

ABSTRAK

IMPLEMENTASI *NETWORK ATTACHED STORAGE* BERBASIS DOCKER PADA *SET TOP BOX* ZTE B860H SEBAGAI PENYIMPANAN DATA TERPUSAT DI SMPN 26 PALEMBANG

(2026:xv + 51 Halaman + 10 Gambar + 15 Tabel + 10 Lampiran)

M. GHALIB

062240352289

JURUSAN TEKNIK ELEKTRO

**PROGRAM STUDI SARJANA TERAPAN TEKNIK TELEKOMUNIKASI
POLITEKNIK NEGERI SRIWIJAYA**

SMPN 26 Palembang masih menggunakan *cloud storage* berbasis akun pribadi dalam pengelolaan data sekolah, sehingga berisiko mengalami keterbatasan kapasitas, kehilangan akses data, dan kesulitan standarisasi dokumen. Penelitian ini bertujuan mengimplementasikan Network Attached Storage (NAS) berbasis Docker menggunakan Nextcloud pada Set Top Box ZTE B860H sebagai media penyimpanan data terpusat. Sistem dibangun menggunakan Armbian dan *Docker Compose* dengan layanan Nextcloud, Nginx, MariaDB, Redis, Cron, dan Cloudflared, serta didukung Cloudflare Tunnel untuk akses dari luar jaringan lokal. Pengujian mencakup fungsionalitas NAS dan kinerja perangkat. Hasil pengujian menunjukkan sistem mampu menjalankan akses layanan, autentikasi pengguna, unggah dan unduh berkas, berbagi berkas, serta manajemen pengguna. Dengan demikian, sistem NAS berbasis Docker pada Set Top Box ZTE B860H dapat menjadi solusi penyimpanan data terpusat di SMPN 26 Palembang.

Kata kunci: Network Attached Storage, Docker, Nextcloud, Set Top Box ZTE B860H, Cloudflare Tunnel

ABSTRACT

IMPLEMENTATION OF DOCKER-BASED NETWORK ATTACHED STORAGE ON ZTE B860H SET TOP BOX AS CENTRALIZED DATA STORAGE AT SMPN 26 PALEMBANG

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M. GHALIB

062240352289

DEPARTMENT OF ELECTRICAL ENGINEERING

**APPLIED BACHELOR PROGRAM IN TELECOMMUNICATION
ENGINEERING**

STATE POLYTECHNIC OF SRIWIJAYA

SMPN 26 Palembang still uses personal account-based cloud storage to manage school data, which poses risks such as limited storage capacity, loss of data access, and difficulty in document standardization. This study aims to implement Docker-based Network Attached Storage (NAS) using Nextcloud on a ZTE B860H Set Top Box as centralized data storage. The system was built using Armbian and Docker Compose with Nextcloud, Nginx, MariaDB, Redis, Cron, and Cloudflared services, supported by Cloudflare Tunnel for access from outside the local network. Testing covered NAS functionality and device performance. The results show that the system can support service access, user authentication, file upload and download, file sharing, and user management. Therefore, the Docker-based NAS system on the ZTE B860H Set Top Box can serve as a centralized data storage solution at SMPN 26 Palembang.

Keywords: *Network Attached Storage, Docker, Nextcloud, ZTE B860H Set Top Box, Cloudflare Tunnel*