



August 29, 2025

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Thank you for clarifying the issues that require this supplemental corrective action, specifically to address 21.2.20 and 21.2.25. This correspondence is provided as a supplement to the corrective action plan for this purpose.

Cal OES Clarification 21.2.20

With respect to Technical Requirement 21.2.20, which requires any CPE system failure with an active operation component to result in no loss of service or capability, NGA provided no plan to correct the issue but asked for clarification of the problem. Cal OES clarifies that the issue of concern is that positions were crashing. While the revised corrective action plan does address the issue of positions crashing at page 8, the plan only notes that computer updates appear to have corrected the issue. The plan is deficient because there is neither an identification of the cause of the underlying issue, nor an explanation of how an update resolved the issue.

In response, NGA provided a Root Cause Analysis (RCA) shortly following the June 30th incident. After submission of the RCA, NGA did not receive any requests for clarification. Furthermore, on Tuesday, August 12, the resolution of this issue was reviewed during the monthly call with the Cal OES team, during which no follow-up questions or requests for additional information were raised.

NGA Supplemental Corrective Action on 21.2.20

Two issues were reported at a single workstation:

1. 'Aw Snap' Error:

- NGA Field Support conducted an on-site visit and replaced the affected workstation, with the spare workstation not used by the PSAP (Position 3).
- The reported error was resolved, and at that time, the issue was determined to be the result of a hardware failure.

2. Post-Replacement Performance Delay:

- Approximately one week later, Wasco reported that the replacement workstation appeared to be freezing. Dispatchers experienced significant delays between input and system response, impacting operations.
- NGA identified that the workstation was running outdated Windows and Chrome versions.
- Field Support upgraded the workstation to NGA's standard Windows and Chrome versions, and increased the virtual memory allocation, resolving the performance issues.
 - i. Field Support ensured all positions were running the latest Windows and Chrome versions for consistency in the PSAP.

Both incidents were isolated to a single workstation and a single PSAP position, and both issues to the single position were fully corrected by updating the Windows and Chrome versions.

Handling "Aw Snap"

Due to the persistent 'Aw Snap' error, NGA Field Support conducted an on-site visit at the Wasco Police Department PSAP and replaced the affected position with the Position 3 hardware, which is a "spare" onsite workstation. Following the replacement, the error was resolved. The issue, at that time, was determined to be the result of a hardware failure.

Scope of the Issue

This incident was limited to a single workstation hardware failure, impacting only one position within the PSAP.

How Did the Update Resolve the "Aw Snap" Issue

The single workstation affected, at that time, was identified as defective and subsequently replaced.

Secondary Issue After “Aw Snap” Issue

Approximately one week after the resolution of the ‘Aw Snap’ issue, Wasco reported that the replacement workstation appeared to be freezing. From the dispatcher’s perspective, the system was unresponsive, but in actuality, the computer exhibited a significant delay between user input (clicking) and system response, creating operational challenges.

As this was an uncommon error, NGA engaged Google support for troubleshooting and root cause analysis, referencing their published guidance

(<https://support.google.com/chrome/answer/6098869?sjid=8635022720643151939-NA#zippy=%2Cstep-update-and-restart-chrome>).

The NGA NOC performed remote diagnostics and identified that the workstation was not running NGA’s standard Windows and browser versions. Subsequently, NGA Field Support visited the site to upgrade both Windows and Chrome to NGA’s standard versions.

It was determined that the workstation deployed at Wasco had not been provisioned with the standard NGA image prior to installation, which contributed to the performance issues.

Scope of the Issue

The secondary issue was contained to one workstation hardware failure, with impact limited to a single PSAP position.

How Did the Update Resolve the Secondary Issue

Resolution of the secondary issue was achieved by updating the workstation to NGA’s standard Windows and Chrome versions as well as increasing the virtual memory allocation on the workstation.

Information NGA Tracks on Windows and Chrome Updates

NGA conducts scheduled reviews of Windows and browser environments to ensure system stability, identify problematic patches, and correlate them with issues such as “Aw Snap!” crashes or degraded performance. Below is the NGA Monitoring approach:

Monitoring Approach – Windows and Chrome Versions

- **How We Monitor:** NGA validates Windows and Chrome versions during troubleshooting activities and as part of scheduled preventive checks. This ensures that all workstations remain aligned with NGA standard configurations.
- **When We Monitor:**

- At sign-on: NOC-T1 and NOC-T2 staff check versions whenever a position is accessed or issues are reported by the PSAP.
- Quarterly: A scheduled verification is performed for all positions to confirm Windows and Chrome are up to date. We perform this scheduled maintenance with the PSAPs to optimize CHS positions and software applications.

This process provides consistent oversight of workstation configurations while maintaining operational stability.

Windows (OS & Platform):

- Windows version and build (e.g., 23H2 / Build 22631.x)
- Cumulative updates (Patch Tuesday + out-of-band) and KB IDs
- .NET updates (often delivered as separate KBs)
- Reliability Monitor scores and new critical events after updates

Google Chrome Browser:

- Browser version and release channel (Stable/Beta/ESR)
- Extensions installed, updated, or removed (name → version)
- Hardware acceleration status.



Cal OES Clarification of 21.2.25

With respect to Technical Requirement 21.2.25, which requires the CPE to provide abandoned call detail, NGA requested clarification of Cal OES' concerns. Cal OES clarifies that any call that makes it past the designated demarcation point is required to present as an abandoned call. For i3 calls, that is any call that makes it past the final Next Gen Service Provider's router. For CAMA calls, that is any call that makes it to the CHS provider's gateway. Please provide information that explains how NGA will correct these issues.

NGA Position on Technical Requirement 21.2.25

NGA acknowledges and agrees with Cal OES' definition of Technical Requirement 21.2.25: any call that progresses past the designated demarcation point must present as an abandoned call. For i3 calls, this includes any call that reaches the final Next Gen Service Provider's router, and for CAMA calls, any call that reaches the CHS provider's gateway.

NGA concurs with this definition, with one clarification: for a call to be processed and reported as an abandoned call, it must be delivered with a valid ANI in 10-digit format, whether dialable or non-dialable (e.g., NSI). NGA passes (p)ANI/CBN exactly as received from the originating service provider (OSP).

NGA Supplemental Corrective Action 21.2.25

Resolution of Abandoned Call Delivery Issue

The issue preventing abandoned calls from delivering to NGA CHS has been resolved. The table below outlines the timeline, corrective actions and preventative steps taken to address and close this issue.

Table 1: Abandon Call Detail and Display Application Timeline

Date	Reported	Participants	Status
4/1/2025	Abandon Calls not displaying on NGA CHS	DHS PD	Corrected / Completed with Patch
4/1/2025 - 5/16/2025	Troubleshooting/Dev/Cal OES Lab Testing	NGA Engineering / NGA Field Engineering / PSAPs / Cal OES	Completed
4/10/2025	Abandon Calls not displaying on NGA CHS	Wasco PD	Corrected / Completed with Patch: During troubleshooting, the issue was discovered at Wasco PD and reported
5/17/2025	Testing of Patch with Cal OES in Lab	NGA / Cal OES	Patch Passed / Requested Maintenance Window (MW) to apply the patch
6/11/2025	Applied Patch	NGA / Cal OES / PSAPs	Applied, Corrected Issue and Monitoring
7/14/2025 - 7/20/2025	Character mis-match in users	NGA / Cal OES / PSAPs	Reviewed Users and Manually corrected DHS/Wasco
6/27/2025	CAB for NGASM-1428 Sent to Cal OES	NGA	Paperwork submitted for approval of patch
7/1/2025	Cal OES approved and requested NGA to obtain individual PSAP approval	Cal OES	Cal OES approved for a 7/9/2025 MW or a date the PSAPs agreed with the MW
7/7/2025	NGA Requested Permission from PSAPs	PSAPs / NGA	NGA reached out to PSAPs after the July 4th holiday
7/8/2025 - 7/14/2025	NGA Received a decline to proceed from the PSAP	PSAPs	PSAPs (Wasco) declined MW - Pending Further Approval

NGA has no indication that the deployed patch failed to correct the issue. Since implementation, NGA has been performing proactive, “white glove” monitoring of the gateways and has not observed any further abnormalities. Additionally, NGA has not received any subsequent reports of trouble related to this issue from the field.



Ongoing Monitoring

NGA is actively monitoring the gateways to ensure that abandoned calls are being delivered as expected. Since the deployment of the patch, no further issues have been observed.

NGA acknowledges Cal OES' concerns regarding Technical Requirement 21.2.25 and reaffirms that corrective actions to resolve the abandoned call display issue have been implemented and validated through prior testing. To further strengthen confidence, NGA can conduct another joint lab validation session, similar to the validation performed at Cal OES Lab on May 17th, with Cal OES to re-test abandoned call handling under controlled conditions. By conducting this additional lab testing, NGA and Cal OES can ensure alignment, reinforce system reliability, and provide PSAPs assurance that abandoned call delivery and reporting is functioning as intended.

Preventative Maintenance Update

NGA identified and corrected a case-sensitivity issue that prevented dispatchers from receiving abandoned call notifications under certain login conditions at Wasco PD. A manual correction was applied to all affected logins.

To prevent recurrence, NGA has developed a patch, NGASM-1428, that implements an automated fix for character case handling. NGA requests a working session with the OES team to re-validate NGASM-1428 in the lab environment to ensure quality assurance prior to deployment.

Respectfully,
/Don Ferguson/
Don Ferguson, CEO
NGA 911 LLC