Food Safety Information System of Malaysia (FoSIM)

Protecting public against health hazards can only be achieved by ensuring food safety along the food supply chain and minimising fraud in the preparation process. FoSIM monitors, governs and presents traceability information about food products from farm to fork.

Overview

FoSIM is a one-stop web-based system that caters to various user groups namely public, food importers, exporters, handlers and the Health Ministry of Malaysia. The Food Safety and Quality Division (FSQD) is able to monitor traceability information via FoSIM of the entire food industry supply chain and its governing bodies in the country.

Features

FoSIM comprises the following features:

- **Micro-Service Oriented**
  FoSIM is a large-scale system built in modular services where each module supports a specific business goal.

- **Offline-Enabled Modules**
  The system functions without an Internet connection for certain modules.

- **Big Data**
  The wealth of data that is collected by the system will lead to better decision-making and establishment of future programs/policies.

- **Data Security and Protection**
  Using HTTP protocol that requires certificate to encrypt and data, the gateway recognises unauthorised login attempts and subsequently probes for further credentials.

Technology Benefits

The main impacts of FoSIM are:

- **Enhanced Contravention Management**
  Early detection of food violation and notifying the right people at the right time.

- **Monitoring and alert of System Tasks**
  The system detects delays, triggers reminders and escalates pending tasks.

- **Mobile Device-Enabled**
  The Inspection and Sampling modules are accessible in offline mode and supported on handheld devices for ease of use.

- **Transparent Procedures and Processes**
  System users will be well-informed of the procedures and processes through transparency in decision-making processes, and accountability in implementation.

Technology Summary

**FoSIM**

An integrated enterprise web system that handles the entire supply chain of the food industry which includes Export, Import, Certification, Licensing, Sampling, Inspection and Training.

**Features**

- Micro-service oriented
- Offline-enabled modules
- Big data decision-making
- Data security and protection

**Technology Benefits**

- Enhanced contravention management
- Monitoring and alert of system tasks
- Mobile device-enabled
- Transparent procedures and processes

System Requirements

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<th><strong>FoSIM</strong></th>
<th><strong>Hardware Requirements</strong></th>
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<tr>
<td><strong>Application Server (Cloud Host)</strong></td>
<td>2 x Intel Xeon Gold 6140/2.3GHz/18-core/24.75MB/140W, 512GB RAM</td>
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<tr>
<td><strong>DB Server</strong></td>
<td>2 x Intel Xeon Gold 5118/2.3GHz/12-core/16.5MB/105W, 256GB RAM</td>
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<tr>
<td><strong>Cloud and User Management Server</strong></td>
<td>2 x Intel Xeon Bronze 3104/1.7GHz/6-core/8.25MB/85W, 128 GB RAM</td>
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<tr>
<td><strong>NAS Storage (80 TB)</strong></td>
<td>3 Monitor Nodes: 2 x Intel Xeon Bronze3104/1.7GHz/6-core/8.25MB/85W, 64 GB RAM 4 OSD Nodes: 2 x Intel Xeon Silver 4110/2.1GHz/8-core/11MB/85W, 64GB RAM</td>
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<tr>
<td><strong>Mini Tablet</strong></td>
<td>Octa-Core, 2GB RAM, 16GB ROM</td>
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<th><strong>Software Requirements</strong></th>
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<td><strong>Web Browsers</strong></td>
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