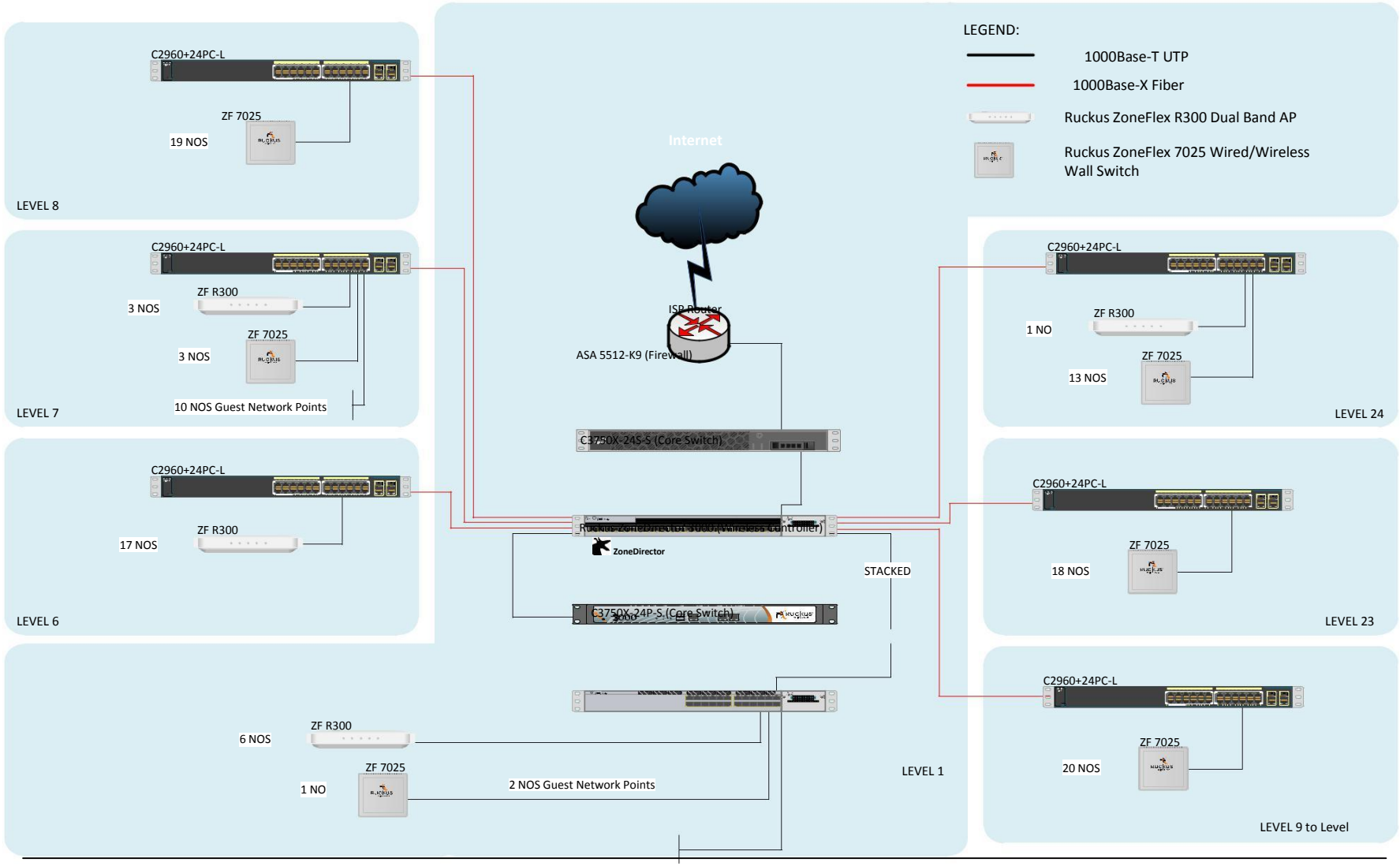
1.0 UNSECURE NETWORK - LOGICAL DIAGRAM



3.0 NETWORK - SWITCH CONFIGURATION

The Unsecured Network for was further separated for different services; IPTV, IPTV Management, WiFi AP Management, Switch Management and WiFi Guest. The services were separated by using IEEE 802.11q standard – Virtual Local Area Network (VLAN). The Cisco switch ports were configured to the corresponding VLANs as show in the diagram below.

3.1 Switch Port VLAN

The Table in the following page indicates the VLAN configured for the Cisco switch port (Unsecured Network).

GROUND FLOOR (SERVER ROOM)

Core Switch I (Cisco Catalyst 3750X-24S-S)												(10.18.1.2/24)
Port No.	Gi1/0/1	Gi1/0/2	Gi1/0/3	Gi1/0/4	Gi1/0/5	Gi1/0/6	Gi1/0/7	Gi1/0/8	Gi1/0/9	Gi1/0/10	Gi1/0/11	Gi1/0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Lvl 6 Uplink	Lvl 7 Uplink	Lvl 8 Uplink	Lvl 9 Uplink	Lvl 10 Uplink	Lvl 11 Uplink	Lvl 12 Uplink	Lvl 13 Uplink	Lvl 14 Uplink	Lvl 15 Uplink	Lvl 16 Uplink	Lvl 17 Uplink
Port No.	Gi1/0/13	Gi1/0/14	Gi1/0/15	Gi1/0/16	Gi1/0/17	Gi1/0/18	Gi1/0/19	Gi1/0/20	Gi1/0/21	Gi1/0/22	Gi1/0/23	Gi1/0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1	1
Port Desc.	Lvl 18 Uplink	Lvl 19 Uplink	Lvl 20 Uplink	Lvl 21 Uplink	Lvl 22 Uplink	Lvl 23 Uplink	Lvl 24 Uplink	-	-	-	-	-

Core Switch II (Cisco Catalyst 3750X-24P-S)												(10.18.1.2/24)
Port No.	Gi2/0/1	Gi2/0/2	Gi2/0/3	Gi2/0/4	Gi2/0/5	Gi2/0/6	Gi2/0/7	Gi2/0/8	Gi2/0/9	Gi2/0/10	Gi2/0/11	Gi2/0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	101	101	101	101	101	101
Port Desc.	Lounge-1 AP	Deli AP	Main Lobby AP	Coffee House AP	Café-1 AP	Café-2 AP	IPTV Encoder	IPTV Encoder	IPTV Encoder	IPTV Encoder	IPTV Encoder	ER Streamer Server
Port No.	Gi2/0/13	Gi2/0/14	Gi2/0/15	Gi2/0/16	Gi2/0/17	Gi2/0/18	Gi2/0/19	Gi2/0/20	Gi2/0/21	Gi2/0/22	Gi2/0/23	Gi2/0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	100	100	100	Trunk	Trunk	Trunk
Port Desc.	ER Streamer Server	ER Streamer Server	ER Streamer Server	ER Streamer Server	ER Streamer Server	Bar_Lounge AP	IPTV	IPTV	IPTV	Wi-Fi	Ruckus ZoneDirector	Cisco ASA Firewall

6TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.6/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	1	1	Trunk	1	Trunk	Trunk	Trunk	1	1	1	1	Trunk
Port Desc.	-	-	Func.Room 1 AP 1	-	Func.Room 2 AP	Func.Room 3 AP	Func.Room 4 AP	-	-	-	-	Func.Room 5 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	1	1	1	1	1	1	1	Trunk
Port Desc.	Func.Room 6 AP	Func.Room 1 AP 2	Func.Room 1 AP 4	Func.Room 1 AP 3	-	-	-	-	-	-	-	Uplink to Banquet

Port No.	Gi0/1	Gi0/2
VLAN ID	Trunk	1
Port Desc.	Core Switch Uplink	-

6TH FLOOR (LINEN STORE)

Access Switch (HP 1820-24-PoE+)												(10.18.1.5/24)
Port No.	1	2	3	4	5	6	7	8	9	10	11	12
VLAN ID	Tagged	Tagged	Tagged	Tagged	Tagged	Tagged	Tagged	Tagged	1	1	1	1
Port Desc.	Banquet AP 1	Banquet AP 2	Banquet AP 3	Banquet AP 4	Banquet AP 5	Banquet AP 6	Banquet AP 7	Banquet AP 8	-	-	-	-
Port No.	13	14	15	16	17	18	19	20	21	22	23	24
VLAN ID	1	1	1	1	1	1	1	1	1	1	1	Tagged
Port Desc.	-	-	-	-	-	-	-	-	-	-	-	Uplink to L6 Switch
Port No.	25	26										
VLAN ID	1	1										
Port Desc.	-	-										

7TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.7/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	1	1	1	1	1	1	1	1
Port Desc.	Pool Bar AP	SPA AP	Swimming Pool AP	GM Apartment	-	-	-	-	-	-	-	-
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	1	1	1	1	1	1	1	1	1	1	1	1
Port Desc.	-	-	-	-	-	-	-	-	-	-	-	-
Port No.	Gi0/1	Gi0/2										
VLAN ID	Trunk	1										
Port Desc.	Core Switch Uplink	-										

8TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.8/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 801 AP	Room 802 AP	Room 803 AP	Room 804 AP	Room 805 AP	Room 806 AP	Room 807 AP	Room 808 AP	Room 809 AP	Room 810 AP	Room 811 AP	Room 812 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1	1
Port Desc.	Room 813 AP	Room 815 AP	Room 816 AP	Room 817 AP	Room 818 AP	Room 819 AP	Room 820 AP	-	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

9TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.9/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 901 AP	Room 902 AP	Room 903 AP	Room 904 AP	Room 905 AP	Room 906 AP	Room 907 AP	Room 908 AP	Room 909 AP	Room 910 AP	Room 911 AP	Room 912 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 913 AP	Room 914 AP	Room 915 AP	Room 916 AP	Room 917 AP	Room 918 AP	Room 919 AP	Room 920 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

10TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.10/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1001 AP	Room 1002 AP	Room 1003 AP	Room 1004 AP	Room 1005 AP	Room 1006 AP	Room 1007 AP	Room 1008 AP	Room 1009 AP	Room 1010 AP	Room 1011 AP	Room 1012 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1013 AP	Room 1014 AP	Room 1015 AP	Room 1016 AP	Room 1017 AP	Room 1018 AP	Room 1019 AP	Room 1020 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

11TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.11/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1101 AP	Room 1102 AP	Room 1103 AP	Room 1104 AP	Room 1105 AP	Room 1106 AP	Room 1107 AP	Room 1108 AP	Room 1109 AP	Room 1110 AP	Room 1111 AP	Room 1112 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1113 AP	Room 1114 AP	Room 1115 AP	Room 1116 AP	Room 1117 AP	Room 1118 AP	Room 1119 AP	Room 1120 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

12TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.12/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1201 AP	Room 1202 AP	Room 1203 AP	Room 1204 AP	Room 1207 AP	Room 1206 AP	Room 1205 AP	Room 1208 AP	Room 1209 AP	Room 1210 AP	Room 1211 AP	Room 1212 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1213 AP	Room 1214 AP	Room 1215 AP	Room 1216 AP	Room 1217 AP	Room 1218 AP	Room 1219 AP	Room 1220 AP	-	-	-	-
Port No.	Gi0/1	Gi0/2										
VLAN ID	1	Trunk										
Port Desc.	-	Core Switch Uplink										

13TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.13/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1301 AP	Room 1302 AP	Room 1303 AP	Room 1304 AP	Room 1305 AP	Room 1306 AP	Room 1307 AP	Room 1308 AP	Room 1309 AP	Room 1310 AP	Room 1311 AP	Room 1312 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1313 AP	Room 1314 AP	Room 1315 AP	Room 1316 AP	Room 1317 AP	Room 1320 AP	Room 1319 AP	Room 1318 AP	-	-	-	-
Port No.	Gi0/1	Gi0/2										
VLAN ID	1	Trunk										
Port Desc.	-	Core Switch Uplink										

14TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.14/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1401 AP	Room 1402 AP	Room 1403 AP	Room 1404 AP	Room 1405 AP	Room 1406 AP	Room 1407 AP	Room 1408 AP	Room 1409 AP	Room 1410 AP	Room 1411 AP	Room 1412 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1413 AP	Room 1414 AP	Room 1415 AP	Room 1416 AP	Room 1417 AP	Room 1418 AP	Room 1419 AP	Room 1420 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

15TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.15/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1501 AP	Room 1502 AP	Room 1503 AP	Room 1504 AP	Room 1505 AP	Room 1506 AP	Room 1507 AP	Room 1508 AP	Room 1509 AP	Room 1510 AP	Room 1511 AP	Room 1512 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1513 AP	Room 1514 AP	Room 1515 AP	Room 1516 AP	Room 1517 AP	Room 1518 AP	Room 1519 AP	Room 1520 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

16TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.16/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1607 AP	Room 1606 AP	Room 1605 AP	Room 1604 AP	Room 1603 AP	Room 1602 AP	Room 1601 AP	Room 1608 AP	Room 1609 AP	Room 1610 AP	Room 1611 AP	Room 1612 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1613 AP	Room 1614 AP	Room 1615 AP	Room 1616 AP	Room 1617 AP	Room 1618 AP	Room 1619 AP	Room 1620 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

17TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.17/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1707 AP	Room 1706 AP	Room 1705 AP	Room 1704 AP	Room 1703 AP	Room 1702 AP	Room 1701 AP	Room 1708 AP	Room 1709 AP	Room 1710 AP	Room 1711 AP	Room 1712 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1713 AP	Room 1714 AP	Room 1715 AP	Room 1716 AP	Room 1717 AP	Room 1718 AP	Room 1719 AP	Room 1720 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

18TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.18/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1807 AP	Room 1806 AP	Room 1805 AP	Room 1804 AP	Room 1803 AP	Room 1802 AP	Room 1801 AP	Room 1808 AP	Room 1809 AP	Room 1810 AP	Room 1811 AP	Room 1812 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1813 AP	Room 1814 AP	Room 1815 AP	Room 1816 AP	Room 1817 AP	Room 1818 AP	Room 1819 AP	Room 1820 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

19TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.19/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 1901 AP	Room 1902 AP	Room 1903 AP	Room 1904 AP	Room 1905 AP	Room 1906 AP	Room 1907 AP	Room 1908 AP	Room 1909 AP	Room 1910 AP	Room 1911 AP	Room 1912 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 1913 AP	Room 1914 AP	Room 1915 AP	Room 1916 AP	Room 1917 AP	Room 1918 AP	Room 1919 AP	Room 1920 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

20TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.20/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 2001 AP	Room 2002 AP	Room 2003 AP	Room 2004 AP	Room 2005 AP	Room 2006 AP	Room 2007 AP	Room 2008 AP	Room 2009 AP	Room 2010 AP	Room 2011 AP	Room 2012 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 2013 AP	Room 2014 AP	Room 2015 AP	Room 2016 AP	Room 2017 AP	Room 2018 AP	Room 2019 AP	Room 2020 AP	-	-	-	-
Port No.	Gi0/1	Gi0/2										
VLAN ID	1	Trunk										
Port Desc.	-	Core Switch Uplink										

21TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.21/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 2103 AP	Room 2105 AP	Room 2107 AP	Room 2119 AP	Room 2117 AP	Room 2114 AP	Room 2112 AP	Room 2101 AP	Room 2110 AP	Room 2111 AP	Room 2102 AP	Room 2104 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 2109 AP	Room 2118 AP	Room 2106 AP	Room 2113 AP	Room 2120 AP	Room 2108 AP	Room 2115 AP	Room 2116 AP	-	-	-	-
Port No.	Gi0/1	Gi0/2										
VLAN ID	Trunk	1										
Port Desc.	Core Switch Uplink	-										

22ND FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.22/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 2201 AP	Room 2202 AP	Room 2203 AP	Room 2204 AP	Room 2205 AP	Room 2206 AP	Room 2207 AP	Room 2208 AP	Room 2209 AP	Room 2210 AP	Room 2211 AP	Room 2212 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1
Port Desc.	Room 2213 AP	Room 2214 AP	Room 2215 AP	Room 2216 AP	Room 2217 AP	Room 2218 AP	Room 2219 AP	Room 2220 AP	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

23RD FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												(10.18.1.23/24)
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 2313 AP	Room 2302 AP	Room 2306 AP	Room 2312 AP	Room 2305 AP	Room 2316 AP	Room 2307 AP	Room 2308 AP	Room 2303 AP	Room 2310 AP	Room 2311 AP	Room 2301 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	1	1	1	1	1	1
Port Desc.	Room 2315 AP	Room 2317 AP	Room 2318 AP	Room 2314 AP	Room 2309 AP	Room 2304 AP	-	-	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

24TH FLOOR (ELV RISER)

Access Switch (Cisco Catalyst 2960X+24PC-L)												**(10.18.1.24/24)**
Port No.	Fa0/1	Fa0/2	Fa0/3	Fa0/4	Fa0/5	Fa0/6	Fa0/7	Fa0/8	Fa0/9	Fa0/10	Fa0/11	Fa0/12
VLAN ID	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk	Trunk
Port Desc.	Room 2401 AP	Room 2402 AP	Room 2403 AP	Room 2404 AP	Room 2405 AP	Room 2406 AP	Room 2407 AP	Room 2408 AP	Room 2409 AP	Room 2410 AP	Room 2411 AP	Room 2412 AP
Port No.	Fa0/13	Fa0/14	Fa0/15	Fa0/16	Fa0/17	Fa0/18	Fa0/19	Fa0/20	Fa0/21	Fa0/22	Fa0/23	Fa0/24
VLAN ID	Trunk	Trunk	Trunk	1	1	1	1	1	1	1	1	1
Port Desc.	Room 2415 AP	Room 2413 AP	Room 2414 AP	-	-	-	-	-	-	-	-	-

Port No.	Gi0/1	Gi0/2
VLAN ID	1	Trunk
Port Desc.	-	Core Switch Uplink

5.0 UNSECURE NETWORK – WIRELESS ACCESS POINT

5.1 Ruckus R300 AP



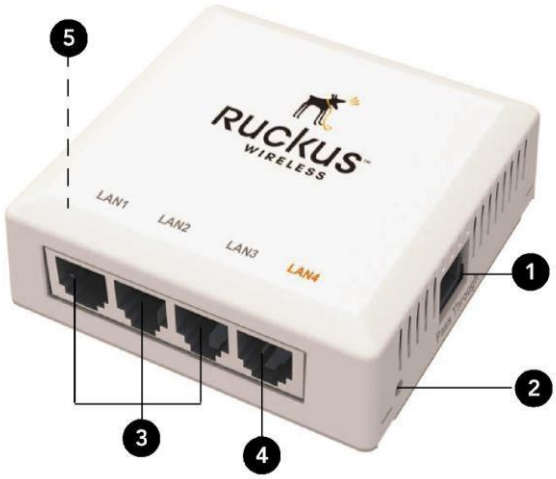
Front Panel LED Indicator

LED	DESCRIPTION
PWR LED	• Off: Off. • Red: Boot up in process. • Flashing Green: No routable IP address • Green: On.
OPT LED	Not used in this model.
DIR LED	• Off: The AP is not being managed by a controller (standalone mode). • Green: The AP is being managed by a controller. • Slow flashing green (one flash every two seconds): The AP is being managed by a controller, but is currently unable to communicate with the controller. • Fast flashing green (two flashes every second): The AP is being managed by a controller and is currently receiving configuration settings (provisioning) or an image update.
2.4G LED (WLAN)	• Off: The WLAN service is down. • Green: The WLAN service is up and at least one client is associated. • Amber: The WLAN service is up and no clients are associated.
5G LED (WLAN)	• Off: The WLAN service is down. • Green: The WLAN service is up and at least one client is associated. • Amber: The WLAN service is up and no clients are associated.

Rear Panel Elements

LED	DESCRIPTION
10/100/1000+PoE Port	One RJ-45 port for a 10/100/1000 PoE (Power over Ethernet, 802.3af) connection.
RST Button	Pressing, and then quickly releasing this internal button reboots the AP. Pressing and holding it for six seconds resets the AP to factory default settings. NOTE Resetting the AP to factory default settings erases all previously configured settings.
Power	Connect the power adapter (12VDC/1.25A) to this socket. Power can also be supplied via the 10/100/1000 PoE port.

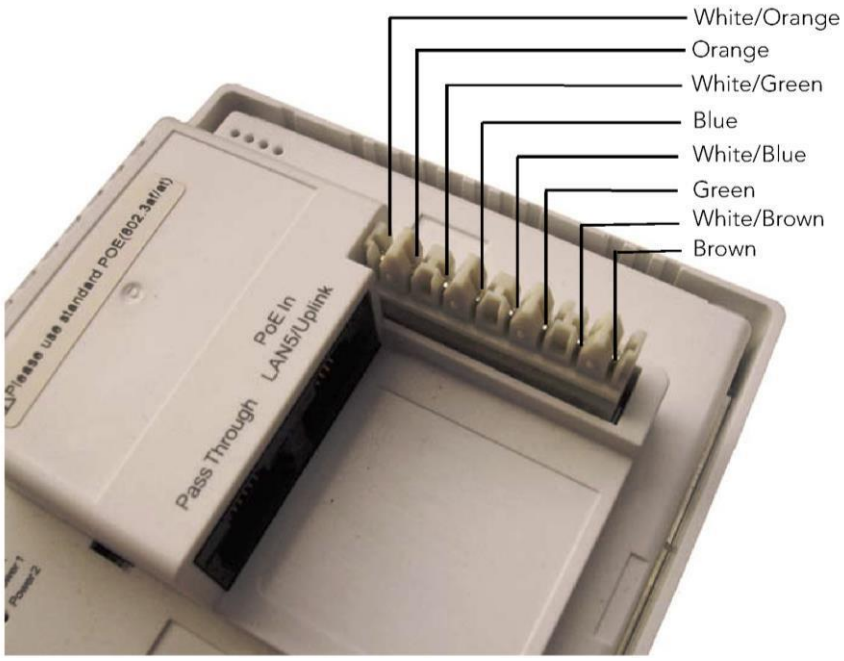
5.2 Ruckus ZoneFlex 7025 AP



Number	Description
1	Pass Through Port
2	Power Input
3	LAN1-LAN3 10/100 RJ45
4	LAN4 10/100 RJ45 with PoE out
5	Reset Buttons



Number	Description
1	Uplink Port
2	110 Punch Down Block
3	Pass Through Port
4	LEDs Indicator

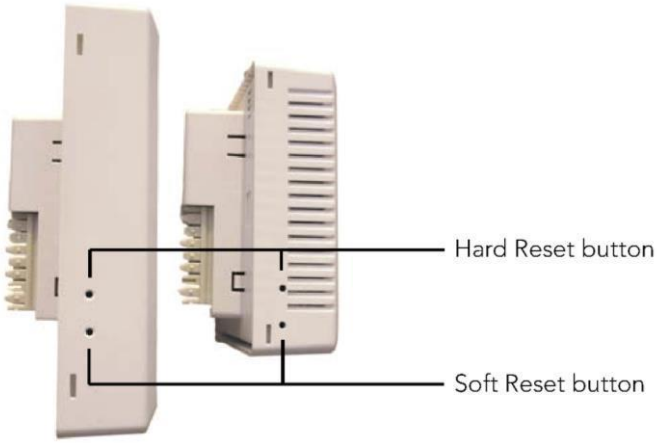


110 Punch Down Block wiring.

LED Indicator

LED	DESCRIPTION
WLAN	Green: WLAN service is available. Off: No WLAN service available.
OPT	Not used in this model.
DIR	Green: AP is being managed by ZoneDirector. Off: AP is not being managed by ZoneDirector.
POWER	Green: On Red: Bootup in process Off: Off
LAN5/Uplink	Green: Link up. Flashing green: Activity. Off: Link down.
LAN1 - LAN4	Green: Link up. Flashing green: Activity. Off: Link down.

Reset AP to Factory Default



Press and release either of the reset buttons to reboot the AP. Press and hold the Hard Reset button for three seconds or more to reset the AP to factory defaults.

5.3 Managing AP (R300 & ZF7025)

Both R300 and ZF7025 have the same web login interface. Both AP also use the same default IP address, default username & password.

To log into the Web interface

1. On your computer, open a Web browser window.

2. In the address or location bar, type the IP address of the

device **http://192.168.0.1**

3. Press <Enter> to connect to the Web interface.

4. If a Windows security alert dialog box appears, click OK/Yes to proceed. The Ruckus Wireless Admin login page appears.

5. In Username, type **super**.

6. In Password, type **sp-admin**.

7. Click Login.

The Multimedia Wi-Fi Wall Switch Web interface appears.



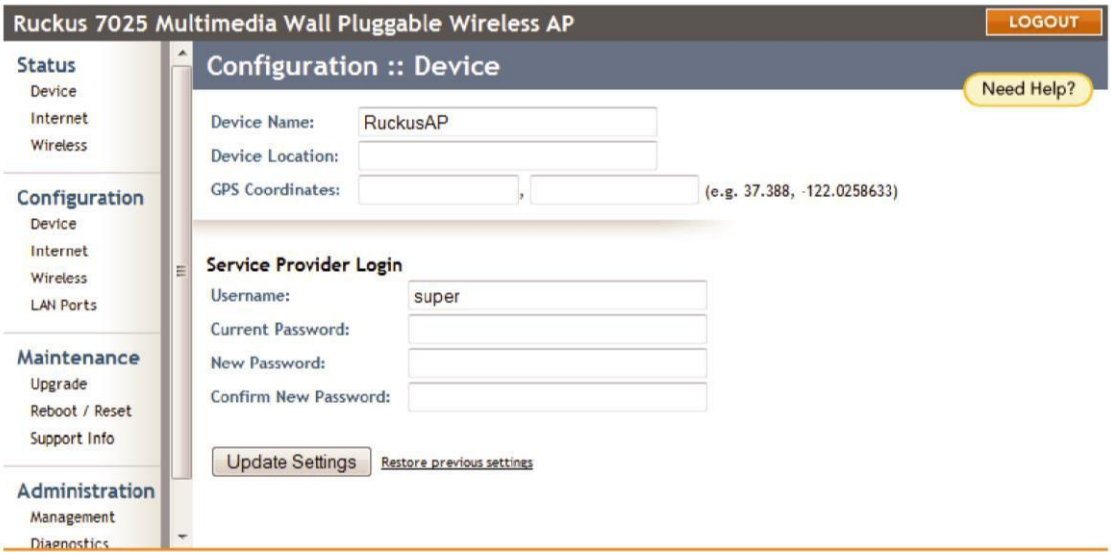
Note:

Once the AP is connected to the LAN and communicates with the ZoneDirector the AP will no longer be able to log in using the default username/password. The AP can be login instead using the ZoneDirector username/password.

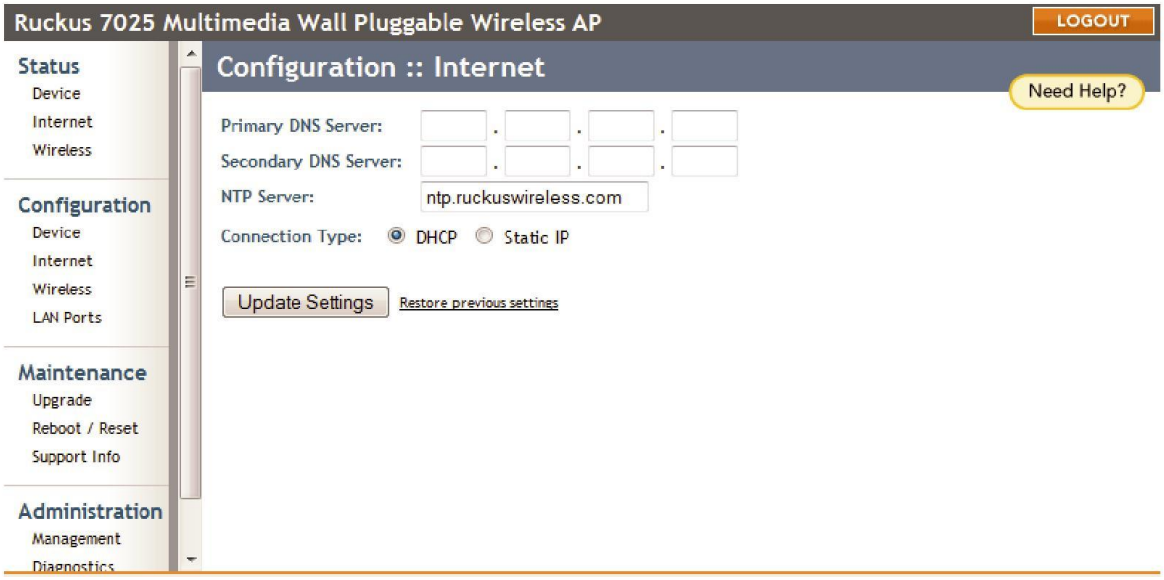
Configuring the AP

There are only two steps needed to configure the AP, since the rest of the configuration was done in the ZoneDirector:

1. Go to *Configuration* > *Device* to change the device name and device location for easy management.

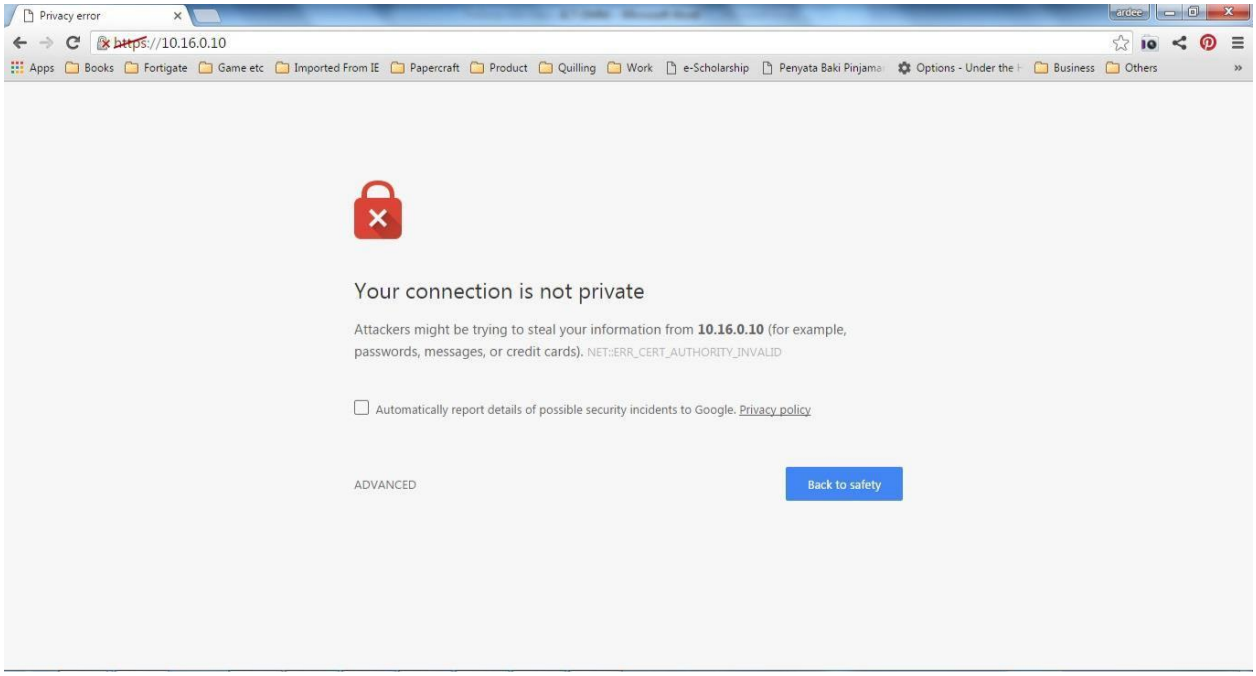


2. Go to *Configuration* > *Internet* and change connection type to Static IP. Enter the AP IP Address, Subnet mask, and default gateway.



6.0 UNSECURE NETWORK – WIRELESS CONTROLLER

All the wireless APs are managed from a single point, the Wireless Controller (ZoneDirector). To access the controller open any web browser and type in the controller's IP Address: http://10.16.0.10



In this case, the browser (Chrome) indicates that the connection is not private. Click Advance > Proceed to 10.16.0.10.

The login page for the Ruckus ZoneDirector will shows up. The credential to log in is:

Admin Name: **admin**

Password:



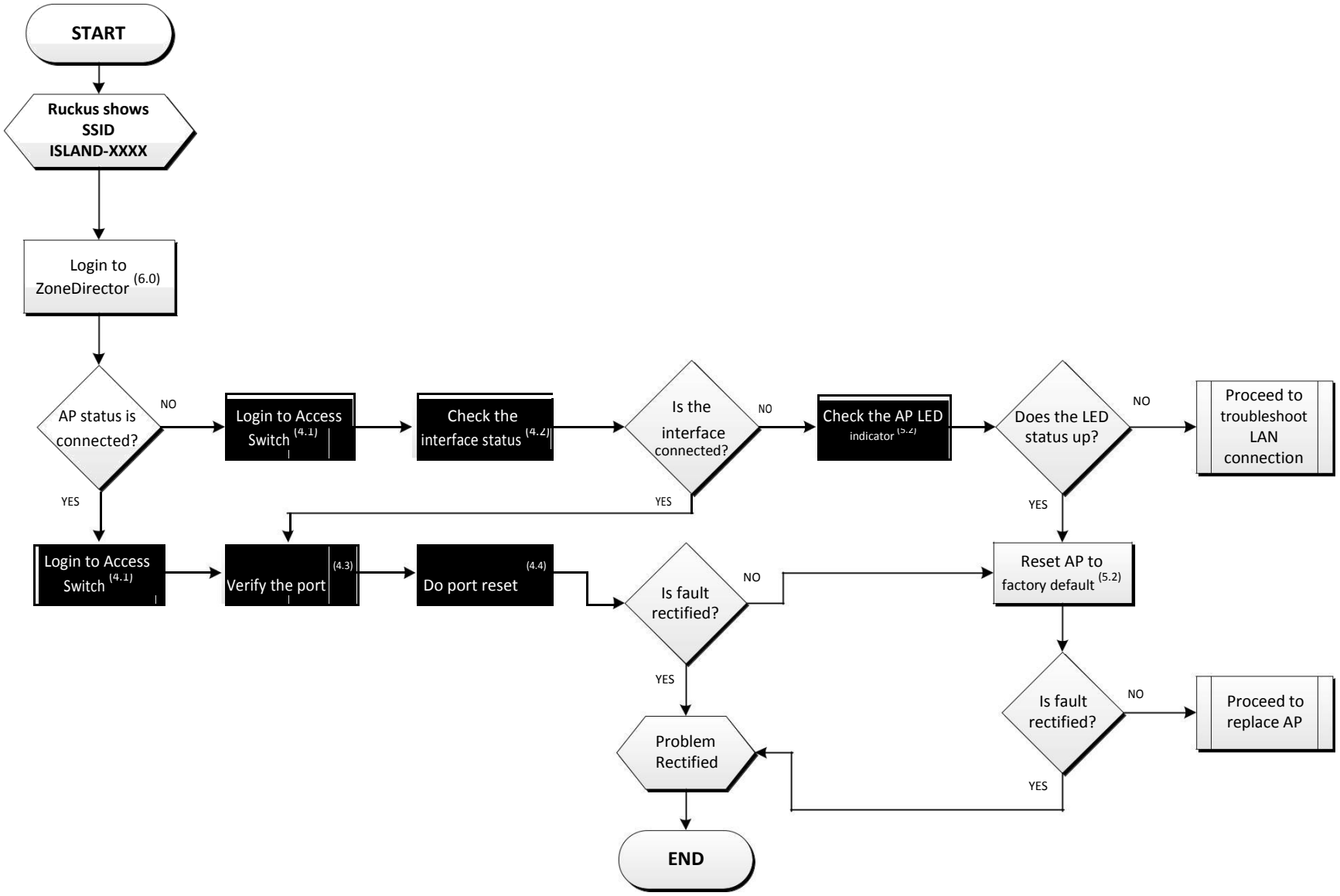
Once logged in, the controller will show a Dashboard page which contains all the important information/messages of the wireless network.

6.0 TROUBLESHOOTING

The following flow chart shows the suggested troubleshooting steps to be taken when face with a problem with the Ruckus AP. One of the common problem is when the AP is advertising SSID ISLAND-XXXX instead of the correct SSID. This happens when the AP lost its connection with the ZoneDirector.

It may cause by either a misconfiguration issue, LAN connectivity problem, or the AP simply freeze/hang which can be rectify by restarting the AP.

In the flow chart certain items are marked with a sub-script number. This number represents the topic in this User Guide in which the topic is explained. As an alternative, simply click on the box and it will redirect you to the topic page.


START
Ruckus shows SSID ISLAND-XXXX
Login to ZoneDirector (6.0)
AP status is connected?
NO
YES
Login to Access Switch (4.1)
Check the interface status (4.2)
Is the interface connected?
NO
YES
Check the AP LED indicator (5.2)
Does the LED status up?
NO
YES
Proceed to troubleshoot LAN connection
Login to Access Switch (4.1)
Verify the port (4.3)
Do port reset (4.4)
Is fault rectified?
NO
YES
Reset AP to factory default (5.2)
Is fault rectified?
NO
YES
Proceed to replace AP
Problem Rectified
END