

Development of Channel Information Management System

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The WIN format [Urabe, 1994] is the national standard format for exchanging or managing the seismic waveform data in Japan. The specification of this format is the waveform data and their channel information (i.e. channel ids, sensor types, components, data resolutions, sensor sensitivities, sensor locations, etc.) are separated. This format is useful to exchange data among seismic observatories and stations because the size of waveform data is smaller than other format. When using the waveform data, however, the channel information corresponding to data must be required. In other words, the correct management of channel information is very important. But now, the seismic observatories individually manage the channel information about their own channels. The observatory notifies new channel information other observatories by e-mail. So, the disadvantages of this managing method are 1) the delay of updating channel information, and 2) the possibility of incorrectly-input of update data. Furthermore, since the format of channel information is a text file, it is difficult to maintain a history of channel information. In this study, we develop the database system of unified management of the channel information. Since this system is written by JAVA language and uses PostgreSQL as database middle-ware, this system can be operated on normal Linux server. The user of this system accesses the database by web, and updates or browses the channel information which is requested by user. This system is easy to use, and the current channel information is shared with all users at the same time. This system may improve the problems of former management system.