A Survey of Techniques for Internet Traffic Identification and Classification

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***Abstract*—The techniques for Internet traffic identification and classification are developed rapidly in recent years, as it widely used in network management, monitor, design, security and research. In the past decade, the traffic identification and classification techniques have been evolved along with development of Internet protocols and applications, and many approaches have been proposed to optimize these techniques. Nowadays, traffic measurement remains one of the hot areas in network research. This is mostly based on the ever increasing network bandwidth, the growth number of network users, the constantly sophisticated applications and the development of technique about confusing traffic identification and classification. In this paper, we present popular traffic identification and classification techniques, include port-based, payload-based, flow-based and host-based, then analyze each technique from challenge aspect and make some remarks and recommendations that contribute to optimize traffic measurement.**

***Index Terms*—traffic identification, traffic classification, challenges, application detection, recommendations.**

I. Introduction

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II. Conclusion

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Appendix A
Proof of the First Zonklar Equation

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Appendix B

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References

[1] H. Kopka and P. W. Daly, *A Guide to LaTeX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.

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