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# Implementasi Black Box Testing dengan Manual Testing untuk Validasi Berdasarkan Requirement pada Infrastructure as a Service Windows Server 2022 di Nutanix Cloud: Studi Kasus di Perusahaan Tabel Data Informatika

Ahmad Fadhil Aulia Faisal<sup>1</sup>, Mira Kania Sabariah<sup>2</sup>

<sup>1,2,3</sup>Fakultas Informatika, Universitas Telkom, Bandung

<sup>4</sup>Divisi Digital Service PT Telekomunikasi Indonesia

<sup>1</sup>ahmadfadhil@students.telkomuniversity.ac.id,

<sup>2</sup>mirakania@telkomuniversity.ac.id

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## ABSTRAK

Zaman digitalisasi dan transformasi di bidang Cloud telah ditandai dengan adopsi cepat teknologi cloud computing oleh bisnis dan organisasi di seluruh dunia, untuk meningkatkan efisiensi, mengurangi biaya, serta meningkatkan skalabilitas dan fleksibilitas dalam operasi IT. Tabel Data Informatika memahami pentingnya pembangunan infrastruktur cloud untuk mendukung berbagai kebutuhan bisnis. Perusahaan sering kali dihadapkan pada tantangan dalam mengelola infrastruktur yang kompleks dan dinamis, sehingga muncul kebutuhan dari Client untuk memiliki infrastruktur yang terotomatisasi. Infrastruktur as a Service Windows server 2022 yang disesuaikan dengan requirement Client telah diimplementasikan, namun kualitasnya belum bisa dikatakan tercapai tanpa tahap pengujian. Pengujian sangat penting dalam memastikan bahwa infrastruktur memenuhi requirement Client, dengan memperhatikan faktor bisnis dan pengembangan. Validasi bisnis diperlukan untuk mencegah kesalahan yang dapat mengurangi kepercayaan Client, sementara validasi pengembangan memastikan kepatuhan terhadap standar. Penelitian ini berfokus pada implementasi black box testing dengan manual testing untuk memvalidasi infrastruktur di Cloud Nutanix sesuai dengan requirement Client.

**Kata kunci:** *Infrastructure as a Service, cloud computing, black box testing, manual testing, validation testing, User Acceptance Testing*

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## ABSTRACT

*The digital era and cloud transformation have been marked by the rapid adoption of cloud computing technology by businesses and organizations worldwide to enhance efficiency, reduce costs, and increase scalability and flexibility in IT operations. Tabel Data Informatika recognizes the importance of developing cloud infrastructure to support various business needs. Companies often face challenges in managing complex and dynamic infrastructure, creating a demand from clients for automated infrastructure. An Infrastructure as a Service solution using Windows Server 2022 tailored to client requirements has been implemented, but its quality cannot be confirmed without testing. Testing is crucial to ensure the infrastructure meets client requirements, considering both business and development factors. Business validation is necessary to prevent errors that could diminish client trust, while development validation ensures compliance with standards. This study focuses on implementing black box testing with manual testing to validate the Nutanix Cloud infrastructure according to client requirements.*

**Keywords:** *Infrastructure as a Service, cloud computing, black box testing, manual testing, validation testing, User Acceptance Testing*

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