Test Project

Infoemation Network Cabling

Module 3

Smart Home/Office Application

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Contents

Introduction

This Test Project consists of the following documents/files, which are provided as digital files:

- Fig.Module3_2_Cable connection diagram.
- WSC2022SE_TP02_M3_actual_en

Description of project and tasks

Module 3 assumes that a smart-home application is to be established. Various cabling works must also be done for this purpose as shown in Figure 1.
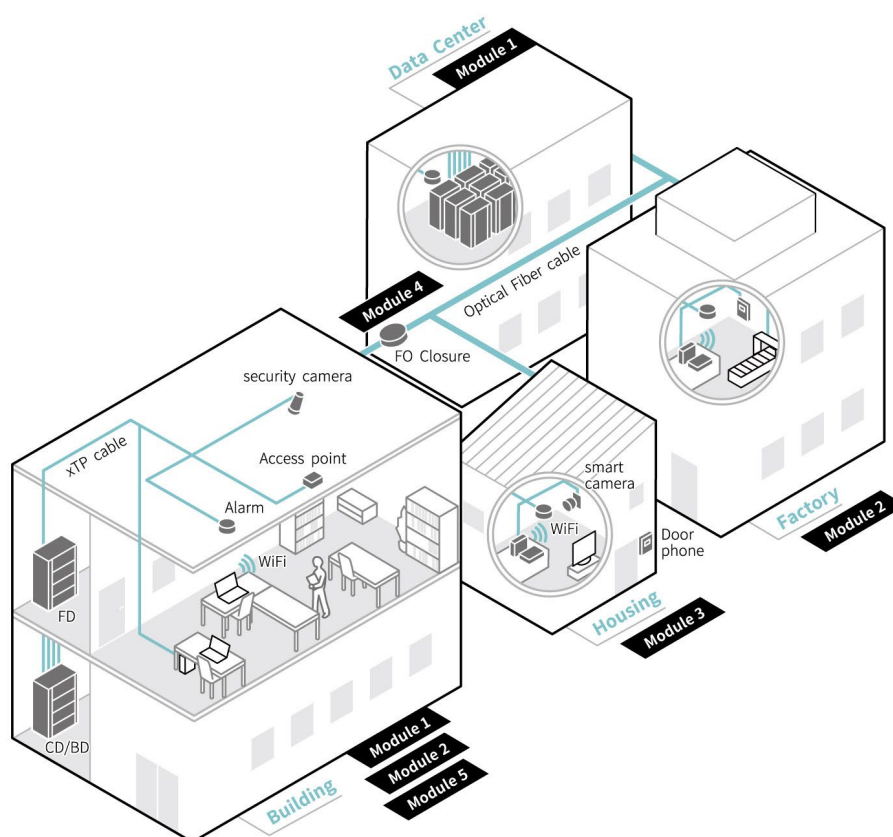

Figure 1. Scope of module 3.

Instructions to the Competitor

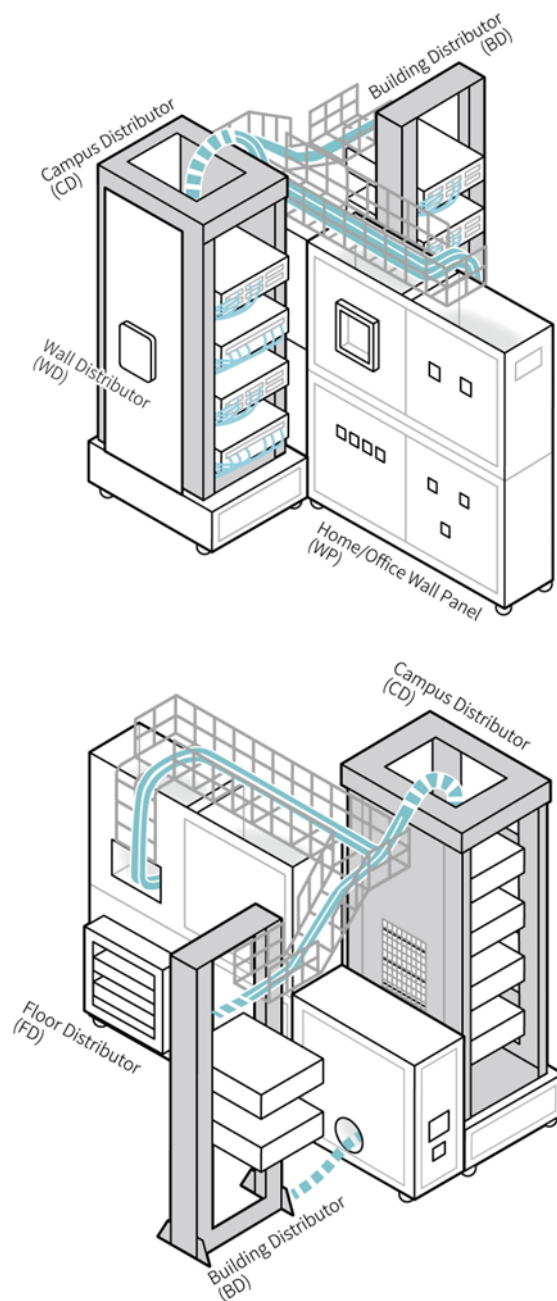The competition time is 2 hours and 30 minutes. The scope of construction is as presented in Figure 2.

Figure 2. Schematic drawing of module 3.

aCompetitors must do the following task.

1. The following work must be done during the pre-competition preparation period:

- Check to confirm that individual applications were installled and are operatable

PC: VIGI Security manager Tablet: Tapo

2. Individual equipment and cabling materials must be connected following Fig.M3.1_connection diagram and Fig.M3.2_installation location.

3. Settings Competitors think necessary must be done to realize the following functions:

- Only five designated devices can be connected to the Router. At this time, Dome camera, and the Router (WAN side) shall have a fixed IP.
- Breakdown of the 5 devices (your own PC, Tablet, Dome camera, Smart camera, Smart Plug)
- Images captured by your own cameras can be checked and confirmed by a camera image monitoring software (VIGI SECURITY MANAGER). Please refer to Fig.3.
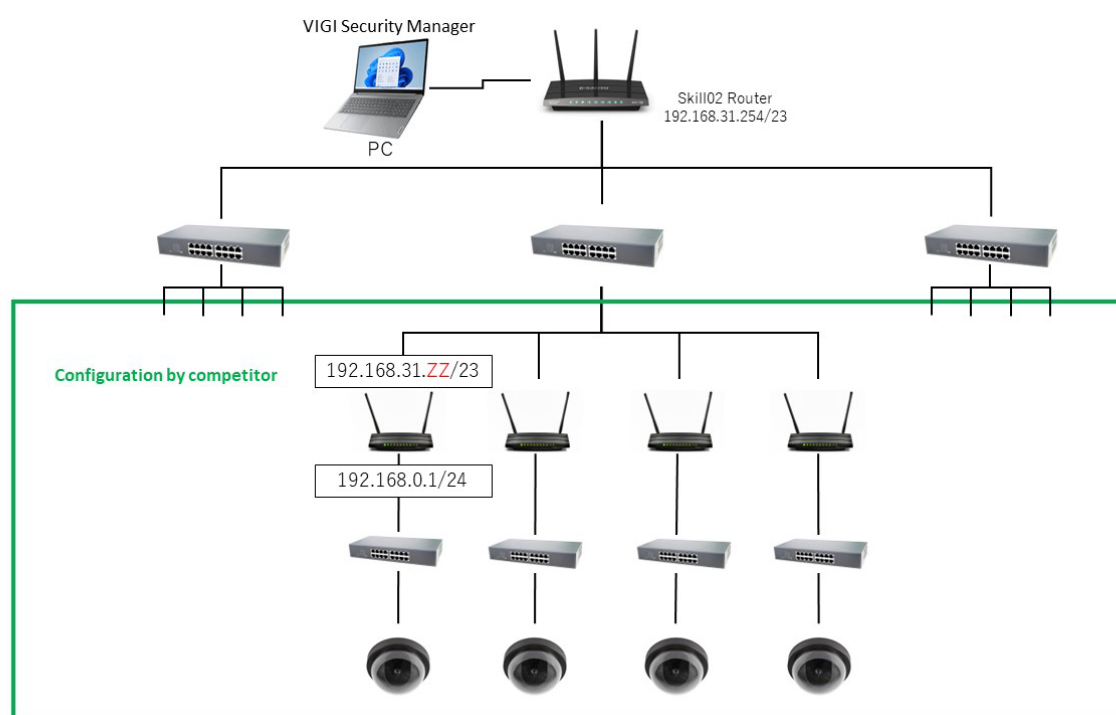

Fig.3 Network configuration.

- PC can be connected to WiFi (only with 2.4GHz) to connect to the report system
- Images captured by Smart Camera can be checked and confirmed using a designated application installed in the tablet. Also, Smart Plug can be turned ON/OFF.
- Smart Camera can be shared with the disignaged address (wsc2022SEkyoto@gmail.com).
- After completing all the settings, Status screen of the router (.jpg) can be caputured and its image can be sent on the system (https://skill02worldskills.com/).

4. The other device settings are as follows. XX is a country code, as shown below:

XX: CN:01 CO:02 FR:03 HK:04 IN:05 JP:06 KR:07 KZ:08 PH:09 TW:10 VN:11 ZM:12

[Router] Router (Archer A6)

- Login name: admin, login passwords: Wsc2022se@kyoto
- WAN IP Address: 192.168.31.ZZ Subnetmask: 255.255.254.0   ※ZZ is a country code, as shown below:

- ZZ: CN:41 CO:42 FR:43 HK:44 IN:45 JP:46 KR:47 KZ:48 PH:49 TW:50 VN:51 ZM:52
- LAN IP: 192.168.0.1 (Inital)   255.255.255.0
- Security to use must be automatic
- SSID must be XX_kyoto and ON all the time

[Dome Camera] VIGI (C400HP)

- Login name: admin, login passwords: Wsc2022se@kyoto
- VIGI's initial registration email address: wsc2022SEkyoto@gmail.com
- Device name: XX_CAM

[Smart Camera] tapo (C100)

- Device name: XX_SmartCAM

[Smart Plug] tapo (P-105)

- Device name: XX_Plug

Equipment, machinery, installations, and materials required

Materials and equipment not listed in the infrastructure list are not used in this module.

ITEM	QUANTITY	MATERIAL	DESCRIPTION	NOTES
Optical fiber box	1	FJB01-U1C<4>		Sumitomo.Elec.

Marking Scheme

The total mark is "X".

Other

Competitors must comply with the matters prescribed in the competition guideline 2022SE.