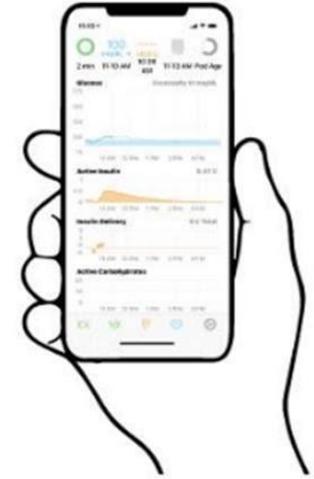


Loop AND Learn

Master Your DIY Closed-Loop Insulin Delivery System



Nightscout Basics

What is it? Why do I need it? How do I get it?

August 2021 (PDF Revised April 22, 2023)

[Nightscout Basics \(YouTube Video\)](#)

What is Nightscout?

Nightscout is a multi-purpose tool

- **Dashboard**
 - Dense, need to learn how to use this
 - Displays essential information
 - Customizable, includes graphs and pills
- **Database**
 - Stores information
 - Supports **displays, reports and analysis**
- **Careportal (Log a Treatment)**
 - Allow multiple caregivers to be informed
 - Record notes: Exercise, Special Meals



**Nightscout may appear cluttered at first . . .
but do not get overwhelmed**

Using NS with Loop

Loop AND Learn

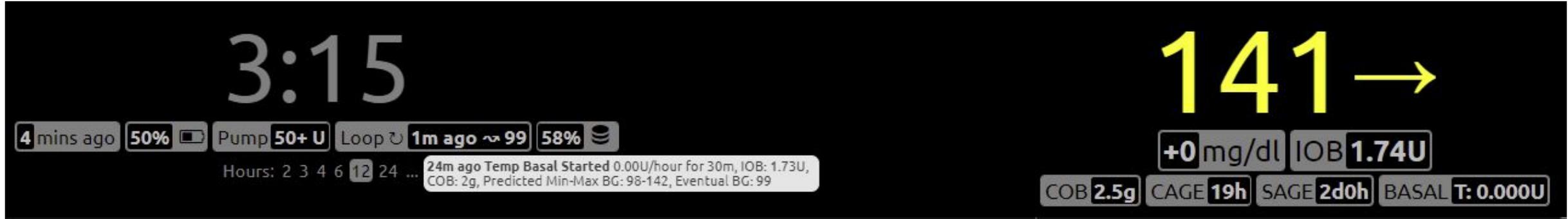
Why use Nightscout?

Nightscout is the BEST tool for consolidating your data, analyzing your settings and preparing information for your doctor

- Successful loopers use Nightscout to guide setting adjustments
- Most mentors are more willing to assist you if you have a Nightscout site
- You can analyze and adjust settings while in closed loop (so long as you are close), **without fasting and on a “normal” day** with Nightscout

**Be kind to your mentors . . .
use Nightscout**

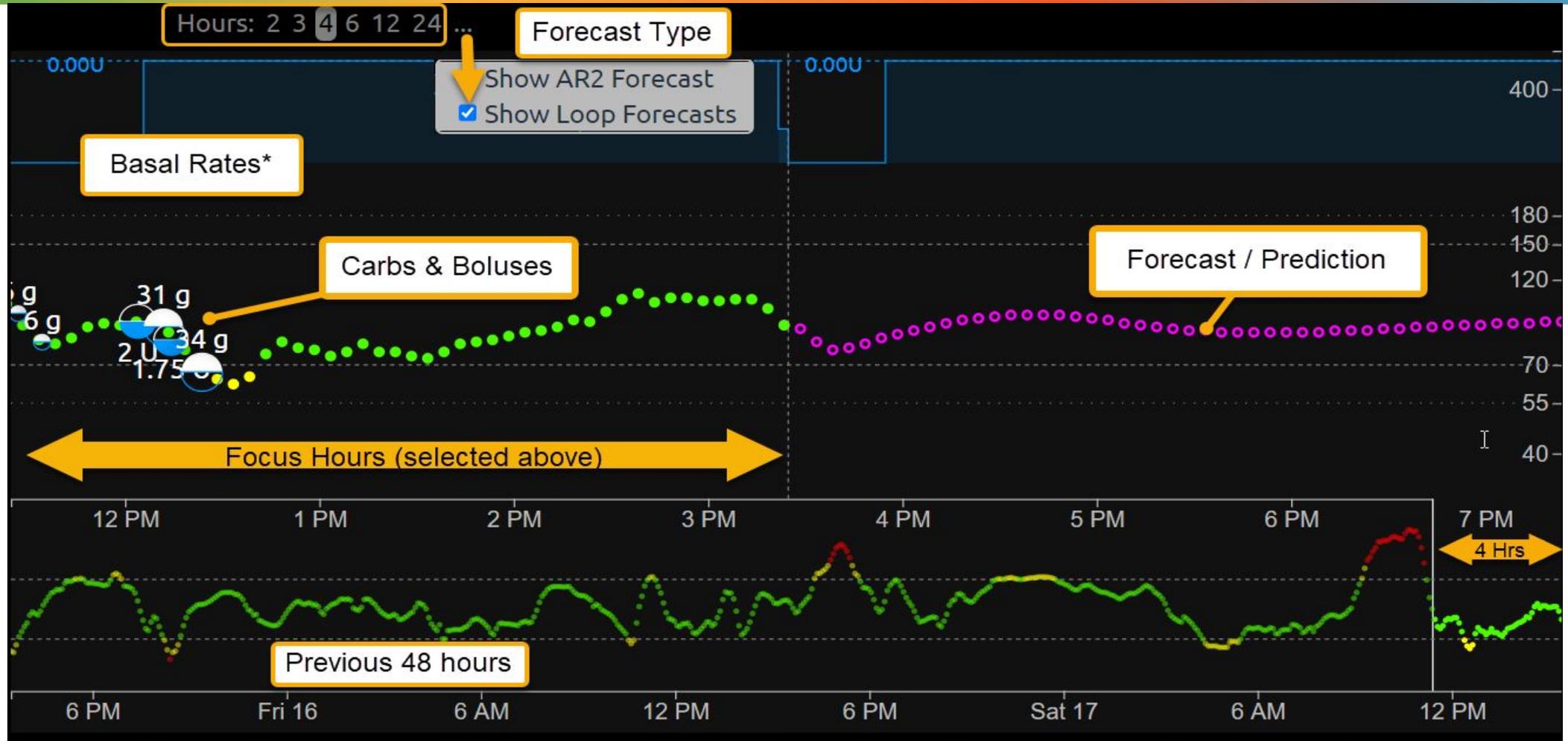
Instrument panel - top of the Dashboard



- Clock
- “Pills”
 - Small boxes with data
 - More info when you hover
- CGM reading and trend arrow
- Customize display with plug-ins

“Pills” display selected plug-ins

Graphs



Retro / focus hours



All elements change as you slide the (left edge) of the focus hours along the 48 hour graph

- Pills change
- “Retro” word shows up
- Focus point of time
- Prediction, at that time, overlaid with reality at that time
- Reference pill data

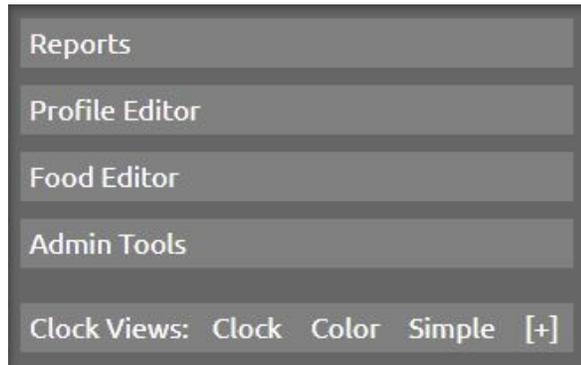
WHY LOOK AT THIS? What does this tell you? This will be covered in a future video ... stay tuned!

“Hamburger” menu

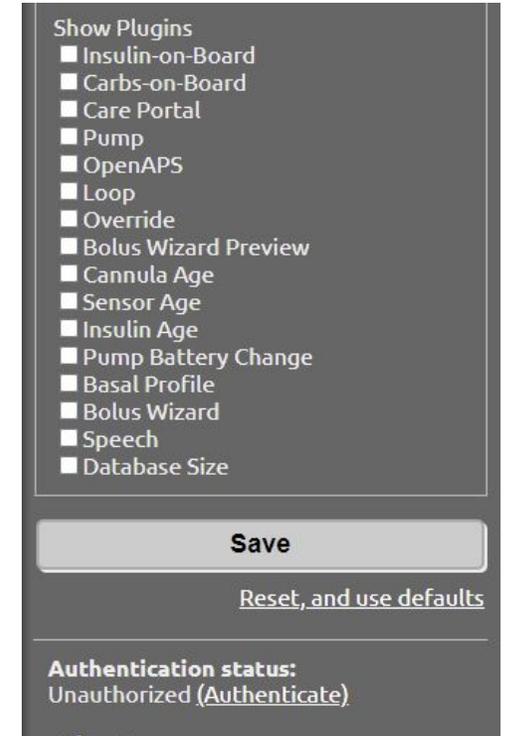
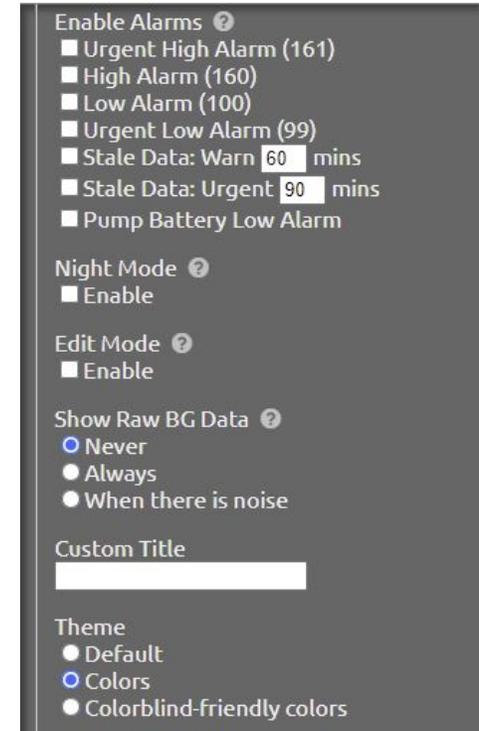
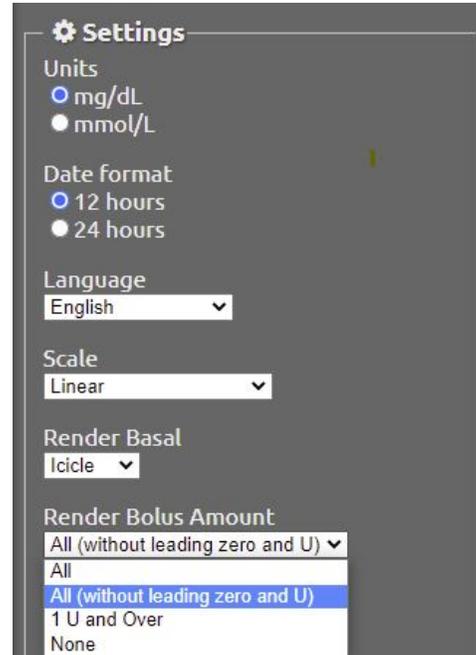
Click on “hamburger” menu
(Upper right of Dashboard)



Top Display



Settings: Adjust and
Scroll to Bottom to Save



Check Boxes and Values selectable
[Follow link for details on set-up](#)

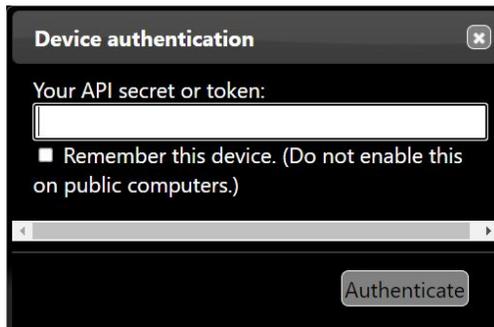
Authentication and Care Portal plugin

Authenticate Nightscout for access to:

- Care Portal
- Profile Editor
- Admin Tools

To get to Device authentication:

- Click the lock
- OR
- Use “Authenticate” at the bottom of the hamburger menu

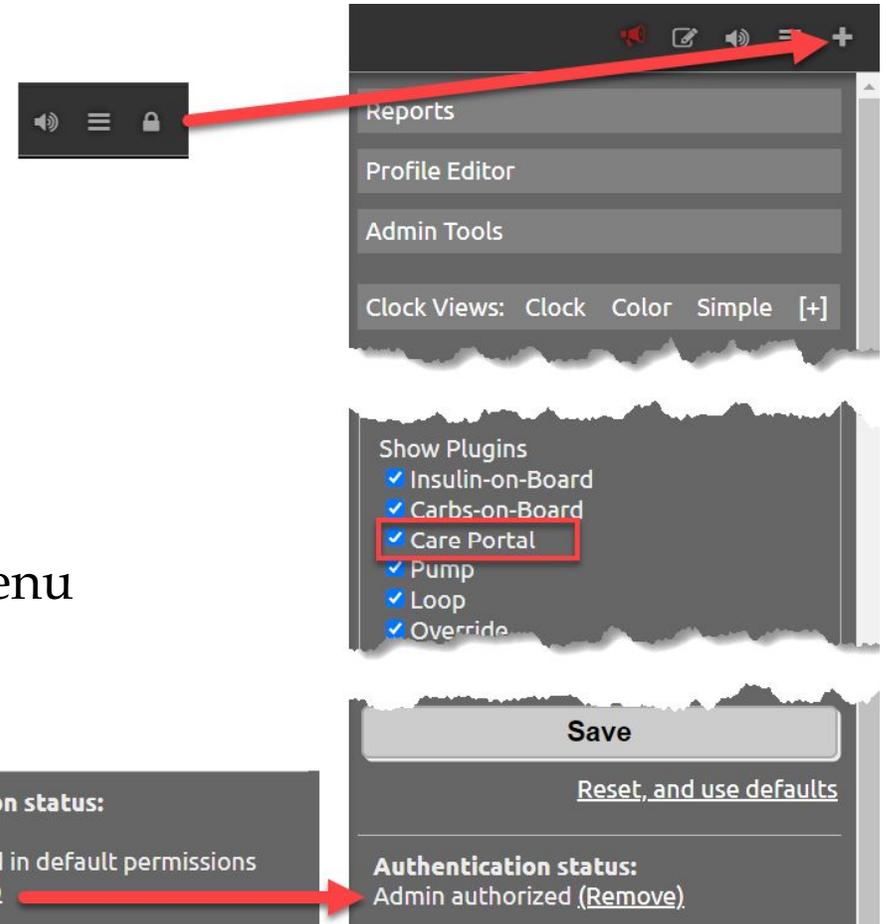


Device authentication

Your API secret or token:

Remember this device. (Do not enable this on public computers.)

Authenticate



The first screenshot shows a hamburger menu with a lock icon. A red arrow points from the lock icon to the second screenshot.

The second screenshot shows the hamburger menu expanded, listing Reports, Profile Editor, Admin Tools, and Clock Views. A red arrow points from the top right of the menu to the third screenshot.

The third screenshot shows the 'Show Plugins' section with a list of plugins: Insulin-on-Board, Carbs-on-Board, Care Portal, Pump, Loop, and Override. The 'Care Portal' plugin is highlighted with a red box.

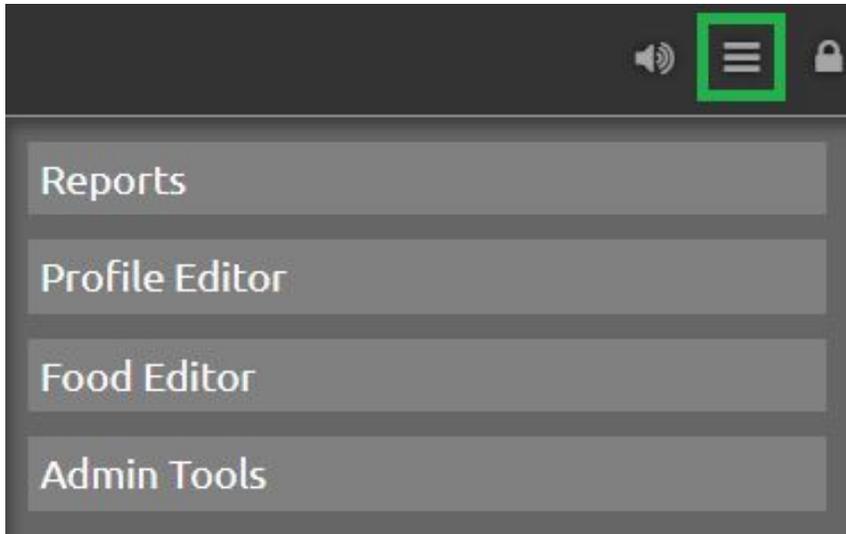
The fourth screenshot shows the authentication status: 'Unauthorized Reads enabled in default permissions (Authenticate)'. A red arrow points from this status to the fifth screenshot.

The fifth screenshot shows the authentication status: 'Admin authorized (Remove)'. It also includes a 'Save' button and a 'Reset, and use defaults' link.

Care Portal plugin must be enabled

Other parts of Nightscout

Reports



Profiles and Admin Tools

- Device must be authenticated
- Loop auto-uploads profiles

Preview of topics for future presentations

Nightscout reporting

Day to day	Week to week	Daily Stats	Distribution	Hourly stats	Percentile Chart
Weekly success	Calibrations	Treatments	Profiles	Loopalyzer	

From: 10/26/2020 To: 11/01/2020 Today Last 2 days Last 3 days Last week
Last 2 weeks Last month Last 3 months

Notes contain:

Event Type:

Mo Tu We Th Fr Sa Su

Target BG range bottom: top:

Order: oldest on top newest on top

SHOW

Day to day

To see this report, press SHOW while in this view

Display: Insulin Carbs Basal rate Notes Food Raw IOB COB Predictions OpenAPS
 Insulin distribution Size

Scale: Linear Logarithmic

Authentication status:

Admin authorized ([Remove](#))

How to get Nightscout?

DIY Nightscout (<https://www.loopandlearn.org/nightscout/#ns-get>)

- Take your time, similar to building Loop
- Learn terms like “restart your dynos” and “update your config vars”
- Don’t let this scare you - the steps are straightforward

Nightscout as a Service (<https://nightscout.github.io/#nightscout-as-a-service>)

- There are several sources to get your site created for you for a fee
 - Create and maintain your site
 - Manage your database
 - Provide a simple interface for adjusting desired options

Resources

Websites

- Loop and Learn: www.LoopandLearn.org
- LoopDocs: <https://loopkit.github.io/loopdocs/>
- Nightscout Documentation: <https://nightscout.github.io/>

Facebook Groups

- Loop and Learn: <https://www.facebook.com/groups/LOOPandLEARN>
- Looped: <https://www.facebook.com/groups/TheLoopedGroup>
- CGM in the Cloud: <https://www.facebook.com/groups/cgminthecloud/>

YouTube

- Loop and Learn Channel: <https://www.youtube.com/c/LOOPandLEARN>

*Endless thanks go out to all Nightscout contributors and
the countless volunteer hours that have supported the
#WeAreNotWaiting movement*



NIGHTSCOUT
#WeAreNotWaiting

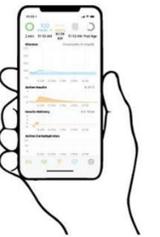
Thank you for looping with us!

Visit us at

- [Loop and Learn Website](#)
- [Facebook Loop and Learn](#)
- [YouTube Loop and Learn](#)

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Disclaimer

Nightscout is a do-it-yourself open-source cloud application.

This presentation is provided to assist you in making your own decisions, in consultation with your health care professionals, regarding your own diabetes self-management.

You take full responsibility for building and running this application and do so at your own risk.

 **Please remember that Nightscout is not FDA-approved.** 

Other links

- **How to get Nightscout**

<https://www.loopandlearn.org/nightscout/#ns-get>

- **Configure your Nightscout (General)**

https://nightscout.github.io/nightscout/setup_variables/

- **Configure your Nightscout (Loop)**

https://loopkit.github.io/loopdocs/nightscout/new_user/#add-loop-variables-to-nightscout