



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



Date	Description
09/05/2022	<p>The following is the determined design as of date:</p> <p>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</p> <p>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</p> <p>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</p>
10/05/2022	<p>Brought the following to project site:</p> <ul style="list-style-type: none"> - Controller Server - HPE5120-24G for workflow sampling - Firewall <p>Did not manage to do anything since maintenance is attending air-conditioning problem. Visit again day after.</p>
11/05/2022	<p>Reset HPE switches at Mechanical Department.</p> <ul style="list-style-type: none"> - IKBN-MEKANIKAL-01 - IKBN-MEKANIKAL-02 - IKBN-MEKANIKAL-03 - IKBN-MEKANIKAL-04 <p>Reset Cisco switch and leave it be as default as the uplink port being untagged VLAN 23 (Lab Elektrikal).</p> <p>Whilst at the deparment, 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</p>
12/05/2022	<p>Reset HPE switches at the rest of any other departments:</p> <ul style="list-style-type: none"> - IKBN-ELEKTRIKAL-01 - IKBN-ELEKTRIKAL-02 - IKBN-ELEKTRIKAL-03



Date	Description
13/05/2022	<p>Reset HPE switches at the rest of any other departments:</p> <ul style="list-style-type: none">- 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 <p>Whilst at Automotive department, found Ubiquiti UAC-AP-PRO. Reset the AP and and configured to join the network.</p>
14/05/2022	<p>Reset HPE switches at the rest of any other departments:</p> <ul style="list-style-type: none">- IKBN-ASRAMA-01- IKBN-TEKSTIL-01- IKBN-MOTOR-01 <p>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</p>
15/05/2022	<p>Revisit Mechanical Department</p> <ul style="list-style-type: none">- 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



Date	Description
19/05/2022	<p>Credentials as follows:</p> <p>TM UNIFI</p> <p>username: ikbnjitra@unifibiz password: xX7qFNzpsg6FW</p> <p>Firewall</p> <p>host: 172.16.126.1 username: admin password: @adminIKBN123</p> <p>Ubiquiti Controller</p> <p>host: 172.16.126.2:8443 username: admin password: admin123</p> <p>Omada Controller</p> <p>host: 172.16.126.2:8443 username: admin password: admin123</p> <p>HPE Switches:</p> <p>host: respective IPs / port 80 (please refer to diagram) username: admin password: ikbn1234</p> <p>WIFI</p> <p>SSID: IKBN-Staff password: Staff@IKBNJitra</p> <p>SSID: IKBN-Pelajar password: none</p> <p>SSID: IKBN-Tetamu password: none / voucher access</p>