



Persyst Overview

Why Persyst?

For more than 30 years Persyst has been committed to providing advanced EEG detection and Trending solutions to clinical practice in order to assist in the review and analysis of EEG data.

Persyst is used for EEG monitoring and review in hundreds of hospitals including 97 out of 100 top hospitals for Neurology in the U.S.¹ The Persyst software package features Spike and Seizure detection and a comprehensive set of customizable EEG trends. Persyst Artifact Reduction is the only FDA cleared solution for reducing most non-cerebral signals and artifact, resulting in clearer EEG and higher value qEEG.

Persyst is the only EEG trending and detection software that is integrated, sold and supported by every major EEG manufacturer.

¹ As ranked by US News:
<https://health.usnews.com/best-hospitals/rankings/neurology-and-neurosurgery>

Recent Persyst Breakthroughs

- **Persyst 14 features a new Seizure Detector with higher sensitivity** and 10x fewer false positives than any previous Persyst seizure detector.
- **The Persyst 14 Spike and Seizure detectors** are each shown in separate peer reviewed publications to perform within the same range as expert human readers^{1,2,3}, making Persyst the most powerful FDA cleared detection and trending software on the market.
- **Persyst's proprietary Versus Baseline Trend highlights statistically significant changes** in the EEG data that may be clinically relevant. Versus Baseline highlights changes whether they happen quickly or slowly develop over hours or days. Baseline information carries across multiple recordings for the same patient, allowing for comparisons over an entire patient stay.
- **The new Persyst 14 Heart Rate Trend** utilizes ECG signals obtained as part of the EEG recording and is continuously displayed alongside the qEEG and seizure detection trends. This is an example of Persyst's ability to trend physiological data that may be associated with events in the EEG such as seizures.

¹ Scheuer, Mark L., Anto Bagic, and Scott B. Wilson. "Spike detection: Inter-reader agreement and a statistical Turing test on a large data set." *Clinical Neurophysiology* (2016). [http://www.clinph-journal.com/article/S1388-2457\(16\)30650-2/fulltext](http://www.clinph-journal.com/article/S1388-2457(16)30650-2/fulltext)

² Joshi, C. N., K. E. Chapman, J. J. Bear, S. B. Wilson, D. J. Walleigh, and M. L. Scheuer. "Semiautomated Spike Detection Software Persyst 13 Is Noninferior to Human Readers When Calculating the Spike-Wave Index in Electrical Status Epilepticus in Sleep." *J Clin Neurophysiol* 35, no. 5 (Sep 2018): 370-74. <https://dx.doi.org/10.1097/WNP.0000000000000493>.

³ Scheuer, M.L., Wilson, S.B., Antony, A., Ghearing, G., Urban, A., Bagic, A.I. "Seizure Detection: Interreader Agreement and Detection Algorithm Assessments Using a Large Dataset." *J Clin Neurophysiol* 00 (May 2020): 1-9. <https://dx.doi.org/10.1097/WNP.0000000000000709>

Persyst Software Assurance - included free for the first year

- Free upgrades allow access to Persyst's latest validated EEG clinical analysis tools.
- Persyst Mobile for iOS and Android enabled on Clinical Review for Server.
- Most cost-effective way to maintain validated and supported configurations.
- Multi-year discounts and increased volume discounts.
- Ensured compatibility with EEG System changes or upgrades.
- On-demand licensing, customized training and priority scheduling for webinars.
- Unlimited access to our team of experts for fast assistance.

Persyst Mobile

- Included at no extra charge with Persyst Software Assurance.
- Persyst Mobile provides access to patient Trends, EEG and Video, the ability to see recent notifications or add comments, on iOS and Android mobile devices and web browsers.



PERSYST®

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Persyst Acquisition

Persyst Continuous Monitoring is a powerful part of the Persyst software package. Persyst Continuous Monitoring is integrated within the OEM Manufacturer's EEG acquisition system and display, providing time-synchronized, continuous trending of EEG and physiological data as it is being acquired, along with online spike and seizure detection. Ongoing Artifact Reduction (AR) of the live data enables easier interpretation of Trends and Detections.

Persyst Continuous Monitoring, along with with Persyst Review, combine to provide a comprehensive solution for EEG monitoring, review and analysis.

Persyst Monitoring and Review

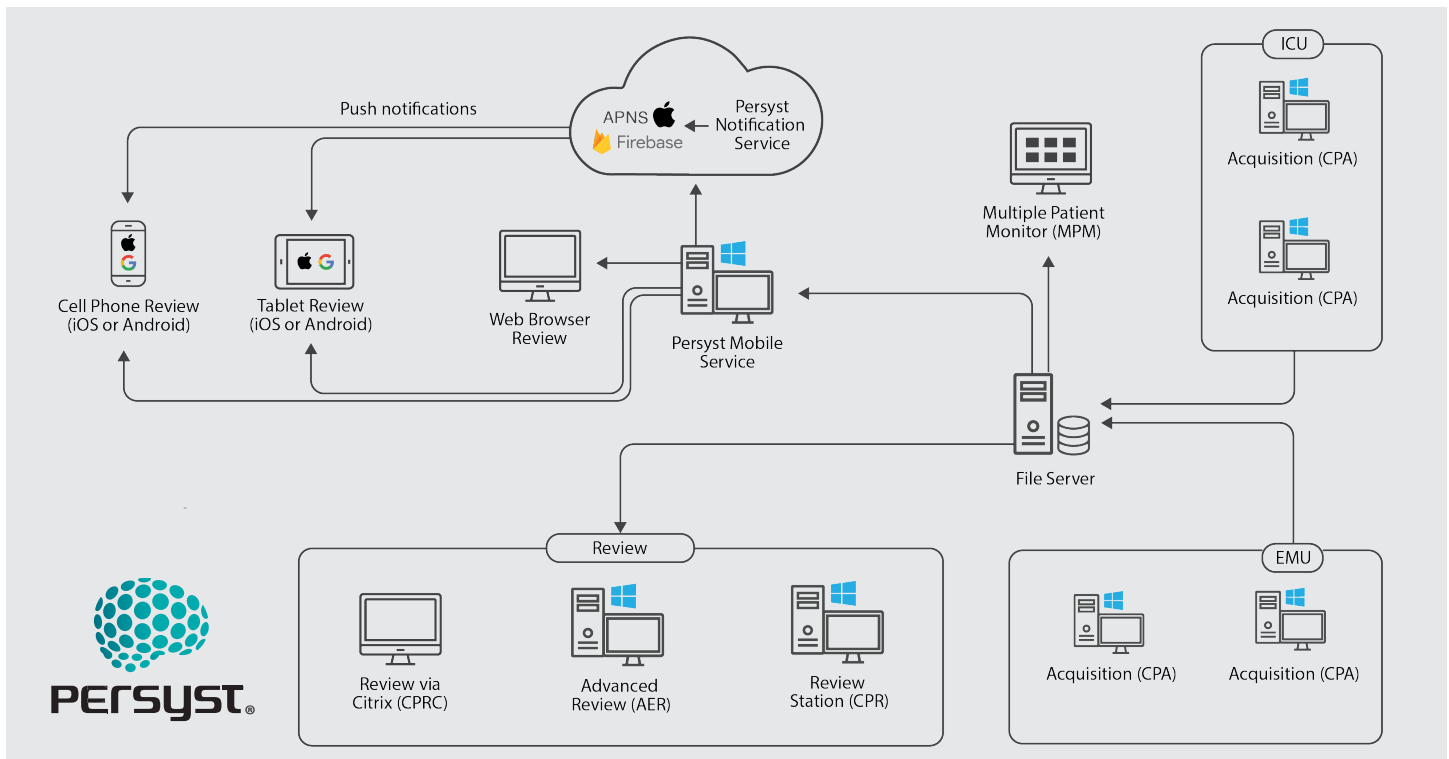
Persyst Clinical Review provides comprehensive universal EEG review capabilities and can open nearly 70 different commercial EEG formats. For recordings that have already been processed online by Persyst, Clinical Review provides a standard, easy to use interface for reviewing EEG waveforms, Trends, Seizure Detections, and Spike Detections. Clinical Review is integrated with the OEM EEG Manufacturer's review software, and synchronizes with the EEG display for deployment to monitoring stations. Clinical Review is the companion to Continuous Monitoring for the monitoring and offline review of processed recordings.

Persyst Advanced Review adds the ability to perform trending and detection on EEG records that have not been previously processed. This can be important for records received from other institutions, or for records acquired on older equipment where Persyst was not integrated on the acquisition system.

Persyst Clinical Review for Server extends the capability of the Clinical Review product so that it can be deployed on an existing Citrix Server allowing doctors and other staff to monitor patients from remote locations.

Combined with Persyst Software Assurance, Clinical Review for Server enables Persyst Mobile as well.

Persyst Mobile provides access to patient Trends, EEG and Video on iOS and Android mobile devices and web browsers. Included at no extra charge with Persyst Software Assurance.



Ambulatory Post Processing

Persyst Routine & Ambulatory is a full-featured EEG reader that provides standalone post-acquisition processing of existing records including spike and seizure detection and Artifact Reduction, but does not include trending. Persyst offers usage-based pricing for 3rd party providers of ambulatory recording.