Requirements for Installation

The following item are required for installation of Ava Communications' products:

A) Security hardware and preparation

1) Having a secure server room and controlling the entry and exit to the room.
2) Providing a suitable environment for the deployment of equipment (suitable temperature, lack of moisture, etc.
3) Suitable network, a minimum speed of 100 Mbps is required for the network.
4) Suitable Telecommunication Platform (appropriate cabling of urban and internal lines)
5) Appropriate network connection for all equipment
6) Appropriate Rack for equipment installation.
7) Network Switch located in the desired Rack, enough free ports on the Switch Network
8) Safe network Node for for installation of each of equipment.
9) Proper transporting and cabling of urban telecommunications lines in the special Rack
10) Installation of equipment using appropriate telecommunications cable Socket handling capabilities.
11) Ample electrical sockets equipped with uninterruptible power supply (UPS) for all equipment.

B) Software security

1) Using a complex password in the login page of system interface.
   Comments:
   Enter the default Username and Password, enter the system, click Options an then Password Change, as shown in the following Figure:

Figure (1)

2) Using a user account with limited access for certain individuals.
   Comments:
   Go to the following path and create user accounts (using a complex and secure passwords):
   Configuration\System Admins\
   Then go to the Roles menu, create Roles with specific access (in Privileges Menu, as shown bellow) and assign Roles to certain User Accounts.

Figure (2)

3) Using a complex PIN code for Extension Registrations.

Comments:

After defining the Extensions, go to the Extensions page, select one and click Edit.

In the opened page (Figure 3), complete PIN Code with a secure numeric code.

Figure (3)

4) Defining an IP Address to register each Extension.
   Comments:
   For more security, it is required to exactly insert the IP Address defined on the IP Phone or computer Convertor on which Softphone is installed.
5) Applying limitations on IP Addresses and ports when connecting to Interface.

Comments:

Using Ava Communications' Call Centers, you can apply certain security policies on different ports of the Network. For example, you can open 8000 and 8001 ports, used for access to Interface Settings, for computers with certain IP Addresses.

To do this, go to Configuration\Access Lists\ and define certain groups, as shown in Figure 4(for example Admins)

Figure (4)

Then in the menu of Configuration\Security, as shown in Figure 5, you can open or close certain ports for different groups (defined in Access Lists)

Figure (5)

After saving the settings, click Apply Security. Click Apply Security in the Management menu, too.

6) Limiting access to specific prefixes (zero and double zero)

Comments: To do this, go to Extension Features, Limits and ODA Limits.

Local Parameter ⟶ only allowed to call urban Phone numbers.

Long Distance Parameter ⟶ allowed to call Suburban and mobile numbers with a zero prefix.
International Parameter ⟶Allowed to call abroad with numbers of two zeros prefix

It is necessary to exactly define this parameter according to the Extension's needs. (It is usually set on Local and Long Distance and in special cases on International)

In addition, to limit access to this specific structure (to have access to urban lines), set ODA Pincode in this part.

6) Applying access limits to the centers' Valid IP through organization's Firewall and Router.

Ensuring proper network platform:

Generally, it is possible to measure information handling speed quality on the network. The network cable tester is one of measuring tools and tests of cable communication on computer networks. The amount of information provided varies according to the type of the device. A good tester will provide cabling experts with information including ppossible interruptions along the cable length.

FLUKE

Fluke test is done using FLUKE products. This type of testing is superior to other similar tests because of more information output. In addition to feasibility study done on cables, equipment

and fittings for the path are also tested and stored in the device, hence providing a full report.

Bellow, you can see a list of major information provided by these types of that testers:

- Thorough testing of network's physical layer including cable, Keystone outlets , patch panels , patch cords
- Certifying the originality or non-originality of network's passive equipment(cable, Keystone , patch panels , patch cords)
- Extracting accurate cabling area, patch panels and Keystone Steel Bug reports
- Reports of outages or poor cable string connections to Keystone
- Reports of Noise and its exact position on the cabling route
- Reports of tension or bending over route cabling and their exact position
- Reports of the extent of the copper purity used in the Network cable, resistance test and conductance test
- Measuring physical and conceptual links
  Report cable -
  Measuring physical and conceptual parameters of links

The items mentioned in paragraph A must be prepared by the customer before our experts come to launch the equipment.

It should be noted that if any of the items mentioned in paragraph A is not ready, company is not responsible for stopping the project and any possible additional costs will be born by the customer.

Items mentioned in paragraph B must be applied in the system after equipment is installed by trained people in the contracting Company (customer), according to the information provided in Product Installation Guide.