

Mobile Video Streaming Application

Version 2.0

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I. User Authentication and Access

A. Logon

The logon screen will provide user authentication to the database. The user will enter their username and password on the webpage and the page will check the combination against the database. Depending on the user access level, the user will be granted access to different parts of the web pages. A time out period will be enforced to ensure that the system is not compromised. Once a user has been timed out due to inactivity, they will have to log back into the system in order to regain access.

B. User Access

- 1. Admin Level

Administrator access will be allowed full control of all aspects of the application. They can modify reports and the dispatch log, view reports and can add, modify and delete users and settings. They can grant special condition of access to users below them, such as allowing a Command level officer to view reports.

- 2. Command Level

Command level officers will be able to view video streams from other mobile units, view and modify the dispatch log, create reports and edit reports of themselves and their squad they are in charge of.

- 3. Officer Level

Security and Police officers will be able to view video streams from other units, create reports and edit their own reports and the dispatch log.

- 4. Dispatch Level

Dispatchers will be able to view and modify the dispatch log and view video streams from other mobile units.

II. Event Logs (Report Database)

A. Dispatch Log

The dispatch log will be a basic daily list of what goes on throughout the day. This can include, but is not limited to, key check ins and returns, change of shift, any incidents that come in and require officers to resolve and anything else that needs to be put in the daily log. It will include date, time reported, time completed (if necessary), the person adding the event and a brief description of what the event entailed.

Users will be allowed to search this database via event, date, time, etc.

B. Officer Reports

Officers who need to write up and submit reports can do this via the web application. The web page will be a form with fields that can be filled in for the specific information required. This will be tied in with Microsoft Word for spell check and other useful features. Reports will be saved locally for a determined period and then erased after a specified period. Reports can be submitted via email to the supervisors in charge of the officer. Officers will be able to view and search these reports.

C. Statistical Reports

Statistical reports can include a variety of information on the use of the web application by the officers. This report will automatically update the numbers via analysis of existing entries in the existing dispatch log. This will include number of incidents per day, number of types of incidents, and can be sorted by type etc.

III. Streaming Video

A. Base station

The base station will have view only capabilities of the video streams and may access more than one stream at once. The base station can also monitor the cameras on the mobile units and may turn the cameras on the mobile units on or off when requesting an officer respond to a call.

B. Mobile Units

Mobile units will send their video streams to the server. They will also have the ability to view other video streams; however, mobile units will be more limited in the streaming video to save bandwidth. They will be limited to accessing one video stream at a time, but may switch between multiple streams if they are available.

The mobile unit will send video out to the web server by toggling an on and off switch. While the camera is streaming, the computer will also be saving the stream locally before broadcast. This will assure backup regardless of whether the mobile unit has cellular network connection.

To conserve space on the hard drive, the camera will not need to be streaming all the time and the officer will be able to turn the camera stream on and off.

IV. Internal Chat Client

Users will be able to communicate via a chat client embedded in the web application. Users will need to login to the chat client and will remain in a "chatroom" for until they log out or are timed out for inactivity.

V. Storage Space

Users will be given a set amount of personal storage space either on the Stevens network or MSV network, similar to the storage space all students have on Storage01. They will have the ability to save, but not be limited to, officer reports, notes from text editor, and various other pertinent campus security information.

VI. Text Editor

A text editor will be available for users to jot down notes electronically. These notes can be saved locally on the mobile unit or in the officer's personal storage space. Because these notes are electronic, the officer may choose to make them available to other users and officers in order to communicate more efficiently.

VII. Hangtag Lookup

Officers will be able to lookup information about a vehicle on campus via the hangtag number. The following will be available to officers: the name of the person the tag and car are registered to, the owner's ID number, the car license plate number, the car type, model, and color; the campus status (Graduate, Undergraduate, or faculty), and tag expiration date.

VIII. Shift Calender

A daily calendar will be available to display which officers are scheduled to be on duty. All users will be able to view the calendar while changes to the calendar will be limited to those with Administrator privileges.