



**Release Notes**

# **VELOS 2021.2**

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# Velos 2021.2

First release of Velos 2021.2. This version is suitable for use in SowSense, PorkSense and ProSense.

For more information about this version please refer to:

<https://www.nedap-livestockmanagement.com/service-support/velos-software-releases/pig-farming-nedap-velos-2021-2/>

## SowSense

- Farrowing feeding with Nedap Activator. To prevent sows from asking for too much feed in a short amount of time, the feed speed setting is now used. The feed speed is checked over a moving time window of 10 minutes. A sow may therefore exceed the programmed feed speed for a short while but if she does the feed speed will be limited afterwards. If for example the feed speed is set to 150 grams per minute the sow will never get more than 1500 grams of feed in any time window of 10 minutes.
- Improved farrowing feeding visit events.
  - The start of a visit is now always after the end time of the previous visit.
  - If a sow eats and stops triggering the Activator for longer than 5 minutes a feeding visit event is generated. End time of the visit is now set to 5 minutes ago.
  - If a sow eats and stops triggering the Activator for longer than 5 minutes then the programmed value now decreases after each visit
- Fixed an issue where the number of responders was not checked against the setting for number of responders when adding an animal.
- Fixed an issue where submitting a relative calibration for feeders without specifying a value for the dosed weight resulted in a calibration value of 1 g/portion.
- Fixed an issue in the report “to be separated”. This report did not show animals that must be marked.
- Fixed an issue on the farm overview page and the animal overview page. Number of animals to mark was not shown correctly on these pages.

## ProSense

- Consistent calculations

Pig Performance Testing		Feeding	Weighing	
Supply date	20-10-2021 00:00		Start weight	74.0 kg
Start test	23-10-2021 00:00		End weight	100.8 kg
Completed days in test	24		Total feed intake	70.5 kg
			Weight gain	26.8 kg
			Daily Feed Intake	2936 g/d
			Daily Growth	1115 g/d
			Feed Conversion Rate	2.63

Several of the outcome measures of pig performance testing were not consistent throughout Velos. This caused slight deviations of calculated values on different pages in Velos. There are five pages that contain these outcome measures:

- Farm overview page
- Location overview page
- Animal overview page
- Animal data report
- Ranking the pigs report

The calculations are now consistent over all these pages. See the appendix at the end of these release notes for an explanation of how all values are calculated by Velos.

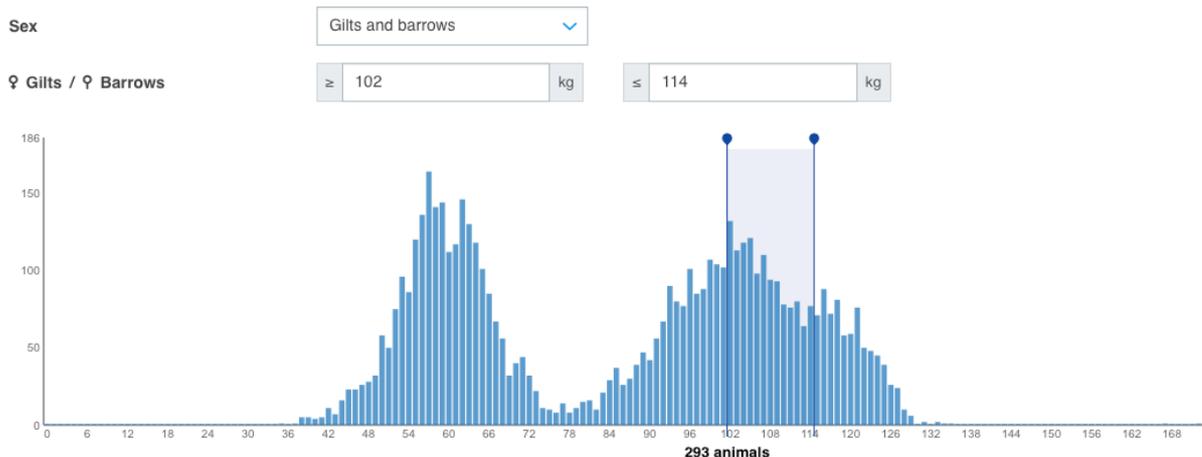
As a result of these changes it is no longer possible to manually modify the start weight of an animal.

- Modified the rule for generating group visit attentions. In the past a group visit attention was generated for a location if there was at least one group visit with a feed intake higher than 70 grams. Group visit attentions are used to attach the feed that is registered in the group visits to a specific animal. This should only be necessary if there is a pig in the group that has lost its responder. In that case the amount of feed intake in group visits will be at least 1000 grams per day. A single group visit of 70 grams is not what users want to attach to an animal, they want to add real amounts to the animals. In order not to bother users too much with unnecessary group visit attentions the rule for generating group visit attentions has been modified: A group visit attention is generated for a location if there is at least one group visit and the total feed intake for group visits for the location today is more than 500 grams.
- Fixed an issue in the “Animal data” report and the “Ranking the pigs” report. The location filter did not function correctly.

## PorkSense

- It is now possible to deliver animals that are in a certain weight range. Where in the past it was only possible to deliver the lightest or the heaviest animals of the group it is now also possible to deliver a midrange.

### Start new delivery: Range animals



- Delayed delivery



It is now possible to delay the start of a delivery. This way it is now possible for example to prepare the delivery and set the fencing correctly for delivery during the day when people are present on the farm and actually start the delivery remotely in the evening when nobody is present at the farm anymore.

A setting on the farm overview page specifies whether the start of deliveries is delayed or not. When deliveries are delayed there is an extra step in the delivery process: Wait for delivery start. A user action is required then in the Velos user interface to actually start the delivery.

- It is now possible to start a delivery even if the Velos installation has no internet connection.
- Shorter learning phases are now allowed. Minimum values are now:
  - Learning phase 1: 3 days
  - Learning phase 2: 3 days
  - Learning phase 3: 3 days
  - Learning phase 4: 3 days
  - Learning phase 5: 2 days

Default and recommended values are unchanged:

- Learning phase 1: 14 days
- Learning phase 2: 7 days
- Learning phase 3: 7 days
- Learning phase 4: 5 days

- Learning phase 5: 2 days
- Fixed an issue where the PorkTuner status light did not indicate state learning finished correctly.

### General

- Added VP1007 firmware version 3.00.06 to support the new VP1007-B. This firmware version also supports VP1007.
- Fixed an issue where resetting the safeguard errors on the power overview page did not work for a VP4102.

## Velos 2021.2 SR1

### SowSense

- On the farm overview animals that must be marked where only displayed if they also had to be separated. This has been fixed. Now animals that only have to be marked are also displayed on the farm overview.

### General

- A security vulnerability has been discovered in the log4j library that is used in Velos. This has been fixed in this version by using log4j version 2.15.
- Firmware upgrade files of the VP1001 and the VP1007 have been removed from Velos temporarily because of issues discovered in upgrading the firmware.
- Fixed an issue in user management role permissions where an error could occur when creating a new user role.
- Fixed an issue where no system attention was generated for V-Packs that were missing for the VPU.

## Velos 2021.2 SR1a

### General

- An additional fix has been added to solve the security vulnerability has been discovered in the log4j library that is used in Velos. This has been fixed in this version by using log4j version 2.16.

## Velos 2021.2 SR1b

### SowSense

- On the feed balance report, it is possible to specify the filters “Feed balance more than (g)” and “Feed balance more than (%)”. These are the same as the settings used for generating feed balance attentions. For the attentions both need to be true, “more than (g)” AND “more than (%)”. In previous versions of Velos the report worked different. In the report it was “more than (g)” OR “more than (%)”. This has been modified now so for the report also both have to be true.
- On the feeding tab of the farm overview page, it is possible to select a breeding or farrowing section. On the page that is opened there, it is possible to select the columns to show. In the column selector not all column names were showed correctly. Fixed this issue.

## PorkSense

- On the delivery details page, it is possible to select the columns to show. In the column selector not all column names were showed correctly. Fixed this issue.

## General

- An additional fix has been added to solve the security vulnerability has been discovered in the log4j library that is used in Velos. This has been fixed in this version by using log4j version 2.17.

# Velos 2021.2 SR2

## ProSense

- Animal weights measured by the PPT in short visits were not always correct measurements. Although the animal day weight calculation tries to filter out these outlier measurements by taking the median of all weights measured during a day, it turned out that not all outliers were removed this way. Therefore, from now on animal weights measured in visits with a duration less than 60 seconds will no longer be stored on the Vpu. Animal visits with zero-feed-intake, which are often also very short visits, will not be stored at all anymore. When downloading the csv-file with animal visits from the Vpu these visits and animal weights will no longer be present. However, if an installation stores visits in the cloud, Nedap BI, then these visits and animal weights will still be present there.
- In the settings page for feed attentions, it was no longer possible anymore to set the minimal feed intake attention level. Fixed this issue.

## General

- An additional fix has been added to solve the security vulnerability has been discovered in the log4j library that is used in Velos. This has been fixed in this version by using log4j version 2.17.1.
- It is possible to add a location to Velos without specifying a name for it. If this was done, then it was impossible to edit this location because the name is the link that must be clicked to edit the location. As of this version a clickable edit icon is added for locations without a name.

## Appendix: PPT calculations

This appendix explains how values are calculated by Velos regarding the PPT. This is divided in two sections. The first section explains how values are calculated for a single animal. The second section explains how values are calculated for location, i.e. all animals on that location.

### Calculations for a single animal

#### Supply date

Timestamp of the first visit of the animal with time set to 00:00

#### Start test

Supply date + 3 days

*Example:*

*Assume*

*- Supply date is 01-01-2021 00:00*

*Then*

*Start test is 04-01-2021 00:00*

#### Completed days in test and last completed day

Number of days finished after start test. A day is finished when midnight is reached and the next day starts. Completed days in test stops counting if there are no more visits registered. Counting stops at the last day where visits were detected. The last completed day is the last finished day where visits were registered.

*Example:*

*Assume*

*- Start test is 04-01-2021 00:00*

*Then*

*On 04-01-2021 completed days in test is 0 and last completed day is -*

*On 05-01-2021 completed days in test is 1 and last completed day is 04-01-2021*

*On 06-01-2021 completed days in test is 2 and last completed day is 05-01-2021*

*etc...*

*Example:*

*Assume*

*- Start test is 04-01-2021 00:00*

*- Last visit was on 06-01-2021*

*- Today is 10-01-2021*

*Then*

*On 04-01-2021 completed days in test is 0 and last completed day is -*

*On 05-01-2021 completed days in test is 1 and last completed day is 04-01-2021*

*On 06-01-2021 completed days in test is 2 and last completed day is 05-01-2021*

*On 07-01-2021 completed days in test is 3 and last completed day is 06-01-2021*

*On 08-01-2021 completed days in test is 3 and last completed day is 06-01-2021*

*On 09-01-2021 completed days in test is 3 and last completed day is 06-01-2021*

*On 10-01-2021 completed days in test is 3 and last completed day is 06-01-2021*

*etc...*

*Example:*

*Assume*

- *Start test is 04-01-2021 00:00,*
- *There were visits on all days except on 07-01-2021*
- *Today is 10-01-2021*

*Then*

*On 04-01-2021 completed days in test is 0 and last completed day is -*  
*On 05-01-2021 completed days in test is 1 and last completed day is 04-01-2021*  
*On 06-01-2021 completed days in test is 2 and last completed day is 05-01-2021*  
*On 07-01-2021 completed days in test is 3 and last completed day is 06-01-2021*  
*On 08-01-2021 completed days in test is 3 and last completed day is 06-01-2021*  
*On 09-01-2021 completed days in test is 5 and last completed day is 08-01-2021*  
*On 10-01-2021 completed days in test is 6 and last completed day is 09-01-2021*  
*etc...*

### **Start weight**

Median of the animal weights in visits during the 2 days before start test.

*Example:*

*Assume*

- *Start test is 04-01-2021 00:00,*

*Then*

*Start weight is the median of the animals weights in visits between 02-01-2021 00:00 and 04-01-2021 00:00*

### **End weight**

Median of the animal weights in visits during the last completed day.

### **Total feed intake**

Sum of the feed intake in visits from start test up to and including the last completed day.

### **Weight gain**

End weight - start weight

### **Daily feed intake**

Total feed intake / Completed days in test

### **Daily growth**

Weight gain / Completed days in test

### **Feed conversion rate**

Total feed intake / Weight gain

## Calculations for all animals on a location

### Supply date

Earliest supply date of all animals on the location

*Example:*

*Assume*

- 3 animals on one location
- Supply date of animal 1 is 01-01-2021 00:00
- Supply date of animal 2 is 02-01-2021 00:00
- Supply date of animal 3 is 03-01-2021 00:00

*Then*

*Supply date of the location is 01-01-2021 00:00*

### Start test

Earliest start test date of all animals on the location

*Example:*

*Assume*

- 3 animals on one location
- Start test of animal 1 is 04-01-2021 00:00
- Start test of animal 2 is 05-01-2021 00:00
- Start test of animal 3 is 06-01-2021 00:00

*Then*

*Start test of the location is 04-01-2021 00:00*

### Completed days in test

Highest number of completed days of all animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- Completed days in test animal 1 is 7
- Completed days in test animal 1 is 6
- Completed days in test animal 1 is 5

*Then*

*Completed days in test of the location is 7*

### Avg. start weight

Average start weight of all animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- Start weight of animal 1 is 28.0kg
- Start weight of animal 1 is 29.0kg
- Start weight of animal 1 is 33.0kg

*Then*

*Avg. start weight of the location is 30.0kg*

**Avg. end weight**

Average end weight of all animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- End weight of animal 1 is 117.0kg
- End weight of animal 2 is 121.0kg
- End weight of animal 3 is 122.0kg

*Then*

*Avg. end weight of the location is 120.0kg*

**Avg. total feed intake**

Sum of the total feed intake of all animals on the location / number of animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- Total feed intake of animal 1 is 92140g (92.1kg)
- Total feed intake of animal 2 is 96540g (96.5kg)
- Total feed intake of animal 3 is 88440g (88.4kg)

*Then*

*Avg. total feed intake of the location is 92373g (92.4kg)*

*Note: The calculation is performed with exact feed intake. In the user interface total feed intake is displayed with .1 kg accuracy. Performing the calculation with the displayed values may therefore give a slightly different result.  $(92. + 96.5 + 88.4)/3 = 92.3\text{kg}$ .*

**Avg. weight gain**

Sum of the weight gain of all animals on the location / number of animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- Weight gain of animal 1 is 101250g (101.3kg)
- Weight gain of animal 2 is 103750g (103.8kg)
- Weight gain of animal 3 is 103500g (103.5kg)

*Then*

*Avg. weight gain of the location is 102833g (102.8kg)*

*Note: The calculation is performed with exact weight gain. In the user interface weight gain is displayed with .1 kg accuracy. Performing the calculation with the displayed values may therefore give a slightly different result.  $(101.3 + 103.8 + 103.5)/3 = 102.9\text{ kg}$ .*

**Avg. daily feed intake**

Sum of the daily feed intake of all animals on the location / number of animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- Daily feed intake of animal 1 is 2201g
- Daily feed intake of animal 2 is 2532g
- Daily feed intake of animal 3 is 1996g

*Then*

*Avg. daily feed intake of the location is 2243g*

**Avg. daily growth**

Sum of the daily growth of all animals on the location / number of animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- Daily growth of animal 1 is 986g
- Daily growth of animal 2 is 1123g
- Daily growth of animal 3 is 1043g

*Then*

*Avg. daily growth of the location is 1051g*

**Avg. feed conversion rate**

Sum of the feed conversion rates of all animals on the location / number of animals on the location.

*Example:*

*Assume*

- 3 animals on one location
- Feed conversion rate of animal 1 is 2,21
- Feed conversion rate of animal 2 is 2,34
- Feed conversion rate of animal 3 is 2,62

*Then*

*Avg. feed conversion rate of the location is 2,39*