

# Transformation Done Right

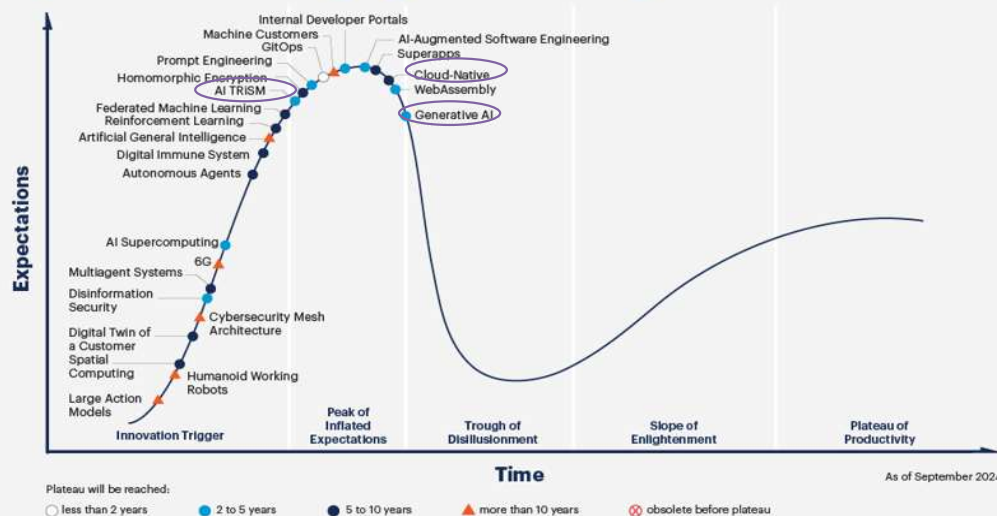
CAKNA MyGovCloud@CFA 2025  
HOTEL DORSETT PUTRAJAYA

Iskandar Iskak  
Vice President Sales, Credence



# Insights from Hype Cycle: Cloud and AI thrive on robust digital infrastructure

## Hype Cycle for Emerging Technologies, 2024



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Gartner

### Autonomous AI & Generative AI

- Uses **AI tools** to automate **coding, testing, and deployment**
- Speeds up software development and reduces manual work
- Key innovations: **Multi-agent systems & autonomous agents** and **Humanoid working robots**
- Passed the **Peak of Inflated Expectations**
- Focus now shifting from hype to **real-world ROI**
- Expect practical use cases to grow over the **next 2–5 years**

### Cloud – Native

- Key enabler of **digital productivity & innovation**
- Moving past the hype into **real adoption**
- Now on the **Slope of Enlightenment**, heading to **Plateau of Productivity** (2–5 years)
- Can **scale faster** and **adapt quickly** to market needs

### Human Centric Security & Privacy

- Embeds **security and privacy** into daily operations
- Builds a culture of **trust and shared responsibility**
- Supports **risk-aware decision-making** across teams
- Example: **AI TRISM** (AI Trust, Risk & Security Management)

Technology Trend	Adoption Rate (%)	Strategic Importance
Cloud & Edge Computing	48	Foundational for enabling other advanced technologies
Generative AI	36	Enhancing decision-making and driving innovation
Digital Trust & Cybersecurity	30	Critical for securing digital assets and maintaining trust

# Strategic Insight on Cloud Imperative for the Government



## Government globally

### 01 Improve government performance

- Streamline service delivery
- Scales easily across agencies
- Enhances citizen experience with faster digital access

### 02 Rising demand

- Citizens expect real-time, remote access to services
- COVID-19 exposed the need for resilient digital infrastructure

### 03 National Cloud Policies Momentum

- Countries advancing digital sovereignty through cloud-first policies ie UK Government Cloud First Policy (2013), Singapore Smart Nation & Government Commercial Cloud (GCC)



## Malaysia urgency

01 **Rapid Evolution of public services:** Evolving at fast pace as to meet market volatility, citizens and technology demand/changes

02 **Cloud is no longer an optional:** Rapid solution & technology innovation including AI on the cloud

03 **Malaysia Strategic Cloud Journey:** MyDIGITAL – Malaysia Digital Economy Blueprint, Cloud First Policy & CSP appointments

## Insight Summary

01

**Public Sector agility is critical** to meet the pace of change in citizen expectations, global disruptions technology advancements. Government is focusing on Cloud native implementation.<sup>1</sup>

02

**Cloud is an enabler:**

- Modernize infrastructure
- Enable agility, innovation & Cost efficiency<sup>1</sup>
- Meet citizen and market expectations in real time

03

Malaysia recognize Cloud as a strategic initiative via MyDiGITAL implementation for **economic competitiveness, data sovereignty and security**

04

Shift from legacy to **Cloud native is critical** and it is more than cost savings ie ensuring nation competitiveness & innovation

**As a subsidiary of TM, we leverage on TM suite of converged solutions to accelerate digital adoption across all industry verticals.**

**Enterprise  
Customers**



**Government  
Customers**



Government



Healthcare



Banking



Energy



Education



Real Estate



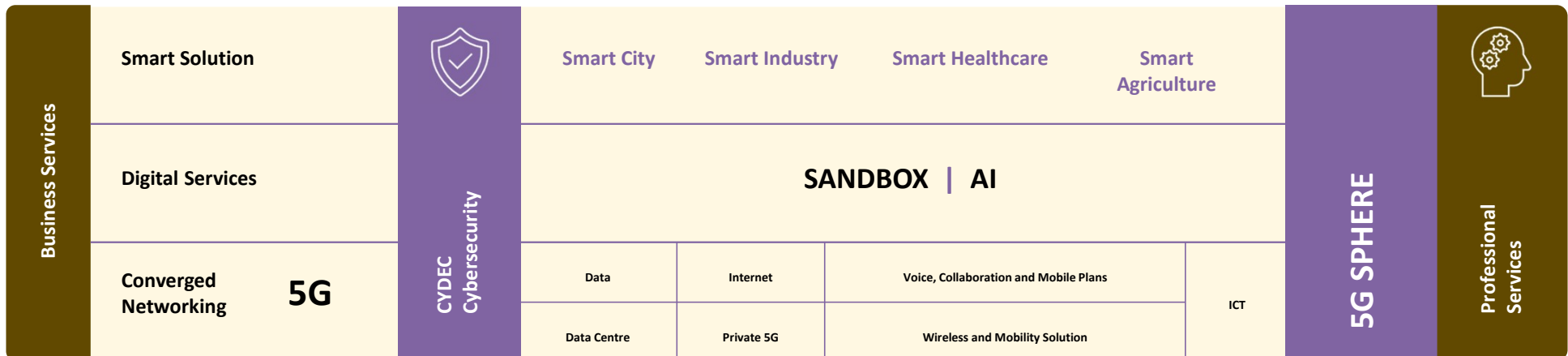
Manufacturing



Retail



Utilities





# Cloud Alpha Edge (CAE) Which Reside In TM Data Centres Is Well Positioned To Support The Country's Digital Ambition

**Availability Zones (AZs)** are geographically separated data centers within a cloud region with independent infrastructure, including power, cooling, and network. This is to ensure that if one zone fails, others can maintain service and data accessibility.

## Characteristics of Availability Zones

- **Location:** AZs are typically situated close enough to provide low-latency connections (usually under 2ms) for efficient data transfer within the region.
- **Deployment method:** Typically, at least 2 AZs are deployed within a close proximity (same city) for low latency, with an optional "arbitrary" zone acting as a monitor to detect and respond to failures in the primary AZs.

## Overview of Cloud Alpha Edge



### Key Features

- Multi-AZs Active-Active Design
- Hyper scale 5G + Cloud + AI
- Data Residency & Sovereignty
- RMIT Compliant
- Ultra-Low Latency
- CSP MyDIGITAL
- Reside in TM Tier III DC
- No Data Egress Charges

### Status Today

- 3 + 1** Availability zones
- 7** Key industries covered
- >80** Services covering core infra & PaaS

# TM Fulfils Malaysia's National Sovereignty Requirements Through Cloud Alpha Edge (CAE)



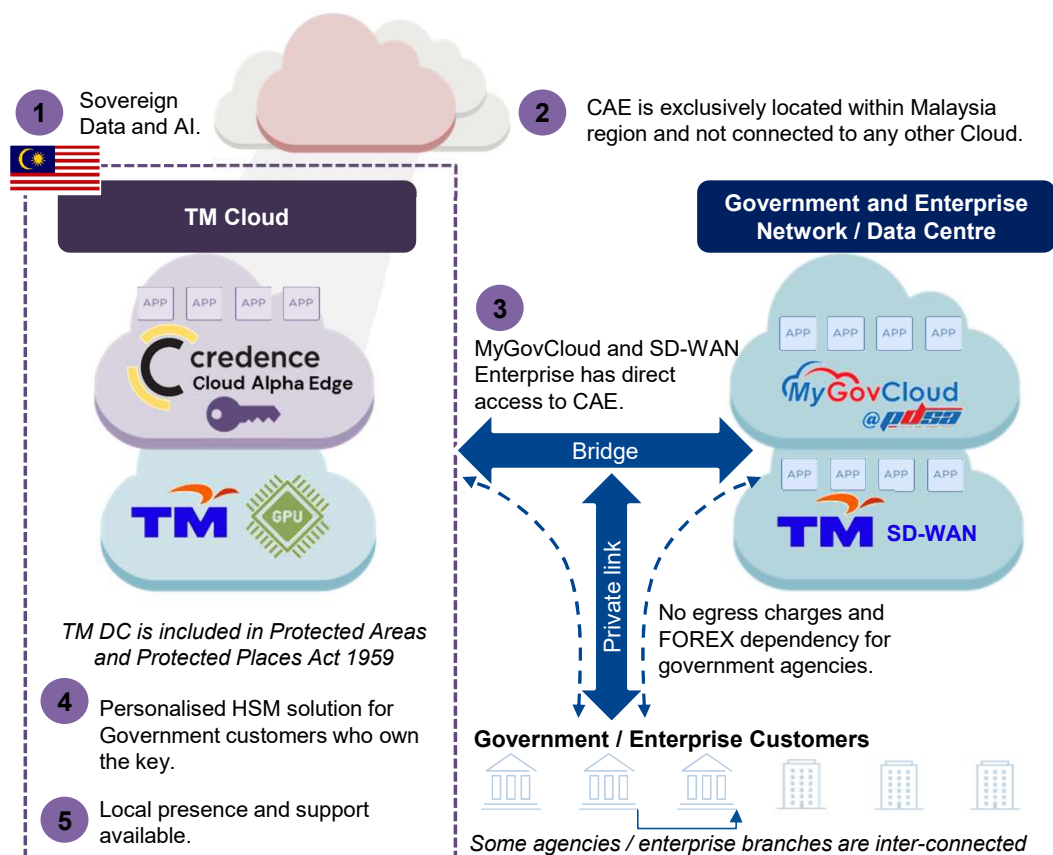
## The National Sovereign Cloud Proposition

### National Cloud Key Features

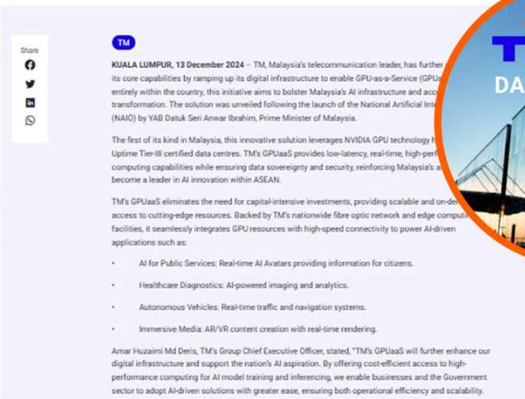
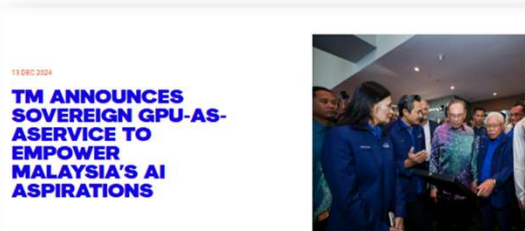
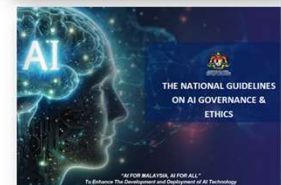
### Offerings

1	<b>Sovereign Data and AI:</b> Data is stored, processed and governed in Malaysia within TM Cloud and Tier III DC; GPU enabled locally with open-source AI and CGSO "Sasaran Penting".	<ul style="list-style-type: none"> <li>No/ Minimal internet price</li> </ul>
2	<b>Private design:</b> CAE incorporates air gap technology to provide additional layer of security to customer's sensitive data.	<ul style="list-style-type: none"> <li>Disaster recovery backup</li> </ul>
3	<b>Private Connectivity:</b> MyGovCloud and SD-WAN Enterprise have direct access to CAE.	<ul style="list-style-type: none"> <li>Data encryption</li> <li>Data ownership</li> <li>Reachability</li> </ul>
4	<b>Private Data:</b> Personalised Hardware Security Modules (HSM) solution for government customers who retain sole ownership of encryption keys.	<ul style="list-style-type: none"> <li>Performance monitoring</li> <li>Perimeter testing</li> </ul>
5	<b>Local presence and support:</b> PS and MS presence in Malaysia; Cybersecurity SOC certified.	<ul style="list-style-type: none"> <li>Data sanitisation</li> <li>Data virtualisation</li> </ul>

## How TM Powers Malaysia's National Sovereign Cloud



# TM Launched Sovereign GPU As Core Infrastructure To Support National AI Agenda ..(1/2)



**TM**

**GPU & AI PLATFORM**  
HIGH PERFORMANCE SOVEREIGN  
GPU & NETWORK INFRASTRUCTURE  
@ TM DATA CENTRE



## AI-EMPOWERED ECONOMY



**AI-EMPOWERED  
GOVERNMENT**

- › Intelligence Automation in Public Services
- › Energy, Water and Natural Resources Sustainability
- › Socio-Economic Growth



**AI-EMPOWERED  
SOCIETY**

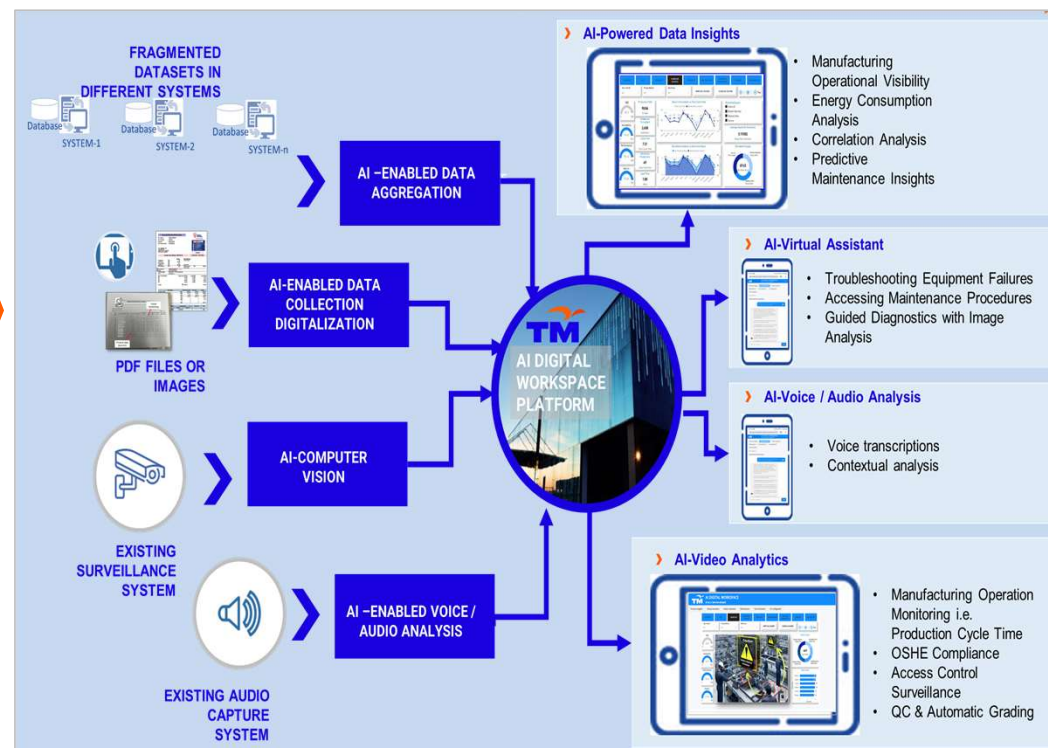
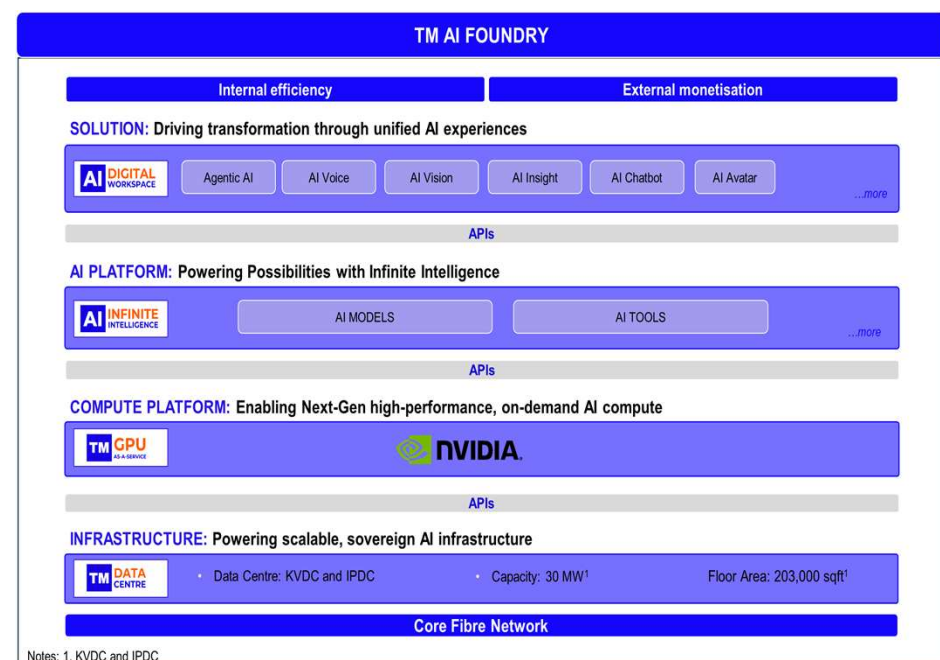
- › Public Safety & Security
- › Healthcare & Wellness
- › Education
- › Job Creations in AI & Digital



**AI-EMPOWERED  
INDUSTRY**

- › GDP accelerated growth via AI-driven economic program such as manufacturing, agriculture, tourism and other and consumer related services

# TM Launched Sovereign GPU As Core Infrastructure To Support National AI Agenda ..(2/2)





## Compute

- Elastic Cloud Server (CPU/GPU)
- Auto Scaling
- Dedicated Host
- Bare Metal Server
- Image Management Service
- FunctionGraph

## Storage

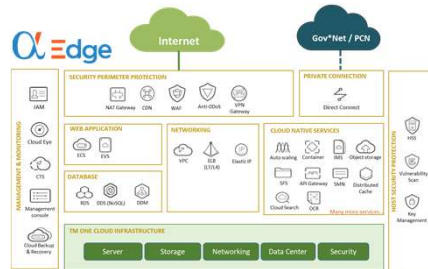
- Object Storage Service
- Elastic Volume Service
- Scalable File Service
- Cloud Backup & Recovery

## Networking

- Virtual Private Cloud
- Elastic Load Balance
- NAT Gateway (public)
- Elastic IP (IPv4, IPv6)
- Direct Connect
- Virtual Private Network
- Domain Name Service (Private)
- VPC Endpoint

## Container

- Cloud Container Engine
- Software Repository for Container
- Application Orchestration Service



## Application & Middleware

- ServiceStage
- Cloud Service Engine
- Distributed Cache Service (Redis)
- Distributed Message Service RabbitMQ
- Distributed Message Service RocketMQ
- Distributed Message Service Kafka
- Simple Message Notification
- API Gateway
- Cloud Performance Test Service

## Enterprise Intelligent

- Model Arts
- MapReduce Service
- Cloud Search Service
- DataArts Studio
- Image Recognition
- Data Warehouse Service
- Optical Character Recognition
- Graph Engine Service
- Data Lake Insight

## Database

- Relational Database (MySQL, PostgreSQL, Microsoft SQL Server)
- Document Database Service
- Distributed Database Middleware
- Data Replication Service
- Data Admin Service

## Online Migration (V2V, P2V)

- Server Migration Service

## Management

- Cloud Eye
- Identity Access Management
- IAM Identity Center
- Tag Management Service
- Application Operation Management
- Cloud Trace Service
- Log Tank Service
- Application Performance Mgmt
- Config
- Resource Access Manager
- Resource Governance Center
- Resource Formation Service
- Organizations

**In Roadmap (2025 onwards):**  
Among Many Others :-

- GaussDB
- TaurusDB for MySQL
- DeepSeek ModelArts



## Security

- Anti-DDoS
- Host Security Service (HSS)
- Web Application Firewall (WAF)
- Data Encryption Workshop (DEW)
- Vulnerability Scan Service (VSS)
- Database Security Service (DBSS)
- Container Guard Service
- Cloud Bastion Host
- SecMaster
- Data Security Center

## Various options to choose from IaaS and PaaS

## Cloud native, AI

## Security, Management & Tools

# What Come To Mind When The Word Sovereign Is Mentioned?



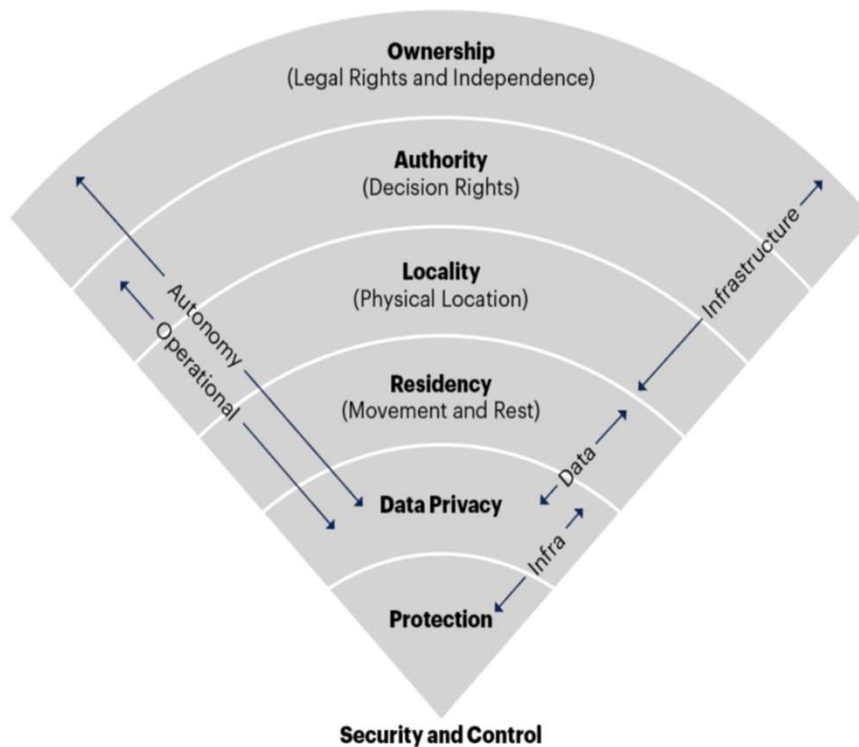
## Why Data Sovereignty In The Cloud Critical For Government?



- ✓ **TO AVOID BEING UNDER FOREIGN LAW/ACT JURISDICTION**
- ✓ **TO PROTECT THE DATA FROM SECURITY BREACHES**
- ✓ **TO MAINTAIN OWNERSHIP AND CONTROL**
- ✓ **TO ENSURE CONFIDENTIALITY AND PROTECT PRIVACY**

# There are several layers in safeguarding the sovereignty in the Cloud

## Layers of Cloud Sovereignty



### OWNERSHIP & AUTHORITY

- Data is subjected to local legal jurisdictions only - insulated from outside Law/ Act
- Legal ownership is local
- Local decision making
- Having certifications/ attestation related to the country

### LOCALITY

- Data, services, staff and infrastructure stay within the country
- Infrastructure and services are maintained and managed by citizens of the country
- The local provider/ partner has control over the control plane and able to enforce action

### RESIDENCY

- Data stay within the country
- Data reside within local DC of the country
- Data in motion and movement can be tracked, documented and sanctioned by the customer

### DATA PRIVACY

- Data owner has control and ownership of their data and keys
- Comply to data privacy law
- Data cannot be accessed and not visible to operators
- Prevent compelled accessed by external authorities
- Rights to audit



# TM Fulfils Malaysia's National Sovereignty Requirements Through Cloud Alpha Edge (CAE)



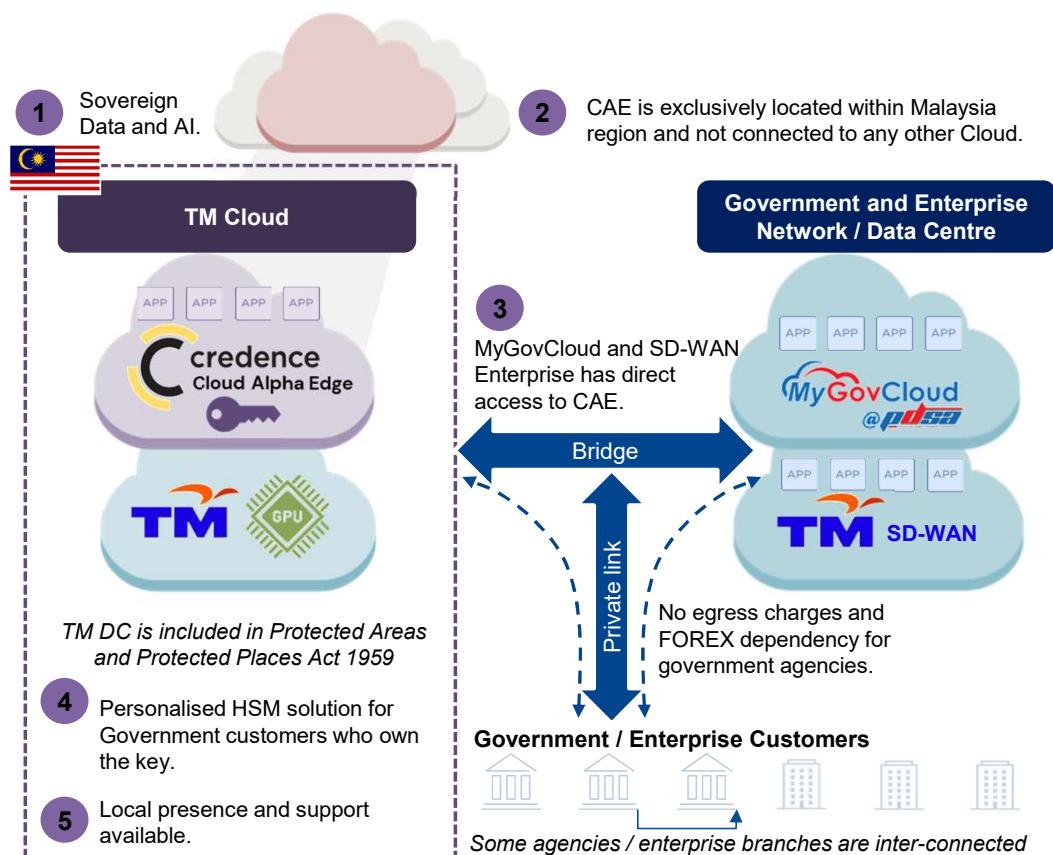
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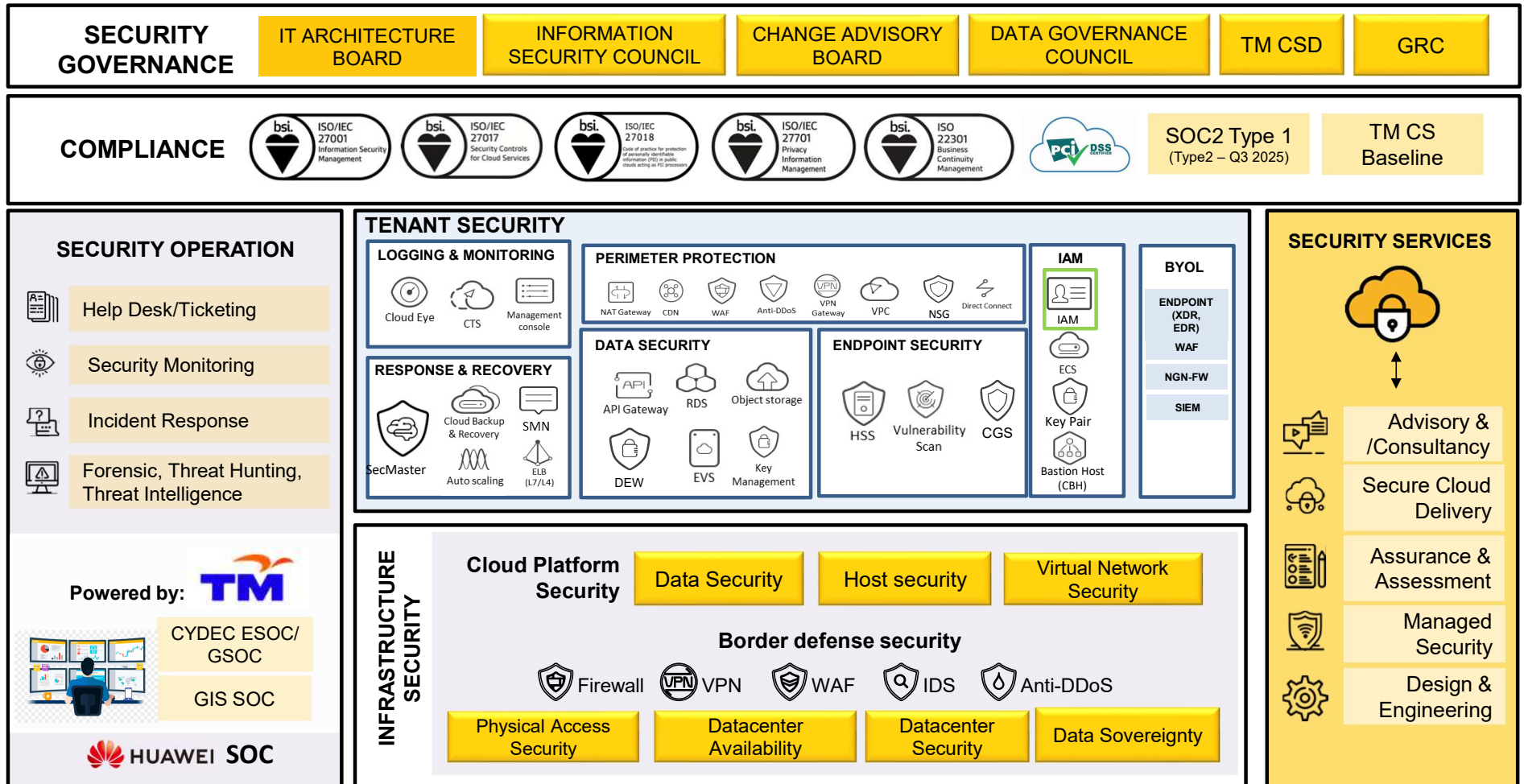
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## How TM Powers Malaysia's National Sovereign Cloud



# TM Cloud Sovereign Position Is Complimented By Established Security Compliance And Offerings



# Credence Empowers Malaysian Enterprises And Public Sectors Through Transformational Solutions



**The National Sovereign Cloud solutions tailored to drive innovation, scalability, and operational excellence.**

- Cloud Hosting
- Advisory & Consulting
- Migration & Modernization
- DevOps & AI/ML
- Security
- Microsoft Licensing Solution Partner
- Microsoft Cloud Solution Provider



**Turn data into a strategic advantage to drive smarter decisions, optimize operations, and accelerate growth.**

- Tailor-made Advanced Analytics and AI Programs
- Enterprise-wide Analytics
- Multi-agency / Multi organization Analytics



**Transform the way you build, modernize, and manage applications to stay ahead in digital-first world.**

- 24/7 Service Deck and Proactive Monitoring Support
- 24/7 L1-L3 Support on Cloud IaaS and PaaS
- BaaS & DRaaS
- Cloud Native Security Managed Services
- Custom Applications Managed Services (Proactive, Reactive L1 to L3 Support)
- Service Management, Cloud Delivery Lead and Customer Success



**Streamline operations, enhance experiences, and achieve agility with Credence's next-gen platforms tailored for the digital age.**

- Specialised applications:
  - Darwinbox
  - SAP
  - Qualtrics
  - Dynamic Talent Cloud
- Custom application development:
  - DMaaS

## Our Partners:

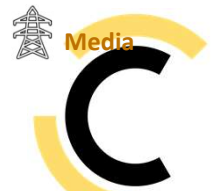


Note for abbreviation

DMaaS (Document Management as a Service) , Cloud IaaS (Infra as a Service), PaaS(Platform as a Service), BaaS (Backup as a Service) & DRaaS (Disaster Recovery as a Service),

## Case Study

# Cloud Management Content Platform – Enabler For National Creative Industry



### Problem Statement

- **On-premise limitations in storage capacity** leading to performance issue and compromised accessibility. Coupled with concurrent access to large datafiles leading to downtime. Insufficient security measures for content access leads to data breaches and hinders overall productivity
- **Difficulty in effectively processing and distributing streaming content** that supports adaptive streaming. Leads to constrained playback capabilities, causing buffering, latency, and a poor user experience
- **Lack of centralised platforms** content scattered across various systems, repositories, and storage locations.

### Approach

**eTVCMS (Electronic TV Content Management System)** solution offering consist of:

- Practical POC approach – objective identification, prototype development, test & evaluate, data collection
- Scalability and Resource Optimisation - enables efficient handling of large volumes of content
- Accessibility and Availability - engagement with both local and international vendors to acquire content
- Content Delivery Network (CDN) – distribute content across multiple edge servers
- Security Measures to Safeguard Intellectual Property – regular backup & DRC, RBAC & encryption during storage, transport, access, WAF to mitigate DDOS attack risk
- CAE Direct Connect – private connection to GovNet/PCN

### Results

- **Scalability and Resource Optimisation up to 4TB of storage for 1,000 vendor application**
- **Secure Streaming Engine includes encryption and RBAC management to sensitive content**
- **Streamlined Workflows in Centralised Platform - 3,000 content submission assessment from 3 months to 1 month**





## Case Study

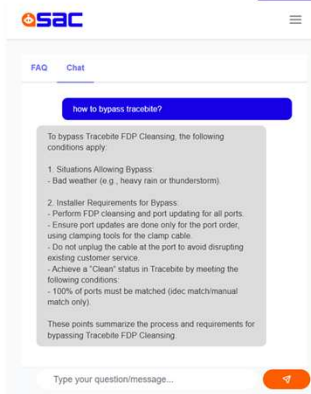
## SAMPLE AI FUNCTIONAL USE CASES IN TM



### TECHNICAL VIRTUAL ASSISTANT AGENT



**Service Agent Companion - SAC** is an AI chatbot powered by Large Language Model, designed to **provide information to Unifi Installers anytime and anywhere.**



Reduce repetitive questions by **50%**

\* 12k to 6k queries per mth

Improves handling time by **83%**

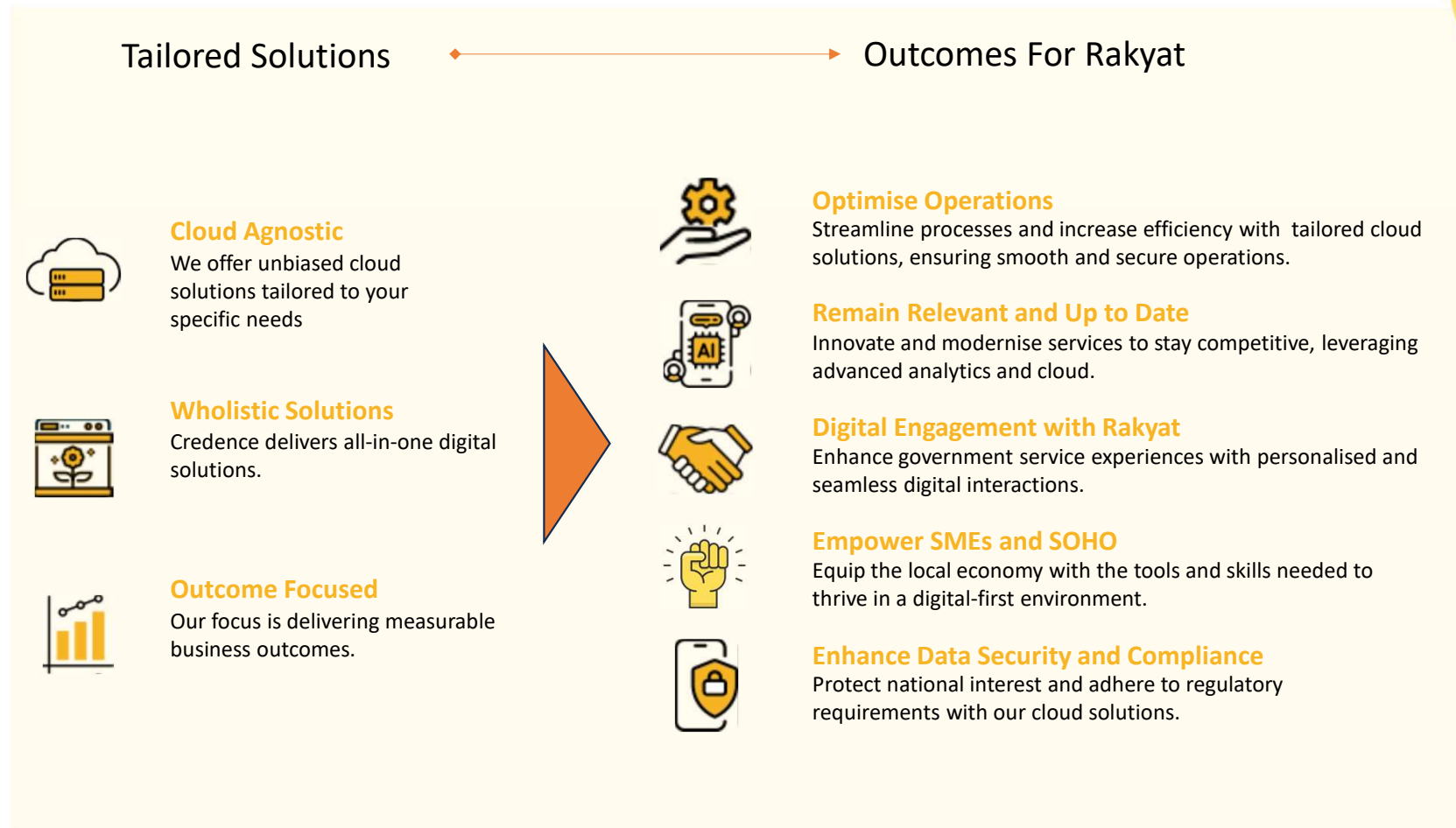
\* 30 minutes to 5 minutes

**24/7 accessibility** and is particularly  
and nearly 1,900 installers Rakan Unifi (RU)

### QUALITY CONTROL VALIDATION

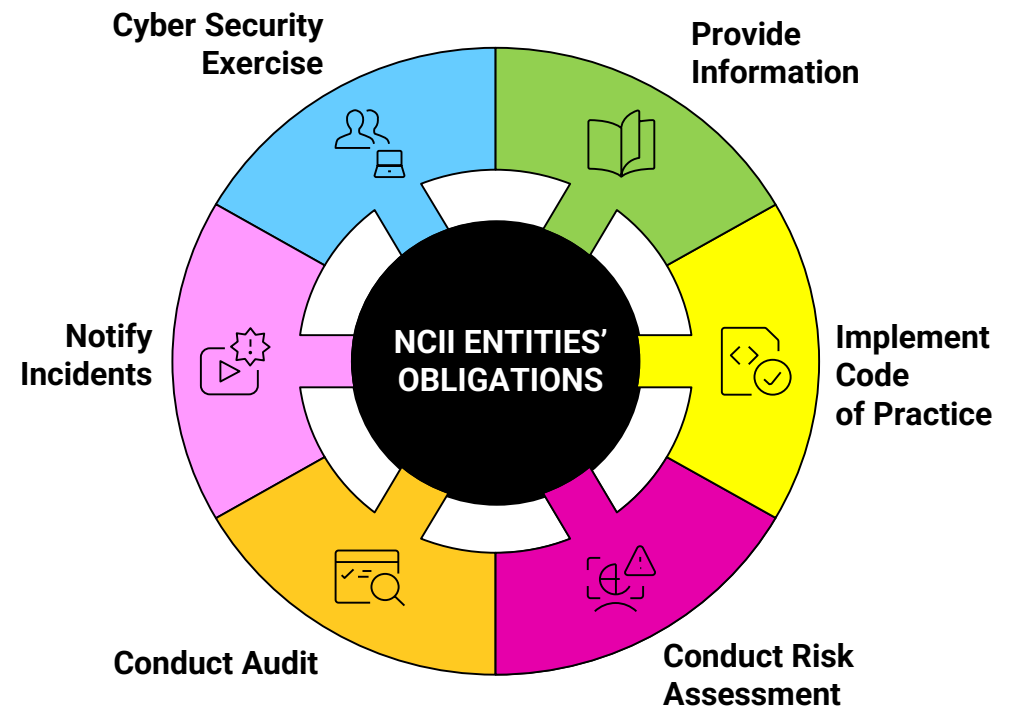
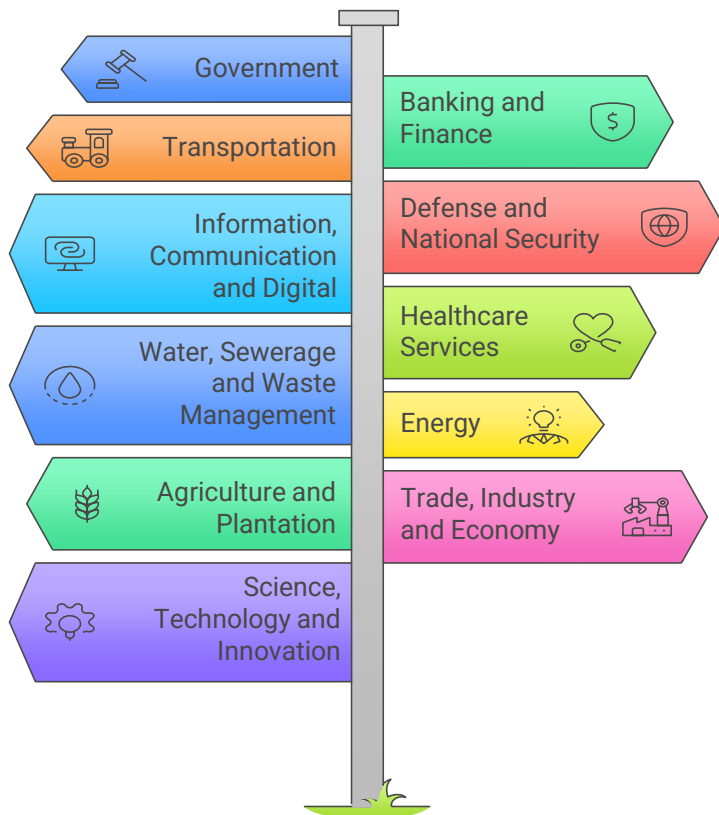


## Key Takeaways







# MALAYSIA CYBER SECURITY ACT 2024 (ACT 854) (1/2)

NCII = National Critical Information Infrastructure



# MALAYSIA CYBER SECURITY ACT 2024 (ACT 854) (2/2)

OBLIGATION	OFFENCE	PENALTY	LIABILITY FOR OFFENCE	HOW TM ONE CAN HELP
 <b>Clause 21: Compliance with Code of Practice</b>	Failure to implement code measures	≤ RM500,000 fine or 10 years' imprisonment or both	<b>Clause 58:</b> Director, compliance officer, partner, manager, secretary or other similar officer  <b>Clause 59:</b> A person is also liable for offences committed by their employees, agents, or their agents' employees while acting on their behalf,	<ul style="list-style-type: none"> <li>Compliance assessment</li> <li>ISO/IEC implementation</li> <li>Cybersecurity Maturity Assessment (CMA)</li> </ul>
 <b>Clause 22: Cybersecurity Risk Assessment</b>	Failure to conduct cybersecurity risk assessment <b>at least once a year</b>	≤ RM200,000 fine or 3 years' imprisonment or both		VAPT/SPA service
 <b>Clause 22: Cybersecurity Audit</b>	Failure to complete/submit audit <b>at least once in every 2 years</b>	≤ RM200,000 fine or 3 years' imprisonment or both		ISO/IEC annual auditing service
 <b>Clause 23: Incident Reporting</b>	Failure to report cybersecurity incident	≤ RM500,000 fine or 10 years' imprisonment or both		Managed Security Operation Centre (MSOC)

Source:  
 - Laws Of Malaysia, Act 854, Cyber Security Act 2024  
 - Cyber Security (Period For Cyber Security Risk Assessment And Audit) Regulations 2024



# TM CYBERSECURITY BASELINE



# TM ONE CYBERSECURITY PRODUCTS AND SERVICES

