Case study of adding an algorithm to geotool

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Geotool is a software system that allows a user to interactively display and process seismoacoustic data from International Monitoring System (IMS) stations. The software can be customised and extended, and this case study shows how to extend an already existing code by adding a new plug-in.

The term plug-in is frequently used to denote a module that is added to web-browser. The only thing that is obviuos to the casual user is that the browser can function without the plug-in and the plug-in adds some new capabilities to the browser. This is true for geotool plug-ins. Many of the geotool data analysis windows (FT, FK, Spectrogram, etc) are in fact plug-in libraries. When geotool begins execution, it searches several directories for plug-in libraries. Geotool loads each plug-in library that it finds with the system methods for handling dynamic libraries. The loaded plug-in library then usually adds an interface component (e.g. Button, or Toggle) to a geotool menu. When the user activates the new menu item, a method in the plug-in library is called that displays the plug-in's initial window.