SeisFinder Test & Release Plan

Levels of Testing/Verifications

- Unit tests : Function-level testing, best to be developed by Viktor after testing-friendly refactorisation of code
- Verification : Develop an automated e-to-e workflow covering hazard curve, disaggregation. (executive summary of statistics or relevant info can be handy)
- Regression tests : Will be developed based on the verification

Next step

- Karim's 10 locations: Produce hazard/deagg and keep the output data as baseline (may not be scientifically correct)
- Viktor/Claudio to refactor the code to be more suitable for unit testing.
- Develop unit testing
- After refactoring, compare the output with the baseline (to prove no degradation during refactoring)
- Karim to verify the output (The code is now confirmed scientifically correct)
- Automate the verification process and implement as a regression test.

What to verify

1. For a given im level,

$(Total_{emp} - Type\_A_{emp})/ Total_{cyber}$ (= $Type\_A_{cyber} + Type\_B_{emp} + DS$) , the contribution of $DS + Type\_B_{emp} = DS$ ($Type\_B_{emp}$ is typically very low). Compare this with PointEqkSource at Top Contributing Faults tab.


Feature List

	Status	Note
Website		
Domain hosted (https)	O	
Static pages		Place holder pages are in place
User login	O	
User activity DB		eg. Allow the same queries for free
Event search		
Dataset	All Cybershake v18p6	
single site	O	

multiple site	O	
custom name	O	
Intensity measures (all?)	O	
Download IMs for all sites	O	
Download Acc. time series for all sites	O	
Site search		
Data set	All Cybershake v18p6	
Intensity measures (all?)	O	
NZ code spectra		Default values for Z factor, minimum distance, soil class to be developed.
Disaggregation Exceedance	50%, 10% 2%	
Disaggregation result	O	
by Type	O	
by Epsilon	O	
by Top contributing faults	O	
Ground Motion Selection		
Underlying code		
Link with web interface		

Deployment & Version control

4 separate servers to be deployed.

- Bleeding Edge http://hypocentre:5000 (Bleeding Edge) : Latest code, may be broken.
- Internal http://dev.(awsURL) : Latest master (that passed regression/unit tests), scientific correctness is not guaranteed.
- EAP http://eap.(awsURL) : When ready for sharing with the EA evaluation. At this stage, code change should be kept strictly minimal.
- awsURL (Public): When EA evaluation has reached satisfactory level and is ready for general public release.
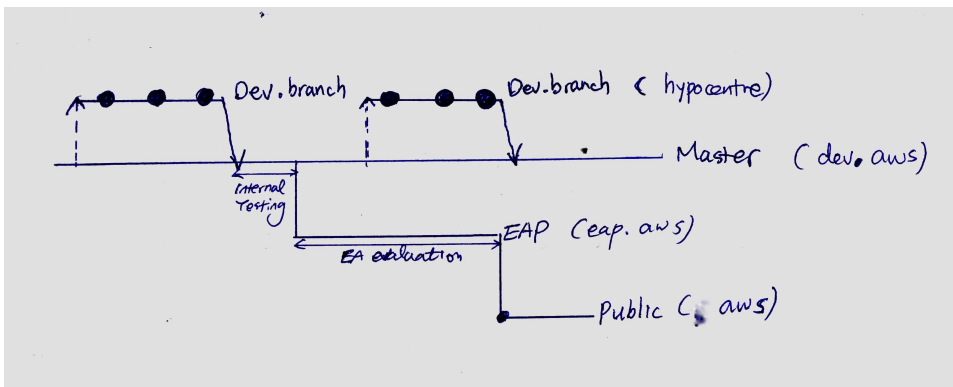
Products

- A package including a cherry-picked feature set. eg. Disaggregation Lite (with no hazard calculation)
- Each product release is to follow the Dev EAP Public steps as above

Next step

Streamline deployment process : Upgrade from Dev EAP Public with simple switch