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A Study Kerberos Protocol: An Authentication Service for Computer Networks

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Abstract: The Kerberos Authentication Service, developed at MIT, provides a trusted third-party authentication to verify users' identity. This paper is an overview of this protocol. The article describes the protocol in the perspectives of the client and the server, focusing on how Kerberos achieve authentication. It also gives an idea of its limitations. This paper deals with practical arguments concerning Kerberos: it goes deep in some applications of Kerberos at two different levels: Cisco and the Operating System Windows 2000; and after that some results about performance are presented.

Keywords: Kerberos, Key Distribution center, protocol, Ticket-Granting Server (TGS)

REFERENCES

- [1]. J. Kohl C. Neuman, RFC 1510, The Kerberos Network Authentication Service (V5), September 1995
- [2]. William Stallings, Cryptography and Network security (Principle and Practice), Upper Saddle River N.J., Prentice Hall 1999
- [3]. Steven M. Bellowin and Michael Merit from AT&T Bell Laboratories, Limitations of the Kerberos Authentication System, Winter '91 USENIX Conference Proceedings, USENIX Association, 1991
- [4]. 1992--2001 Cisco Systems, Inc. All rights reserved http://www.cisco.com/univercd/cc/td/doc/product/software /ios121/121cgcr/secur c/scprt2/scdkerb.htm, August 2001
- [5]. Microsoft Corporation. All rights reserved, Windows 2000 Kerberos Authentication White Paper http://www.microsoft.com/technet/treeview/default.asp?url =/TechNet/prodtechnol/windows2000serv/deploy/kerberos.asp
- [6]. Mahmoud T. El-Hadidi, Nadia H. Hegazi, Heba K. Aslan, Performance Analysis of the Kerberos Protocol in a Distributed Environment, 2nd IEEE Symposium on Computers and Communication (ISCC 1997).

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