Documentation Pages

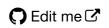
ShakeCast V3 (v3_introduction.html)

ShakeCast V4 (pyCast) (pycast_docs.html)

Workbook (inventory_workbook.html)

ShakeCast Project

Summary: ShakeCast is an application for automating ShakeMap delivery to critical users and for facilitating notification of shaking levels at user-selected facilities.



☑ Tip: Who should use ShakeCast: businesses, utility and other lifeline managers, emergency responders, and others have an urgent need for information about the impact on their own facilities so they can make informed decisions and take quick actions to ensure safety, restore system functionality, and minimize losses.

• Warning: Who should not use ShakeCast: individual users without facility inventory or organizations that look for earthquake information infrequently.

Release History

- ShakeCast V4 (beta, 2017)
- ShakeCast V3 (2015)
- ShakeCast V2 (2008)
- ShakeCast V1 (2004)

Current Release (Version 3)

Critical users (lifeline utilities, for example) can receive automatic notifications within minutes of an earthquake indicating the level of shaking and the likelihood of impact to their own facilities.

The current release of ShakeCast is Version 3.0 (October, 2015). This is a significant rewrite from Version 2.0, and although it preserves the basic features and principles, it is advised that all users upgrade to Version 3 to add significant improvements in robustness, capabilities and features, and ease of installation and use.

Usage

Situational awareness. ShakeCast is an application for automating ShakeMap delivery to critical users and for facilitating notification of estimated shaking levels at user-specific facilities. Full Web-based Graphical User Interface, notification services, and documentation.

Platform

MS Windows operating system (XP, 7/8 Server); Linux. ShakeCast AMI (CentOS-6) using Amazon Web Services (AWS) and VM (Linux, Win Server) Interface, PERL, MySQL, Apache, HTML5; responsive web.

Output

Email and txt messaging, PDF facility report, Web-based GUI using Google Maps.

References and Acknowledgements

Fraser, W. A., D. J. Wald, and K-W. Lin (2007). Using ShakeMaps and ShakeCast to Prioritize Post-Earthquake Dam Inspections, Proceedings of the Geotechnical Earthquake Engineering and Soil Dynamics Conference IV, Sacramento, CA.

Lin, K.W., and Wald, D.J., 2008, ShakeCast manual: U.S. Geological Survey Open-File Report 2008-1158, 90 p.

Wald, David J, and K. Lin (2007). USGS ShakeCast- Automating, Simplifying, and Improving the Use of ShakeMap for Post-Earthquake Decision Making, U.S. Geological Survey Fact Sheet 2007-3086, 6 pages.

Wald, David J., K. Lin, K. Porter, and L. Turner (2008). ShakeCast: Automating and Improving the Use of ShakeMap for Post-Earthquake Decision-Making and Response, Earthquake Spectra, in review.

Wald, D. J., B. C. Worden, V. Quitoriano, and K. L. Pankow (2005). ShakeMap Manual: Users Guide, Technical Manual, and Software Guide, USGS Open File Report, 131 pp.

Wald, D. J., K. Lin, B. Worden, and L. Turner (2006). ShakeCast: Facilitating the Use of ShakeMap for Post-Earthquake Decision-Making and Response within Caltrans and other Critical Lifeline Communities, September 2006, Proceedings of the Fifth National Seismic Conference on Bridges & Highways, San Francisco.

Acknowledgements

USGS contracted with Gatekeeper Systems, Inc., Pasadena, to help develop the prototype ShakeCast system (Version 1.0). Early funding for ShakeCast was provided by the USGS and the American Lifelines Alliance (ALA), and it is now supported by the USGS under the Advanced National Seismic System (ANSS). Ongoing development is done in-house, with PHP consulting from Hungry Mind, Inc, in Boulder. Motivation and support for the development of ShakeCast (Version 2) was provided by the California Department of Transportation (Caltrans) under the guidance of Loren Turner.

Tags: getting_started (tag_getting_started)

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