This means that a bin does not get ignored or over collected due to an unchanging fill level. The automatically generated collection routes will reset the bin level to empty once that scheduled route has been run. When the nPod is able to connect again the predicted fill levels are automatically stopped and the actual fill levels reading used again.

Contents	Mixed waste ✎
Fill level (%) (Estimated)	100 %
Temperature (°C)	21 °C

The fill level is shown as estimated on the bin information page and displayed in red on the bin list page if no recent connection has occurred.

Improved management of bin photos

Multiple photos of the bin and surrounding area can now be uploaded or deleted through the netBin bin information page through a browser in addition to the bin Setup app and Collect app method. This simplifies management of photos of the bins and makes for a more maintainable system as bins and their locations change over time.

Testing of alert messages

When profiles are created for users to be sent texts, emails or WeChat messages test messages can be optionally sent. This allows any misconfiguration problems to be checked for immediately rather than when a real alert is sent to the user.

Bin type specific ultrasonic configuration

To enhance the accuracy of fill level readings a number of ultrasonic power and sensitivity profiles have been created in V 1.4.5 for common types and sizes of bins. This leverages the superb configuration flexibility of the nPod to allow ultrasonic power levels and receiver sensitivity to be adjusted in an easy to apply way when the bin type is defined.

For unusual shaped bins new profiles will be created by FarSite for it's customers that can also be applied. These profiles are applied at the time the bin is added to the system but can also be changed later if required.

Automatic database record maintenance

Historical collection data kept in the netBin database can now be configured to be automatically removed after contractually agreed time periods have elapsed, for example 3 years. This can stop the database from perpetually growing removing the requirement for extra storage charges for data that is no longer required.

More Minor Enhancements

- When creating events to trigger alerts based on location any associated sub locations are automatically included by default. This saves time having to select the sub locations which in most cases is what most users intend.
- Collection routes generated by the system and published in PDF format now include: the estimated full time, time since last collection and the actual fill level when the route was created for each bin in the collection route.
- Bins marked for collection can now only appear on one collection route until they have been collected. This can prevent unnecessary collections, in particular when multiple routes overlap geographical areas.
- The bin list page now has an option where the bin summary details including the fill level graphs are expanded to be displayed on request. This saves time individually expanding bin summary details when reviewing the status of large numbers of bins.
- A new event is available to raise an alert if ultrasonic level readings from a bin become fixed at the same level for long time (period is configurable). This time saving feature provides a timely alert when something appears to amiss with the fill level readings from a bin, this could indicate a fault but in many cases it indicates the bin is not being collected.
- The bin's location (Coordinates) in the Bin Information page when edited now pops up a map to allow the bins position to be moved on the map as well as by editing the latitude and longitude as before. This speeds up the relocation of bins which are not using nPods with GPS fitted.

- The details of refuse collection vehicles can now be edited, before they were fixed once created. This time saving feature allows for vehicle details to be updated/corrected on live systems while the vehicle are used on collection routes without deleting them first.