



MEMO

Body Worn Camera

DATE: February 20, 2017

TO: Undersheriff Raymond J. Rose
Business Manager Dawn Wucki-Rossbach

FROM: *Forest E Pennington x2392*
Lake County IT CTO Forest E Pennington

PROJECT OVERVIEW

Collaboration with the Lake County Sheriff Department, and Lake County IT. Infrastructure; Review and provide recommendations as they relate to planning efforts involved with resource requirements and Spec Testing for the Sheriff Department.

RESOURCES

Resources involved; IT Department Technical Services (Networking Team), IT Operations Manager and Chief Technology Officer (Management) Identify the resource requirements for the Sheriff Department in support of the upcoming Body Worn camera project.

ASSUMPTIONS AND FINDINGS

Lake County IT would assist or participate in identifying four (4) main areas of dependencies or requirements.

1. Anticipated amount of video, defining bandwidth requirements
2. Anticipated amount of body cameras issued in any given shift
3. Findings; maximum bandwidth required to complete video uploads
4. Findings; Security Requirements

Approximately 10Mbps throughput per dock, files are broken up into 30min increments, file size per 30min approximately 850Mb (Megabyte) upload time per file 12min, upload speed approximately 80MB/min, upload ratio 1m u/l : 2m recorded (It takes 1 minute to upload 2 minutes of video)

IDENTIFIED RISKS AND RECOMMENDATIONS

For security purposes, Lake County IT recommends a private and separate internet based circuit for the Body Worn camera project and to be used for a secured cloud based storage solution. Testing results shown that 3 camera docks uploading simultaneously consumed nearly 10% of the available internet bandwidth on the main organization internet circuit. There is an unknown as to what the future capacity is required, e.g. 5 – 10 cameras, therefore allowing for future upgrades if required. This will align the Sheriff Dept. for other / future, storage, and IaaS or IOT needs. Identified future use e.g. drone w/recording technology, or squad car recordings.

Evaristo, Maria

Subject:

FW: Taser body worn camera upload metrics

From: Kurek, Scot W.
Sent: Friday, January 6, 2017 3:15 PM
To: Rucker, Robert
Subject: Fwd: Taser body worn camera upload metrics

Sent from my iPhone

Begin forwarded message:

From: "Germaine, Austin" <AGermaine@lakecountyl.gov>
Date: July 20, 2016 at 4:18:32 PM CDT
To: "Kurek, Scot W." <SKurek@lakecountyl.gov>
Cc: "Rucker, Robert" <RRucker@lakecountyl.gov>, "Karlson, Erik E." <EKarlson@lakecountyl.gov>
Subject: Taser body worn camera upload metrics

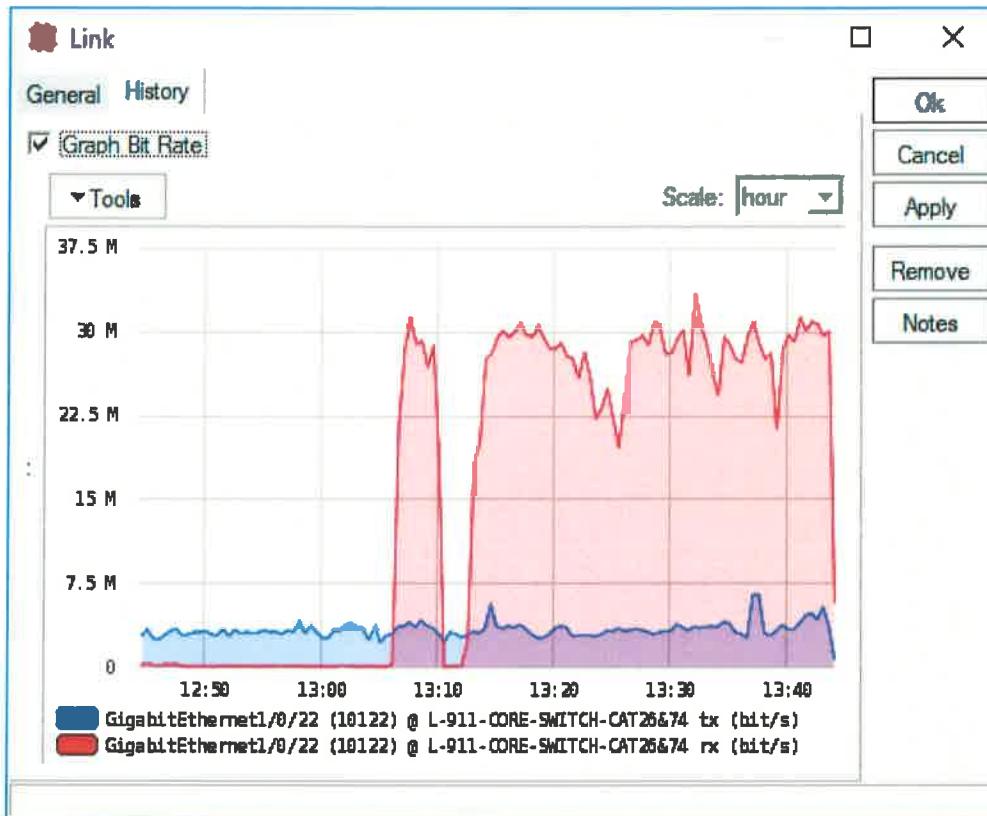
Good Afternoon,

Erik and I were able to perform the final test on uploading data from County 2 to the Taser cloud site (evidence.com).

This graph that Erik provided represents the outbound traffic (in red) of 3 camera docks while the cameras actively upload data to evidence.com. As suspected, the average speed is around 30Mbps, or 10Mbps per dock. Given the amount of data and number of cameras that will be uploading at any given time, we can safely assume that these docks will collectively consume 30Mbps of outbound bandwidth 24/7.

As mentioned previously, CIT recommends a separate Internet circuit to handle this traffic. When appropriate, we can get into the details of what that entails but suffice it to say that it's not a big deal to stand up a circuit like that. Pretty much the same thing you'd get at home.

Thanks to Erik for helping me gather this data. Please let me know if there's any questions. Thank you.



Austin Germaine

IT Support

Lake County Sheriff's Office

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