

**Visitor Management System Specification**  
**Manufacturer - Matrix Research Limited**  
**Product Brand - ACX**

Visitor Management System Specification

1 VMS architecture

- 1.1 The visitor management system (VMS) can be applied to entire building tenants.
- 1.2 The VMS server can be cloud-based or on-premises.
- 1.3 The VMS shall be integrated into the building access control and lift destination control system.
- 1.4 The VMS shall have API for 3<sup>rd</sup> party software integration.
- 1.5 The VMS shall integrate with the customer's Email and SMS server.
- 1.6 The web-based application shall have an SSL certificate.
- 1.7 The VMS has a super admin to create the tenant's admin.
- 1.8 The tenant's admin can create their user account.
- 1.9 The VMS user interface shall have English, Traditional, and Simplified Chinese.
- 1.10 The VMS server keeps all the visitors pre-registered and access records.
- 1.11 The VMS booking and access records can be auto-deleted in a certain period.
- 1.12 The visitor management system shall include visitor pre-registration and walk-in operation. Visitor walk-in operation has a concierge or self-service version. Self-service has a Kiosk and mobile version.
- 1.13 The sub-contractor shall be responsible for complying with the latest applicable patent and certificate if required under the scramble / dynamic QR code application. E.g., "Card Identification System with Scramble Coding Ability", "Scramble Encryption in Data Communication", and "Non-Transferred Identification System Using Scrambling Two Dimension Code" from Hong Kong Patents Registry Intellectual Property Department, and any relevant Authorities or Regulatory Bodies. Plagiarism is not allowed.
- 1.14 The scramble QR code image is changed per second, the copied QR image cannot be used after the QR time-out. The QR time-out can be less down to ONE second.

2 VMS - Pre-registration

- 2.1 Tenant can input visitor booking information through a web browser or by mobile apps. The visitor booking info shall include the visitor company name (optional), visitor name, date and the visit period, number of entry access, mobile number (optional) email address, etc.
- 2.2 Once the booking is confirmed, the tenant will receive an email for the confirmation, and the visitor will receive a scramble QR code (web link) as a temporary pass by

Email or SMS.

- 2.3 The visitor's temporary pass either can be defined as direct access or can be activated after the validation process.
  - 2.4 The visitor booking record can be modified or canceled.
  - 2.5 Tenants can import/export visitor booking records.
  - 2.6 Tenants can export visitor check-in and check-out records.
  - 2.7 The visitor scramble QR code shall be activated during the valid access period.
  - 2.8 Once the visitor scramble code is activated, the scramble code cannot be activated on other mobile devices.
- 3 VMS Walk-in requires a helper for an assistant (conciierge)
- 3.1 This is a Windows-based application that allows the operator to check the pre-registered visitor record and enable the visitor's QR code
  - 3.2 The PC shall connect a QR code printer and a QR code scanner.
  - 3.3 The tenant's visiting time can be configured.
  - 3.4 The program records the walk-in visitor record.
  - 3.5 The program can assign the building access rights to the visitor. Eg. Male / Female toilet access, turnstile access, and integration into the lift destination control system.
  - 3.6 After the concierge verification, the QR code printer will print a QR code paper for the visitor.
  - 3.7 Real-time time monitoring of the number of visitors in the building.
  - 3.8 Email notification to the user if the visitor arrives.
  - 3.9 Provide emergency notification by email / SMS to visitors in the building area.
  - 3.10 Once the visitor pass is generated, the visitor pass access rights shall be updated to the building access control system and the lift destination control system within 5 seconds.
- 4 VMS Self-Service (Kiosk)
- 4.1 The Kiosk shall have a 24" touch monitor.
  - 4.2 A camera is a provision for video recording or facial recognition.
  - 4.3 The Kiosk outlook, body material; and dimension are subject to end-user approval.
  - 4.4 The Kiosk program shall have an English, Tradition Chinese; and Simplified Chinese user interface.
  - 4.5 The tenant record can be searched by tenant name, by floors; or by handwriting the tenant info.
  - 4.6 The tenants can be classified into three categories.
    - 4.6.1 (Cat. 1) Never accept visitor direct access.
    - 4.6.2 (Cat. 2) Ever accept visitor direct access.
    - 4.6.3 (Cat. 3) Visitor is required verification before direct access.
  - 4.7 The Kiosk program supports the input of more than one visitor per application

- 4.8 The Kiosk program supports multi-floor access.
  - 4.9 For (Cat. 1) tenant: once the visitor selects this kind of customer, the screen will display the "Please go to the concierge for an assistant"
  - 4.10 For (Cat. 2) tenant: once the visitor selects this kind of customer, the visitor inputs their info, and the visitor management system will send the scramble QR code web link to the visitor(s) through SMS within 30 seconds. Once the access time is effective, the visitor can open the web link to get a scramble QR code, else an ICON will be shown on the mobile.
  - 4.11 For (Cat. 3) tenant: once the visitor selects this kind of customer, the visitor inputs their info, the visitor management system will connect an A.I. chatbot server, the A.I. chatbot server will dial up the host's telephone, and once the phone is connected, the host can listen to the visitor message which speak by the A.I. chatbot. The A.I. chatbot speaking language depends on which user interface the visitor selected.
    - 4.11.1 The tenant can press "1" for approval. The visitor management system will send the scramble QR code web link to the visitor(s) through SMS within 30 seconds. Once the visit access time is effective, the visitor can open the web link to get a scramble QR code, else a fixed ICON will be shown on the mobile.
    - 4.11.2 The tenant can press "2" for rejection. The visitor management system will send a "Reject" SMS to the visitor within 30 seconds.
    - 4.11.3 The tenant can press "3" to repeat the message.
    - 4.11.4 The tenant can press "9" to connect the telephone phone call to the master visitor.
    - 4.11.5 During the telephone call, the tenant can press "1" for accept; and press "2" for reject.
  - 4.12 If the visit application is accepted, the visitor management system will send a scramble QR code web link as a temporary pass to the visitor(s) through SMS within 30 seconds. Each visitor has a unique scramble QR code as the temporary pass.
  - 4.13 If the visit booking is rejected, the visitor management system will send the "rejected message" to the master visitor through SMS within 30 seconds.
- 5 VMS Self-Service (Mobile phone)
- 5.1 A scramble QR code that represents the building visitor management system will be displayed on the Kiosk or the Pad. The QR code MUST be in scramble format preventing the QR code is copied.
  - 5.2 The visitor uses their mobile to scan the QR code, and the building visitor management system web link will be displayed on the user's mobile phone.
  - 5.3 The visitor opens the weblink, and then the mobile displays the building management system.
  - 5.4 The mobile VMS program shall have an English, Tradition Chinese; and Simplified

Chinese user interface.

- 5.5 The tenant record can be searched by tenant name, by floors; or by handwriting the tenant info.
- 5.6 The tenants can be classified into three categories.
  - 5.6.1 (Cat. 1) Never accept visitor direct access.
  - 5.6.2 (Cat. 2) Ever accept visitor direct access.
  - 5.6.3 (Cat. 3) Visitor is required verification before direct access.
- 5.7 The mobile VMS program supports the input of more than one visitor per application.
- 5.8 The mobile VMS program supports multi-floor access.
- 5.9 For (Cat. 1) tenant: once the visitor selects this kind of customer, the screen will display the "Please go to the concierge for an assistant"
- 5.10 For (Cat. 2) tenant: once the visitor selects this kind of customer, the visitor inputs their info, and the visitor management system will send the scramble QR code web link to the visitor(s) through SMS within 30 seconds. Once the access time is effective, the visitor can open the web link to get a scramble QR code, else a fixed ICON will be shown on the mobile.
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