

Mechanisms for Administrating Tasks and Editing Data Bases in Hybrid email/SMS Info-Communicational Systems

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Abstract

Info-communicational system 'Mail2SMS' [1] is a flexible mechanism to notify the receivers of email about the delivered e-mail by SMS messages. In such systems every user should be able to control the list of allowed/disallowed notifiers. In this article a possible solution to this problem is considered by special commands.

Keywords: mail2sms, e-mail, SMS, notification

Electronic mail (email), along with indisputable advantages, has some qualities characteristic to those of traditional mail services - delivering the letter to the addressee's "poste restante" mailbox.

Another system for delivering letters is SMS, which, not being a postal system, also performs such functions. One of the differences of SMS from email is the delivery of a mail right to the addressee's telephone with this excluding the uncertainty over time of when the user will check his/her mailbox. The problem of uncertainty over time of reading an email in addressee's mailbox can be solved by using post informers (SMS servers) connected with the mail server and regional cellular network sending SMS to notify the addressee about receipting an email [2-5]. Other technologies performing the same tasks may also be used. Technologies use SMS-servers as independent, substantive info-communicational resources. SMS server wherein operates with mail's copy which is automatically sent to the email address of SMS-server (function "CC"). A similar technology is used in Mail2sms.Asnet.am (www.asnet.am/sms applications) post informer for sending an SMS as a notification about an email sent to him/her. As a targeting mechanism to SMS-server a domain outlined with markers is used in the email address part "subject" (markers are used for identifying the email, targeting the SMS-server) which is a more optional variant for operating applications of SMS-server. Functions in the domain "subject" (in mail2sms limited only to telephone to which the SMS-notification is to be sent) can be significantly expanded if consider the marked domain in "subject" as a command line, where commands can be written connecting other applications to SMS-server. It should be noted that the instrument of "command line" is an open resource

allowing the other developers to insert their own operation into the system with email/SMS services. Similar combinations, “hybrid” technologies can be used not only as systems for notifications, but also for other applications using email/SMS technologies. These technologies are attractive with that they allow different SMS applications to be combined into a single informational resource by the "one-window" principle. This, in addition to the direct assignment, allows the user, if necessary, to use the address part of the mail while formatting it as a targeting mechanism to the SMS-server for connecting to the desired service and managing its functions from the list of options available in this system.

As an example here, we cite some available basic list of options implemented by commands from “subject”:

- *sms to... (#phone)* - send an SMS to the specified phone number by ‘#phone’
- *notice to...(#phone)* - along with email send SMS notification to recipient
- *Save...(username/#phone)* - record attributes of recipients in the database
- *add to black list* - add someone to the recipient's “black list” to disallow to send SMS notifications.
- *del from black list* - delete blocked users from recipient’s “black list”

References

- [1] A.Nanassian and K. Khachatryan, “Mail2sms.asnet.am – the Alert System of Incoming”, *Proceedings of International Conference Computer Science and Information Technologies, CSIT*, Yerevan, Armenia, pp. 459--461, 2013.
- [2] [Online]. Available: <https://help.mail.ru/mail-help/settings/notifications>
- [3] [Online]. Available: <http://iglous.ru/besplatnyj-sposob-poluchat-sms-vedomleniya-opochte/>
- [4] D. Gevorkyan, K. Khachatryan, A. Nanassian, A. Petrosyan, G. Petrosyan, V. Sahakyan and E. Vardanyan, “Mail informer- selective incoming instand phone notification system”, *Proceedings of International Conference Computer Science and Information Technologies, CSIT*, Yerevan, Armenia, pp. 466--467, 2009.
- [5] Д. Геворкян, А.Нанасян and К. Хачатрян, “Новые WEB ресурсы ASNET.AM”, *Proceedings of International Conference Computer Science and Information Technologies, CSIT*, Yerevan, Armenia, pp. 311--312, 2011.

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Հիբրիդային email/sms ինֆո-կոմունիկացիոն համակարգերի առաջադրանքներով ղեկավարման մեխանիզմները և տվյալների բազաների խմբագրումը

Ա. Մխիթարյան

Անփոփում

Աշխատանքում առաջարկվում է ինֆո-կոմունիկացիոն համակարգերում օգտատերերի կողմից թույլատրելի/անթույլատրելի ծանուցիչների ցուցակը կառավարող մեխանիզմ: Նկարագրված համակարգում յուրաքանչյուր օգտատեր հնարավորություն ունի էլ. փոստի “Subject”-ում օգտագործել համապատասխան հրամաններ սև ցուցակում որևէ մեկին ավելացնելու կամ հանելու նպատակով:

Механизмы управления заданиями и редактированием базы данных в гибридных email/sms инфокоммуникационных системах

А. Мхитарян

Аннотация

В работе обсуждается метод управления и редактирования «черными списками» входящих электронных писем. Система позволяет пользователю электронной почты использовать один из двух возможных команд в поле «subject» для редактирования черного списка.