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IKBN Jitra Network Upgrade Report Period of 26/04/2022 - 31/05/2022

Date	Description
26/04/2022	Being informed about project award by turnkey. Proceed with hardware sourcing/acquisition.
27/04/2022	Supplier returned back and informed about world-wide shortage on the item being earlier quoted. Finally sourced for TP-Link that have same
	capacity of deliverables:
	- Core Switch TL-SX3016F
	- Management Switch TL-SG3428X
29/04/2022	Retrieve a site/floor HPE switch (model JE068A - A5120-24G) from project site (Bengkel Automotif) for the purpose of sampling upgrading
	workflow:
	- to reset current configuration
	- to configure interfaces and VLAN
	- to save configuration as template
30/04/2022	Learned that the floor/site switch that was brought back is faulty. Some of the cooling fans (there're 4 of them) working intermittently. Informed
	site owner about it. Sourced for replacement fan. Specs of the following:
	- Size: 40x40x20mm
	- Connector: 3 Pin
	- Power: 12V 0.15A
	- Rate: 8200RPM
01/05/2022	Contacted Mr Azmi from GiTN in order to retrieve the delegated subnet from their network.
	- Network Number 10.140.128.0
	- Subnet Mask 255.255.248.0
	- GiTN Router IP Address 10.140.128.6/27
	- IKBN Router IP Address 10.140.128.2/27
03/05/2022	Prepare a small server for the purpose of installing and configuring the following:
	- Ubiquiti Controller
	- TP-Link Omada Controller
08/05/2022	Came up with a high level network diagram to finally determine the following:
	- Specs of connectors - SFP/SFP+
	- Specs of Switches
	- Final VLAN configurations with concerning subnets





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Date Description

09/05/2022

The following is the determined design as of date:

10.140.129.0/25 - Admin - VLAN 11

10.140.129.128/25 - HEP - VLAN 12

10.140.130.0/26 - Elektrikal - VLAN 13

10.140.130.64/26 - Automotif - VLAN 14

10.140.130.128/26 - Mekanikal - VLAN 15

10.140.130.192/27 - Tekstil - VLAN 16

10.140.130.224/27 - Lukisan - VLAN 17

10.140.132.0/25 - Lab HEP - VLAN 21

10.140.131.0/24 - Lab Lukisan - VLAN 22

10.140.132.128/25 - Lab Elektrikal - VLAN 23

10.140.133.0/25 - Lab Mekanikal - VLAN 24

10.140.133.128/25 - Lab Auto - VLAN 25

10.140.134.0/25 - Lab Tekstil - VLAN 26

172.16.125.0/24 - WIFI Tetamu - VLAN 31

172.16.132.0/22 - WIFI Staff - VLAN 32

172.16.128.0/22 - WIFI Pelajar - VLAN 33

10/05/2022

Brought the following to project site:

- Controller Server
- HPE5120-24G for workflow samping
- Firewall

Did not manage to do anything since maintenance is attending air-conditioning problem. Visit again day after.

11/05/2022

Reset HPE switches at Mechanical Department.

- IKBN-MEKANIKAL-01
- IKBN-MEKANIKAL-02
- IKBN-MEKANIKAL-03
- IKBN-MEKANIKAL-04

Reset Cisco switch and leave it be as default as the uplink port being untagged VLAN 23 (Lab Elektrikal).

Whilst at the department, found a pair of Ubiquiti US-8-150W and UAC-AP-HD. Reset both switch the AP and and configured to join the network. Can find the configured devices at Ubiquiti configured https://172.16.126.2:8443

12/05/2022

Reset HPE switches at the rest of any other departments:

- IKBN-ELEKTRIKAL-01
- IKBN-ELEKTRIKAL-02
- IKBN-FI FKTRIKAI -03

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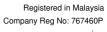
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Date	Description
13/05/2022	Reset HPE switches at the rest of any other departments:
	- IKBN-HEP-01
	- IKBN-HEP-02
	- IKBN-HEP-03 (Cisco reset as default, uplink port being untagged VLAN 12)
	- IKBN-HEP-04
	- IKBN-HEP-05
	- IKBN-AUTOMOTIF-01
	- IKBN-MOTOR-01
	- IKBN-JAHITAN-01
	Whilst at Automotive department, found Ubiquiti UAC-AP-PRO. Reset the AP and and configured to join the network.
14/05/2022	Reset HPE switches at the rest of any other departments:
	- IKBN-ASRAMA-01
	- IKBN-TEKSTIL-01
	- IKBN-MOTOR-01
	Whilst at the hostel and Textile department, found a pair of Ubiquiti US-8-150W and UAC-AP-HD each at both locations. Reset both switch the
	AP and and configured to join the network. Can find the configured devices at Ubiquiti configured https://172.16.126.2:8443
15/05/2022	Revisit Mechanical Department
	- reconfigure WIFI bridge from Mechanical Department to Dewan Baru
	- reconfigure Ubiquiti UAP-AC-HD to join the network. Device discoverable in Ubiquiti Controller at https://172.16.126.2:8443

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Date Description

19/05/2022 Credentials as follows:

TM UNIFI

username: ikbnjitra@unifibiz password: xX7qFNzpsg6FW

Firewall

host: 172.16.126.1 username: admin

password: @adminIKBN123

Ubiquiti Controller

host: 172.16.126.2:8443 username: admin password: admin123

Omada Controller

host: 172.16.126.2:8443 username: admin password: admin123

HPE Switches:

host: respective IPs / port 80 (please refer to diagram)

username: admin password: ikbn1234

WIFI

SSID: IKBN-Staff

password: Staff@IKBNJitra

SSID: IKBN-Pelajar password: none

SSID: IKBN-Tetamu

password: none / voucher access

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