ABSTRACT

The development of Information Technology (IT) is the cause that use of IT in

conducting organization activities for exchanging information and business

services. Information Technology in organization should be balanced in terms of

security aspect includes the confidentiality, availability and integrity.

DISKOMINFO Pemerintah Kabupaten Bandung is an Government organization

that provides of data communications statistiks and code. DISKOMINFO has

implemented Information Technology to support their business process. But there

are problems due to security weaknesses of existing services, such as no security

against bruteforce attack, not optimal server port settings which resulted in some

ports still default, there are some information security policy documents that are

not in compliance with ISO 27001, and lack of password management. Based on

the problems, there needs to be a optimization security of bruteforce attack in

accordance with ISO/IEC 27001 standard and using Network Development Life

Cycle (NDLC) method to results an ideal design of network security for

DISKOMINFO.

Test result propose the design security of bruteforce attack with Honeypot dan

IPTables, design of policy documentation framework regarding security policy,

access control, and management communication & operation in accordance

according to the ISO/IEC 27001 Standard and design of password management

Key words: Information Technology, Network Security, ISO/IEC 27001, NDLC

iv