

Space Weather Information Feature on Lapan Bandung Website Based On Syndication Technology

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ABSTRACT

www.bdg.lapan.go.id is the official Lapan Bandung website. This site displays information on the results of research and space science activities. In 2011 web site developed in the direction Lapan Bandung Space Weather information. Source of space weather information from the database research field of solar and space, the ionosphere and telecommunications, geomagnet and magnetism space, which has been developed in the year 2010 through inhouse programs Lapan Bandung. This paper describes how the syndication technology is designed and implemented on the website Lapan Bandung so space weather information can be delivered and accepted not only by a single user but for the website in and outside the country.

Keywords : Feature, Space Weather Information, Technology Syndication

8 INTRODUCTION

Lapan is an institution that specifically assess the space weather, provide realtime information on solar activity as an indicator of space weather [1]. Lapan Bandung has www.bdg.lapan.go.id official web site, with models of dynamic content using web technology version 2.0, displays information the results of research and space science activities.

Lapan Bandung website developed into the Space Weather information, at 2011. Syndication technology trend today, is one way of quickly and accurately applied to add the features on Lapan Bandung website, so space weather information can be delivered and accepted not only by a single user but for the website in and outside the country.

9 METHOD

The methods used in building the feature space weather information on the website Lapan Bandung based on syndication technology are Analysis of system requirements, Integration Of database content and sub Domain Name System from bidang matahari dan antariksa, geomagnet and magnet antariksa, Ionosfer dan

telekomunikasi. Next Selection of Syndicated Applications, Implementation.

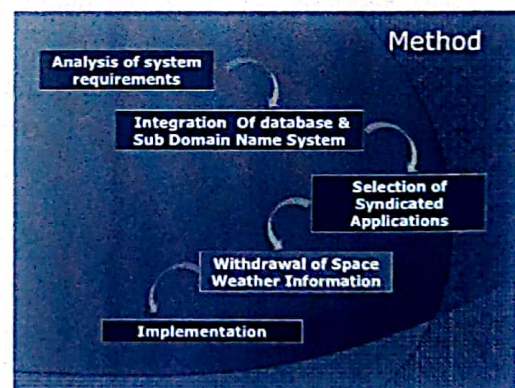


Figure 1 : Space Weather Information Feature Based On Syndication Technology Method

10 RESULT AND DISCUSSION

Figure 2 Show three important requirements for building space weather information feature on Lapan Bandung website based on syndication technology. Platform website 2.0 with dynamic content, built on integration of system database

based on open source application. 2009 to 2010 Lapan Bandung website was developed to version 2.0 web technology with content models using a data base for the division of solar and space, geomagnet and magnetism space, ionosphere and telecommunication. The content of website Lapan Bandung more dynamic, easily updated and will always give priority to the latest information. Lapan Bandung website system using open source applications, both on the operating system, application or web programming and databases. Thus Lapan Bandung website are eligible for added feature space weather information systems based on technology syndication.

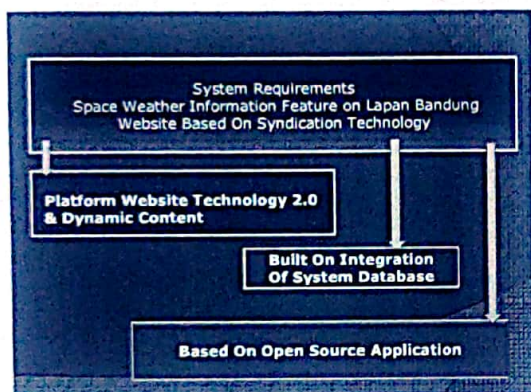


Figure 2 : System Requirements

Figure 3 Show information from the Solar and Space Division, Geomagnet and Magnetism Space, Ionosphere and Telecommunications Division such as information of solar activity, bursts of sun, sunspot observations, the recapitulation of space weather data, observations of Earth's magnetic field, geomagnet storm prediction, ionospheric conditions, Total Electron Content dan Scintillation, the predicted frequency. The information is stored in the integrated media database. By the interface of sub DNS (Domain Name System), SQL application (Selected Query Language), Data Source Connection, the information of is selected and managed.

Figure 4. Show the space weather information withdrawal scheme. This is the stage of the selection and application of syndication technology. Content that is integrated in the data base media selected and processed by the XML application (Extensible

Markup Language), RSS Generator (Really Simple Syndication) dan RSS Reader application that will read the last content space weather information to be displayed on the main page of the website Lapan Bandung.

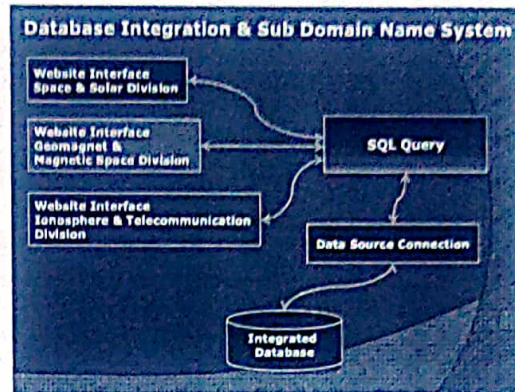


Figure 3 : Database Integration Of Space Weather Information System

Figure 5 show the information of the sunspot observations, the dynamics of the ionosphere and telecommunications, observation of the Earth's magnetic field can appear on the main page of the website Lapan Bandung. This is an implementation of the syndicated technology. Information on space weather can be visited and accessed by the Internet using a desktop, laptop, mobile phone or smartphone both in and outside the country.

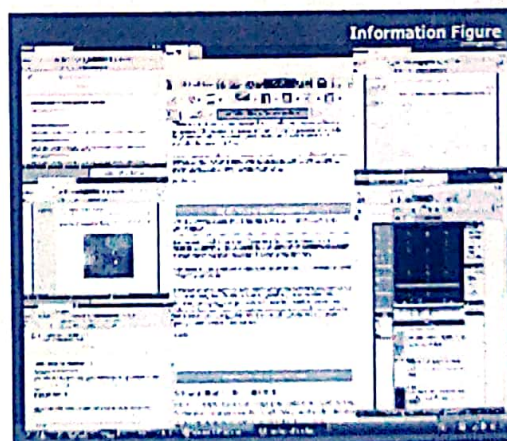


Figure 5: Space Weather Information Figure

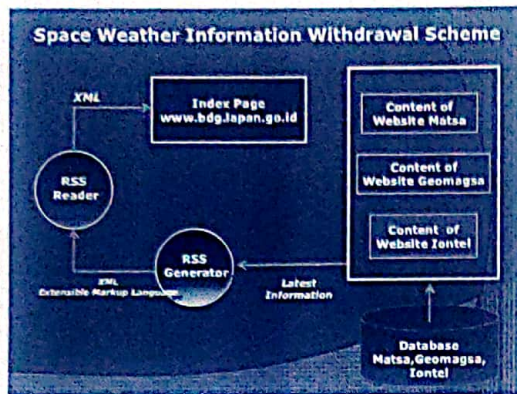


Figure-4 : Space Weather Information Withdrawal Scheme

11 CONCLUSION

Space weather information complete website content Lapan Bandung at 2011. This feature is built by the integration of research results database

division of Solar and Space, Geomagnet and Magnetism Space, Ionosphere and Telecommunications and by implementation of RSS (Really Simple Syndication) that has the ability to expand the reach of deliver information by internet media. With syndication technology, space weather information will be accepted not only by a single user but for the website in and outside the country by media desktops, laptops, mobile phones or smartphones.

12 REFERENCES

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