

CAK3EAB3 KOMPUTASI AWAN DAN TERDISTRIBUSI

Tugas-14

Keamanan

Kelompok: 8

KELAS IF-46-11

Dosen: ISB



PROGRAM STUDI **S1 INFORMATIKA**

FAKULTAS INFORMATIKA

UNIVERSITAS TELKOM

BANDUNG

2024





Ketentuan:

1. Dikerjakan secara kelompok.
2. Dikerjakan langsung pada lembar soal.
3. Untuk soal perhitungan, maka cara atau langkah pengerjaan **wajib** dituliskan.
4. Setiap anggota kelompok wajib mengerjakan soal (ikut berkontribusi).
5. Anggota kelompok yang tidak ikut mengerjakan maka nilainya nol, nama mahasiswa tersebut tidak perlu ditulis di tabel.
6. Unggah jawaban ke LMS diwakili oleh salah satu anggota kelompok.
7. Lengkapi tabel pernyataan di bawah ini sebagai syarat nilai diinput.

PERNYATAAN

Saya menyatakan bahwa saya:

- (a) benar-benar ikut mengerjakan soal
- (b) telah menjelaskan jawaban saya ke teman anggota kelompok
- (c) telah memahami penjelasan dari teman anggota kelompok
- (d) tidak mencontek jawaban dari kelompok lain
- (e) tidak memberikan jawaban PR ini ke kelompok lain

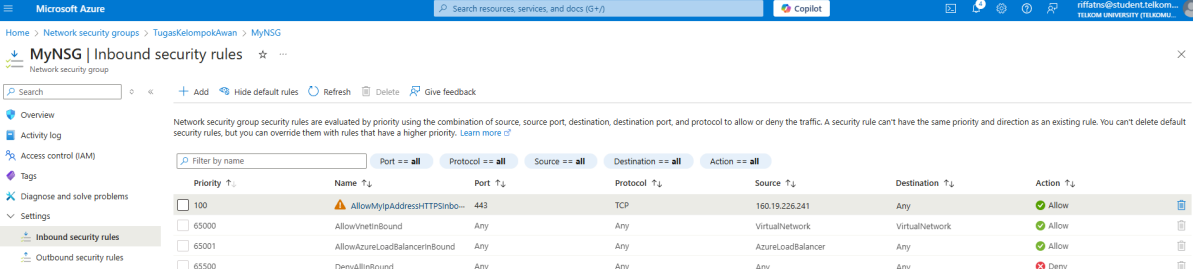
Nama	NIM	Kontribusi Tugas	Tanda Tangan
Muhammad Kahfi Bachtiar	1301223047		
Riffat Nabil Shiddiq	1301220204		
Amirah Saleh M Alhumaidhi	1301223374		
Azizah Rahmawati K	1301220444		

TUGAS 14

1. Lakukan setting keamanan pada aplikasi cloud Anda

a. Firewall

i. Menambahkan aturan baru untuk hanya mengizinkan akses port 443



Network security group security rules are evaluated by priority using the combination of source, source port, destination, destination port, and protocol to allow or deny the traffic. A security rule can't have the same priority and direction as an existing rule. You can't delete default security rules, but you can override them with rules that have a higher priority. [Learn more](#)

Priority	Name	Port	Protocol	Source	Destination	Action
100	AllowMyIpAddressHTTPSInbound	443	TCP	160.19.226.241	Any	Allow
65000	AllowVnetInbound	Any	Any	VirtualNetwork	VirtualNetwork	Allow
65001	AllowAzureLoadBalancerInbound	Any	Any	AzureLoadBalancer	Any	Allow
65500	DenyAllInbound	Any	Any	Any	Any	Deny

b. SSH

i. Sudah menggunakan SSH untuk login(tidak bisa menggunakan password)

```
41 },
42   "osProfile": {
43     "computerName": "linux11kadt",
44     "adminUsername": "azureuser",
45     "linuxConfiguration": {
46       "disablePasswordAuthentication": true,
47       "ssh": {
48         "publicKeys": [
49
```

c. Identity management

i. Menggunakan Azure Active Directory (Azure AD) dan Role-Based Access Control (RBAC).

```
riffat [ ~ ]$ az role assignment create \
  --assignee riffatns@student.telkomuniversity.ac.id \
  --role Contributor \
  --scope /subscriptions/7dd9e05e-b893-4578-9b52-45dfe853ce7f/resourceGroups/KomputasiAwanDanSistemTerdistribusi
{
  "condition": null,
  "conditionVersion": null,
  "createdBy": null,
  "createdOn": "2024-12-26T14:11:59.694254+00:00",
  "delegatedManagedIdentityResourceId": null,
  "description": null,
  "id": "/subscriptions/7dd9e05e-b893-4578-9b52-45dfe853ce7f/resourceGroups/KomputasiAwanDanSistemTerdistribusi/providers/Microsoft.Authorization/roleAssignments/3879ec5f-a35d-468e-ad53-0a056746d33b",
  "name": "3879ec5f-a35d-468e-ad53-0a056746d33b",
  "principalId": "74e36e8f-21f2-46fa-80b3-607f61254736",
  "principalType": "User",
  "resourceGroup": "KomputasiAwanDanSistemTerdistribusi",
  "roleDefinitionId": "/subscriptions/7dd9e05e-b893-4578-9b52-45dfe853ce7f/providers/Microsoft.Authorization/roleDefinitions/b24988ac-6180-42a0-ab88-20f7382dd24c",
  "scope": "/subscriptions/7dd9e05e-b893-4578-9b52-45dfe853ce7f/resourceGroups/KomputasiAwanDanSistemTerdistribusi",
  "type": "Microsoft.Authorization/roleAssignments",
  "updatedBy": "74e36e8f-21f2-46fa-80b3-607f61254736",
  "updatedOn": "2024-12-26T14:11:59.816250+00:00"
}
riffat [ ~ ]$
```

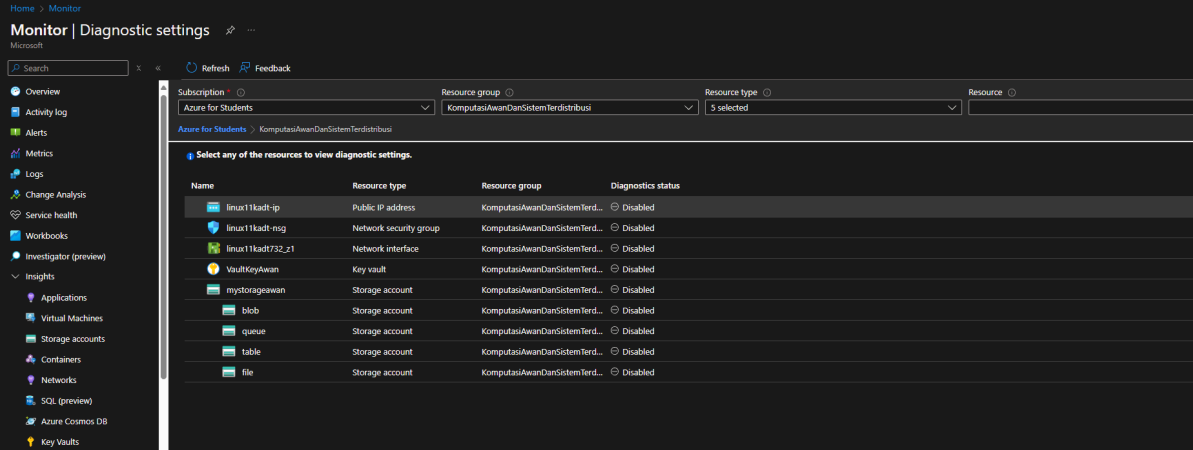
d. Enkripsi

i. Mengaktifkan disk encryption dan menggunakan Azure Key Vault

```
riffat [ ~ ]$ az vm encryption enable --resource-group KomputasiAwanDanSistemTerdistribusi --name linux11kadt --disk-encryption-keyvault VaultKeyAwan
The encryption request was accepted. Please use 'show' command to monitor the progress.
riffat [ ~ ]$
```

e. dll

i. mengaktifkan azure monitor untuk aktivitas dan keamanan aplikasi



The screenshot shows the Azure Monitor Diagnostic settings page. The page title is "Monitor | Diagnostic settings". The left sidebar contains a navigation menu with options like Overview, Activity log, Alerts, Metrics, Logs, Change Analysis, Service health, Workbooks, Investigator (preview), Insights, Applications, Virtual Machines, Storage accounts, Containers, Networks, SQL (preview), Azure Cosmos DB, and Key Vaults. The main content area shows a table of resources with their diagnostic settings status. The table has columns for Name, Resource type, Resource group, and Diagnostics status. The resources listed are:

Name	Resource type	Resource group	Diagnostics status
linux11kadt-ip	Public IP address	KomputasiAwanDanSistemTerdistribusi	Disabled
linux11kadt-nsg	Network security group	KomputasiAwanDanSistemTerdistribusi	Disabled
linux11kadt732_x1	Network interface	KomputasiAwanDanSistemTerdistribusi	Disabled
VaultKeyAwan	Key vault	KomputasiAwanDanSistemTerdistribusi	Disabled
mystorageawan	Storage account	KomputasiAwanDanSistemTerdistribusi	Disabled
blob	Storage account	KomputasiAwanDanSistemTerdistribusi	Disabled
queue	Storage account	KomputasiAwanDanSistemTerdistribusi	Disabled
table	Storage account	KomputasiAwanDanSistemTerdistribusi	Disabled
file	Storage account	KomputasiAwanDanSistemTerdistribusi	Disabled