



Date: April 23, 2012

To: H. Stephen Williamson, President and CEO

From: Frank Gresh, CIO

Re: Update on CAD2CAD with Oklahoma City

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As per your request, I am providing you with an update on the CAD2CAD interface with Oklahoma City.

As you are aware we went live with the Edmond CAD2CAD interface on January 31<sup>st</sup>, 2012. That go-live went well. The only major outstanding issue is that Edmond is getting duplicate comment entries on the status change of their units. What that means is that when a status change of an Edmond unit occurs (example: E1 is dispatched), a comment reflecting that change is added to the EMSA system. A software defect is causing that status change comment to be echoed back to Edmond so a note is entered reflecting the status change of their unit in their comments. That defect in the TriTech software was introduced in version 4.5.8 (per an email from TriTech dated 2/10/2012). EMSA had upgraded to a version later than 4.5.8 prior to the Edmond go-live but after testing had been completed. The upgrade to the EMSA system was necessary to resolve several outstanding issues (one of which dealt with duplicate call detection which was vital to have in place when we went live with the CAD2CAD interface).

The problem that we are experiencing with Oklahoma City, and that is delaying our go-live is that a "storm" of those aforementioned status change comments is occurring. By storm, I mean that as soon as a unit is assigned to a call in either CAD system, the status change comment is echoed back and forth, in a pin-pong effect between both CAD systems. This results in about two to three comments per second being written to the call in both CAD systems. Within ten minutes there are over a thousand comments in the call (we had a call in the test environment that was open for 19 hours and there were almost 185,000 comments entered on that call – screen print attached). The storm of comments is continued until the actual CAD2CAD interface applications are stopped on the server (closing out the call has no impact on the storm – the comments continue to be written to the call even after it is closed).

The comment storm issue with the Oklahoma City CAD2CAD is related to the Edmond problem, but is exacerbated by the fact that both Oklahoma City and EMSA are on version 4.5.9 (Edmond

FD is currently on 4.5.6.24 – which is why the storm isn't happening there). This comment storm could bring the entire CAD system down within a matter of hours, which is why we are stuck waiting on a solution from TriTech.

Prior to the comment storm issue, we were not moving forward with a go-live with Oklahoma City while we waited on SP9 from TriTech to fix an issue that was spawning calls to Fire and Police that were supposed to be cancelled. That issue was resolved in version 4.5.9 but unfortunately the upgrade to 4.5.9 in Oklahoma City introduced the new comment storm defect since their test environment was on a 4.5.6 or 4.5.7 version prior to this upgrade. It is fortunate that this was discovered in the testing environment because if this had occurred once we moved to production, we would not have been able to move back to an earlier version to restore CAD2CAD functionality; the interface would have been down until the issue could be resolved.

Attached to this memorandum is an email I sent out with a status update on February 24, 2012 explaining the current situation as of that date in regards to the comment storm issue. We did receive the promised update from TriTech with a patch that was installed in the EMSA system on March 29<sup>th</sup> and in the Oklahoma City system on April 10<sup>th</sup>. We tested on April 11<sup>th</sup> and the problem was still occurring.

Bob Farrell (Oklahoma City Public Safety IT Staff) contacted TriTech on April 11<sup>th</sup> to advise them the patch did not resolve the issue. I worked with Bob on April 13<sup>th</sup> to do a "Black Box" capture (a software product that captures everything going on on the computer during a specific period of time) on the workstations and interface servers to send to the TriTech engineers so they could try and identify the problem or recreate it in house at TriTech. The captured data was sent to TriTech by the close of business on the 13<sup>th</sup>.

On April 19<sup>th</sup> I received an email from Mike Nabors at TriTech indicating that he was aware the patch did not resolve the comment storm issue. Mike indicated that TriTech had pulled the necessary logs and that his engineering teams were looking at the issue at that point trying to find out what the problem was. On April 20<sup>th</sup> I received a phone call from Mike at TriTech indicating that they may have found out what the problem was, and they were able to reproduce it in-house at TriTech. Mike said I should expect a call later on Friday or first thing on Monday (4/23) to allow someone from TriTech to get in to our system and make the changes and perform additional testing.

On Monday (4/23) I was contacted by Scott Kraetsch, an engineer at TriTech, requesting to connect and make some configuration changes so we can test to see if that solves the issue. The changes were made to both sides of the interface but no change in the status of the

problem. After some additional changes were made by Scott on the EMSA side of the interface, we had some improvement. On calls that were generated by Oklahoma City, the comment storm was not occurring. We were seeing duplicate comments, (exactly like the Edmond issue) but no comment storm. On calls that EMSA created, the comment storm was still occurring. We made contact with Scott to advise him of this. Scott requested we send him a backup of the database so he can continue to test in-house at TriTech. The EMSA database has been sent as of this writing. Scott has promised us a follow-up as soon as he has new information.

This issue continues to be one of my top priorities. I have been in communication with senior management at TriTech to make sure that this issue continues to be one of their top priorities as well. I have requested frequent updates from them on the status of resolving this defect and will continue to keep you advised of our progress.

Should you have any questions or concerns, please don't hesitate to ask. I look forward to answering any questions that our board members may have at the Board of Trustees meeting on April 25<sup>th</sup> in Stroud.

## Gresh, Frank

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**From:** Gresh, Frank  
**Sent:** Friday, February 24, 2012 16:45  
**To:** Kerry Wagnon (kerry.wagnon@okc.gov); Williamson, Stephen  
**Cc:** Bob Farrell (bob.farrell@okc.gov); W. B. Taylor (william.taylor@okc.gov); Brian Stanaland (brian.stanaland@okc.gov); James Davis (DAVISJ@emsa.net); Linda Ali (linda.ali@tritech.com)  
**Subject:** CAD2CAD Problem Resolution Update

As you know, after upgrading both environments (EMSA and OKC Test Systems) to version 4.5.9 of the TriTech CAD software, a software defect was introduced in the CAD2CAD interfaces that would cause a “comment storm” as soon as either agency assigned a unit to a CAD2CAD call. This issue brought our forward progress to a crawl. I have been regularly communicating with TriTech to get a status update on when we can expect to see a fix for this problem. I did have an update from TriTech earlier this week with a commitment to make a patch or hot-fix available to us, but they weren’t ready to commit to a timeframe at that point. We did finally get a timeframe today. In speaking with Mike Nabors at TriTech he tells me that they are planning to resolve the issue for Service Pack 10 (4.5.10) and will cut us a patch or hot-fix for 4.5.9 at the same time they generate the completed service pack. The development and QA efforts will take virtually all of March to complete. They are targeting early April to have the patch available to apply to our test environments. Mike and I were specifically talking about the first week of April for the release of the patch.

I wish the news was a little better, but we have a mostly definitive timeframe now, and can complete some testing between now and that date to get us closer to running final acceptance testing before go-live.

If you have any questions or concerns, please feel free to let me know.

Frank Gresh  
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**EMSA’s Mission: “To reduce pain and suffering by providing superior and compassionate service”**

Agency: EMSA



Premise Name:

ANI/ALI

Address: 4000 SW 29TH ST

Apt/Ste:

Cross Street: S SHAWNEE AVE/S TULSA AVE

Show All

Comments:

City: OKLAHOMA CITY

Exit/Save

Update Address

Caller Name:

Cancel

Phone: Ext:

Page

Add'l Info:

Problem Code: NP

Determinant: [Redacted]

1 Pre2 His3 Cau4 Haz5

ProQA

Problem/Nature: NP - Nature Pending

Priority: 0-Nature Pe

ProQA Sum.

Response Plan: DYNAMIC-ALS Response West

Map Coord:

Recommend Add Resource Add Agency

Jurisdiction: Western Division Division: Western Division Battalion: Western Division All Resp Areas: Oklahoma City 2

SendtoFR

Additional Information Assignments Activities Call Backs Comments/Notes Edit Log Times Transport Info User Data Attachments

Date	Time	Initial	Conf	Comment
03/01/2012	14:02:15	C2CI		Transferred incident: Remote Reference Number: 201203010000168 by John Williams From OKC
03/01/2012	14:02:16	C2CI		Interface has sent an ack message for incident 12-W-000340 to the remote CAD
03/01/2012	14:03:16	C2CI		Automatic Case Number(s) issued for Oklahoma City Fire Dept: 12000004.
03/01/2012	14:03:16	C2CI		Unit - E21, status change to STATUS_DISPATCHED by OKC at 03/01/2012 14:03:16 Disposition = DSP;OKC;RMI.MIN=201203010000168;Address=4000 Sw 29th St;Problem=EM MEDICAL <EM; Priority=Life Threaten;Multi-Agency Links=
03/01/2012	14:03:17	C2CI		Unit - E21, status change to STATUS_DISPATCHED by OKC at 03/01/2012 14:03:16 Disposition = DSP;OKC;RMI.MIN=201203010000168;Address=4000 Sw 29th St;Problem=EM MEDICAL <EM; Priority=Life Threaten;Multi-Agency Links=
03/01/2012	14:03:18	C2CI		Unit - E21, status change to STATUS_DISPATCHED by OKC at 03/01/2012 14:03:17
03/01/2012	14:03:18	C2CI		Unit - E21, status change to STATUS_DISPATCHED by OKC at 03/01/2012 14:03:17
03/01/2012	14:03:19	C2CI		Unit - E21, status change to STATUS_DISPATCHED by OKC at 03/01/2012 14:03:18
03/01/2012	14:03:19	C2CI		Unit - E21, status change to STATUS_DISPATCHED by OKC at 03/01/2012 14:03:18

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