The Complete Guide to Converting CAE Lucina to CAE Maestro

August 10, 2021

Introduction

CAE Maestro is the latest generation of patient simulation software. Featuring the power of CAE Physiology for model-driven simulation and designed with a streamlined interface for instructor-driven scenarios, CAE Maestro is the most comprehensive and user-friendly application of its kind.

This document highlights the differences between Maestro and its predecessor (Müse), and it answers the frequently asked questions about converting from Müse to Maestro. It includes important information that customers should understand before converting their simulators.

Key Benefits of Maestro

- Ideal for both model-driven simulation powered by CAE Physiology and instructor-driven ("manual-mode") simulation with a streamlined interface
- Designed for both PC and tablet
- More intuitive and efficient user interface
- More information for facilitator and learner
    - more detailed patient status
    - graphical indicators of patient changes and interventions performed
    - categorized logs
    - display of CPR feedback on patient monitor for coaching
- More control over the patient and monitors
    - access to settings by clicking widgets
    - quick undo of settings
    - instructor control of patient monitor
    - access to more bleeding parameters when running SCEs for Apollo
- Expanded assessment capabilities
    - custom checklists
    - multiple checklist instances
- Easier content development and management
    - no more separate patient and scenario libraries to manage
    - associate patient records (media files) with SCEs
    - test model-driven scenarios while editing
- Platform switching, the ability to develop content for any type of simulator from a single Maestro Standalone installation
- Under the hood, the latest web-based interface technologies
- Enhanced interoperability with the CAE ecosystem and third-party devices
- Support for future learning modules and exciting improvements to CAE Physiology

Pricing

- List price, $4995 USD
    - Customers with units under warranty are entitled to a discount of 5-10%, under the terms of the warranty, amounting to total discounts as follows:
        - Value warranty, 5% total discount ($4745 USD)
        - Premier and Premier Plus warranties, 10% total discount ($4495 USD)
- Each Maestro conversion also includes one free license for both Maestro Standalone and the Standalone Physiology option.
- Additional Maestro Standalone licenses are available
    - Maestro Standalone (manual-mode/instructor-driven only), $495 USD
    - CAE Physiology option for Maestro Standalone, $1495 USD
- Lucina units shipped on or after January 1, 2021 are eligible for a free conversion to Maestro. Customers with qualifying units will receive an email with instructions and the required license key(s).

Compatible Simulators

- Maestro is now compatible with CAE Lucina units with SymEyes:
    - CAE Lucina with SymEyes
        - Requires the Software upgrade from Müse to Maestro - $4995.
- The simulator must have a compatible instructor computer.
    - The simulator to be converted to Maestro must be updated to Müse v2.8.313 (a free update) before the Maestro conversion is performed.
        - If currently running Müse 2.3.25, then need to install Müse 2.7.70, then Müse 2.8.313, then the Maestro 2.7 converter.
          You cannot go directly from Müse 2.3.25 to Müse 2.8.313
        - If currently running Müse 2.7.70, 2.8.293 or 2.8.304, need to install Müse 2.8.313, then the Maestro 2.7 converter.
    - Only macOS Big Sur (11) will be supported for both simulator and standalone for current CAE Lucina customers using Mac. It is not compatible with macOS Catalina (10.15 or earlier).
    - Customers with a Mac need to have a MacBook Air introduced in mid-2013. MacBook Pros are not supported. If you have a MacBook Pro you will need to purchase and convert to a Surface Pro for the Maestro conversion.
    - Note: Once the Mac is converted to macOS Big Sur, it will no longer be able to run Müse. This would primarily affect customers who are installing the Maestro standalone on another computer that had the Müse standalone.
- You do not need to be under warranty to purchase the Maestro conversion.
- CAE Lucina units without SymEyes will be addressed in the Phase II roll out.
- Compatibilty with CAE LucinaAR will be addressed in the Phase II roll out.

Conversion of Müse SCEs

- Upon conversion to Maestro, all Müse content (user-created and factory SCEs) loaded on the simulator will be converted to their Maestro equivalents.
- In general, SCEs are expected to run the same in Maestro as they did in Müse with exceptions noted below, affecting a very small fraction of content. However, users will be cautioned to verify the operation of their converted content before conducting training.

Features Coming Soon

To ensure quality, the following features of Müse that are intended for Maestro are not included in the initial release for Lucina:

- Thermodilution cardiac output
- Custom medication responses
- Support for Spanish, Portuguese, Russian and Polish

Purposeful Exclusion of Müse features in Maestro

- Multiple scenarios running simultaneously
    - This little-used feature has been excluded to simplify the interface.
    - Upon conversion, multiple scenarios in any Müse SCE will be merged into a single scenario.
- Custom conditions
    - In most use cases, the same functionality can be accomplished with scenario states.
    - Upon conversion, custom conditions in Müse scenario states will be replaced with the collection of individual settings in that custom condition.
- User accounts
    - Customers told us that they do not use the user-account system in Müse and that it is an inconvenience. Maestro has no user accounts at this time. Security of the system and customer data can be achieved by setting a password on the instructor device (tablet or laptop).

User-Interface Improvements Impacting the Presentation of Content

- While in Müse, the patient baseline acts like a scenario state that is applied at the start of the SCE, the patient baseline in Maestro modeled-mode SCEs lets you snapshot a patient at exactly the moment you want the scenario to begin. This is the replacement for saving patients into a separate library, and when creating a new SCE, the user can now simply import a patient from any existing SCE. Upon conversion from Müse, any patient-baseline settings in SCEs become part of a new state in the scenario, called Baseline State.
- There is no longer a separate scenario library. When creating a new SCE, the user can simply import a scenario from any existing SCE.
- Müse's cardiac rhythms with fixed heart rates are replaced by simply setting the cardiac rhythm and heart rate independently. Likewise, the PVC probability can be set independently for any applicable rhythm.
- The PEA rhythm is now just Sinus rhythm with the PEA option turned on. The new PEA option can be used with any rhythm to stop cardiac output, which disables pulses and—when using the physiological model—causes all the other expected changes to the patient.
- There is no bowel sound option for "none" anymore. Converted Müse content will use the muted option, instead.
- Stridor is now found among the so-called Vocal Sounds.