

BESA Epilepsy 2.0 - Update History

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BESA Epilepsy 2.0 March 2016 Patch 10

The patch 10 includes all changes of the previous patches and does not require the previous patches to be installed. You can apply this patch directly to the setup or previously patched versions.

Bugfixes

- **Database update:** The program crashed in some scenarios, if patients were no longer visible in the patient list since their recordings are outside the inclusion criteria.
- **Database patient list and recordings:** Fixed the issue that sometimes no epochs are visible for a patient and an empty rectangle is shown in the patient list.

January 2019

BESA Epilepsy 2.0 March 2016 Patch 9

- Patch is not available to customers. Required for testing.

BESA Epilepsy 2.0 March 2016 Patch 8

The patch 8 includes all changes of the previous patches and does not require the previous patches to be installed. You can apply this patch directly to the setup or previously patched versions.

Bugfixes

- **Database update:** Bugfix related to different epochs in detection and review program and checking for online recordings.

Improvements

- **Splash screen:** CE marking added. In addition, the license information field does no longer show “Clinical Edition” within EU and other countries that recognize CE certification but it still shows your license scheme (Review, Spike, Seizure, or Complete). For the US market and all remaining countries, the research edition of this product is available.
- **User documents:** Updated due to the changes introduced for the splash screen and due to new regulatory requirements.

BESA Epilepsy 2.0 March 2016 Patch 7

The patch 7 includes all changes of the previous patches and does not require the previous patches to be installed. You can apply this patch directly to the setup or previously patched versions.

Bugfixes

- **Database update:** Bugfix related to different epochs in detection and review program
- **Alpha Trace:** Smaller bug fixes related to database update and reading from export folder.

Improvements

- **XLTEK reader:** New reader supporting the new XLTEK 8.1 file format.

BESA Epilepsy 2.0 March 2016 Patch 6

The patch 6 includes all changes of the previous patches and does not require the previous patches to be installed. You can apply this patch directly to the setup or previously patched versions.

January 2019

Improvements

- **Database configuration - Alpha Trace:** New checkbox **Is BESA Export folder** is now available in the **Add new EEG data folder** dialog. This checkbox is only visible, if Alpha-Trace is selected as data format. Check this option, if the specified folder contains only link files to the server data. Do not check this option, if the folder is the server path and a normal update should be applied for this folder.
- **Hide events:** Enhancement for the event list in EEG Review and Seizure Review. You have now the possibility to hide events (e.g. system events) permanently in BESA Epilepsy. You can hide an event (and all matching events) by a right-click on the event in the event list. Select the **Hide** item in the appearing popup menu to remove it from the event list. The new **Hide** event list filter button retrieves the pushed state. You can use this button to make the events temporary visible and to hide them again during review. You can right-click the **Hide** button to see the list of hidden events and to clear the list.
- **EEG Review / Seizure Review:** In the observation details window (**Obs**), the **Map** column is now also visible. This allows you to directly add images of the 3D map to the report from this window. You do not longer need to switch back to the event list for taking a 3D map image.

Bugfixes

- **Database update:** Bugfix related to epochs of patients which are currently in recording.
- **Alpha Trace:** Bugfix in reading the subject information.
- **Clustering:** Bugfix related to automatic clustering on very short files.

BESA Epilepsy 2.0 March 2016 Patch 5

- Patch is not available to customers. Required for testing.

BESA Epilepsy 2.0 March 2016 Patch 4

- Patch is not available to customers. Required for testing.

BESA Epilepsy 2.0 March 2016 Patch 3

The patch 3 includes all changes of the previous patches and does not require the previous patches to be installed.

Improvements

- **BESA LTM pipeline:** The action behind the **File → Open Review Files in BESA Research... CTRL+ B** menu item works now correct for all review types and not only on pressing the **BESA Research** button in the database window. If you perform this action, all events of the epileptiform hyperclusters are send as triggers (starting number is 51) to BESA Research. In addition, the patch now enables sending your manually marked Spike events (**Sp**) as triggers (starting number is 81). Each single spike (**Sp**) gets a new trigger code. Related to seizures the action now sends all types of seizure events (**SzD, Sz, SzV, SzE, and SzB**) which are marked for the report as comment events to BESA Research. The comments are then accessible in the event log of BESA Research.

January 2019

- **3D mapping window:** In Seizure Review the 3D mapping window is not shown automatically. In Spike Review and EEG Review the 3D mapping window is shown automatically. Use the [View → Auto-Show/Hide Mapping Window](#) menu item to modify this behavior.
- **Smaller changes** for the list of ignored files in the database configuration.

Bugfixes

- **Nicolet-Nervus:** Bugfix related to crash on reading EEG data files which contain invalid date and time information.
- **Database update:** Bugfix related to current recorded patients. The internal “online” state was not set correct by database. This fix solves also issues on starting spike and seizure detections for current recorded patients.
- **Patient recordings:** Bugfix related to incomplete database update. In this case the database did show empty epochs for all patients, which have been processed until the cancelation. The next update did not correct the empty epochs and the patients always remain with the empty epochs. This problem is now solved. Press the [Recording update](#) button or press the [Database Update](#) button to calculate missing epochs. This fix enables aborting a database update without problems. **Spike review:** If you right-click a cluster event, a new event of type **Sp** with the comment **Spike** is created. The new event is automatically added to the EEG report which can be accessed in EEG Review or Seizure Review. This allows you to document single spikes which might be added automatically to a hypercluster that mostly contains non-epileptiform activity. You can e.g. send these single spike events to BESA Research for further analysis or pattern search.
- **Spike review:** Bugfix related to crash during hypercluster evaluation and occurring only on Windows 8.1.
- **Electrode configuration:** Bugfix in manual assignment of a [<MySettingsX>](#) button.
- **Event list:** Bugfix on filtering the event list for seizure events (Sz...).

BESA Epilepsy 2.0 March 2016 Patch 2

Bugfixes

- **Alpha-Trace:** Bugfix on reading data files which contain “REF” as reference channel.
- **BESA format (.besa):** Bugfix in showing the epochs in the database.
- **Cadwell:** Bugfix in reader. Note that you need the Cadwell API SDK to read Cadwell EEG data on computers without having a Cadwell software installed.
- **Nicolet-Nervus:** Bugfix on reading data files which have more than 2 different sampling rates over all channels.

BESA Epilepsy 2.0 March 2016 Patch 1

- Patch is not available to customers.