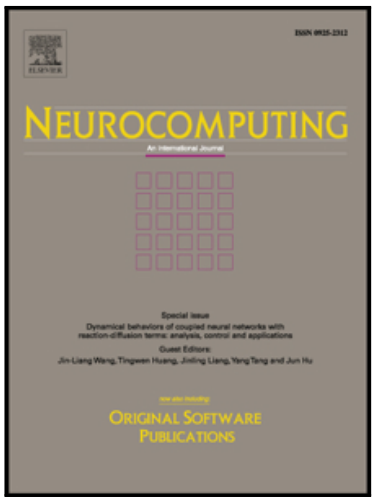
Accepted Manuscript



Distributed content filtering algorithm based on data label and policy expression in active distribution networks

Song Deng, Dong Yue, Aihua Zhou, Xiong Fu, Lechan Yang, Yu Xue

PII: S0925-2312(17)31086-X
DOI: 10.1016/j.neucom.2017.03.087
Reference: NEUCOM 18587

To appear in: *Neurocomputing*

Received date: 25 May 2016
Revised date: 28 February 2017
Accepted date: 23 March 2017

Please cite this article as: Song Deng, Dong Yue, Aihua Zhou, Xiong Fu, Lechan Yang, Yu Xue, Distributed content filtering algorithm based on data label and policy expression in active distribution networks, *Neurocomputing* (2017), doi: 10.1016/j.neucom.2017.03.087

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Distributed content filtering algorithm based on data label and policy expression in active distribution networks

Song Deng[a,*], Dong Yue[a], Aihua Zhou[b], Xiong Fu[c], Lechan Yang[d], Yu Xue[e]

[a]*Institute of Advanced Technology, Nanjing University Post & Telecommunication, 210003, Nanjing, China*
[b]*Global Energy Interconnection Research Institute, 102209, Beijing, China*
[c] *School of Computer, Nanjing University Post & Telecommunication, 210003, Nanjing, China*
[d]*International Institute for Earth System Science, Nanjing University, 210093, Nanjing, China*
[e]*Nanjing University of Information Science & Technology, 210044, Nanjing, China*

Abstract

With the development of active distribution networks, data transmission is facing a severe security challenge. Secure data transmission is crucial for the real-time and exact control of active distribution networks. However, traditional data encryption methods have difficulty with the real-time control and mass data transmission of the active distribution networks. Additionally, content filtering based on text classification has a strong dependence on the size and type of data. To solve these problems, this paper proposes a novel distributed content filtering algorithm based on data labeling and policy expression (DCF-DLPE). In DCF-DLPE, we design a secure private protocol with data labeling and build a policy rule expression. Four representative datasets are used to evaluate the performance of the proposed algorithm. The comparative results show that for the larger dataset, DCF-DLPE outperforms the DES, AES (256-bit) and Blowfish encryption methods in the average time-consumption. Experimental results also show that compared with text classification algorithms, DCF-DLPE

*Corresponding author
Email addresses: dengsong@njupt.edu.cn (Song Deng), yued@njupt.edu.cn (Dong Yue), zhouaihua@geiri.sgcc.com.cn (Aihua Zhou), fux@njupt.edu.cn (Xiong Fu), yanglechan@163.com (Lechan Yang), xueyu_123@nuaa.edu.cn (Yu Xue)

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
✓ امکان دانلود نسخه ترجمه شده مقالات
✓ پذیرش سفارش ترجمه تخصصی
✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
✓ دانلود فوری مقاله پس از پرداخت آنلاین
✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات