Import VRI Zones

VRI Zones

The VRI zone importer can be used to import VRI zones from a shapefile into Raindancer.VRI zones are event areas that cause irrigators to change the irrigation amount by command when the irrigator enters the zone.

There are three types of VRI zones

- Zones that adjust the irrigation amount as a percentage (Relative Percent)
- Zones that adjust the irrigation amount in millimetres (Absolute in mm)
- Zones that adjust the irrigation amount in metres per hour (Absolute in m/h)

To define how the irrigation should be adjusted in a zone, each zone requires a numerical value, which is then sent by command.

The values are limited differently depending on the zone type.

- "Relative per cent" zones can have values between 1% and 100%
- "Absolute in mm" zones can have values between 1mm and 50mm
- "Absolute in m/h" zones can have values between 5m/h and 150m/h

Activating the VRI zone import

!!! So far just available for Service-Users (Please contact your Dealer or the Raindancer Support for activation) !!!

The VRI zone import is not visible in the normal state. It is activated via the client's advanced settings. These can be found under "**Settings** > **Client** > **Extended settings**".
There you have to scroll to the fields, remove the checkmark next to "**Use default value**" and place the checkmark directly above it. After saving, the VRI zone import can be found under "**Fields** > **Import VRI zones**"

Requirements for shape files

Shape files that can be imported as VRI zones must have the shape type polygon or multipolygon.

They must also contain at least one data column containing the names of the zones.

The features in the shape file should all be simple polygons, i.e. features that only consist of a polygon without holes.

If a polygon feature consists of several polygons, only the first one is imported as a zone. Holes are discarded.

Import process

The VRI zone importer can be opened in Raindancer in the area section with the "Import VRI zones" button.

The mapping of VRI zones to fields is established during import by the geographical position of the polygons in the shape file. If the polygon of a zone is located on a field, it is added to this field.

Open Data

In the Importer, you can open the individual files of the shapefile using the "Select files" button. All files belonging to the shapefile must be selected in the open dialogue.

After selecting the data, start the import process using the "Check format" button.

Import Options

Projection

If no projection is included with the shapefile, the projection of the shapefile must be selected here. If an incorrect projection is selected, the VRI zones on the map may be in the wrong position or contain completely invalid coordinates.

Name

Here you select the data column of the shapefile from which the names for the VRI zones are to be obtained.

Number zone names consecutively

If the "Number zone names automatically" box is selected, the names of the zones are not taken from a column but are numbered automatically from 1 to n.

VRI zone type

Here, you select the type of zones to be imported. If no type has been selected, the import button is not displayed.

VRI zone value

You can select here whether the individual zone values should be obtained from a data column in the shape file or whether all zones should be given the same fixed value.

If you select "Load value from a file column", you can select the corresponding data column in a second selection. Only columns containing numerical values are offered here.

If one of the numerical values is outside the limits defined above, the VRI zone is not defined.

If the shape file does not contain a column consisting only of numerical values, it is only possible to import zones with a fixed value.

If you select "Fixed value for all zones", a numerical input appears in which you can define the value. The input is restricted to the limits mentioned above.

Dealing with existing VRI zones

Finally, you must define whether the existing VRI zones are to be changed. You can choose between

"Replace VRI zones on affected fields" - The VRI zones of all existing fields for which zones are contained in the shape file are deleted before the import and thus replaced by the new zones from the file.

"Do not change existing VRI zones by import" - All existing VRI zones are retained. This may result in new zones being assigned over existing zones. However, if there are no zones at the positions of the VRI zones from the shape file in Raindancer, this is the optimal variant.

"Delete all existing VRI zones before import" - Deletes all VRI zones of the client and imports the new zones from the file. This option is useful if the shapefile contains all of your client's VRI zones.

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