Sage Alerting Systems Rev96 Release

February 8, 2023

An FCC Report and Order for PS Docket No. 15-94 adopting new rules to improve the clarity and accessibility of Emergency Alert System (EAS) messages recently went into effect with a compliance date of December 12, 2023. This R&O requires a significant change to EAS procedures, mandating that alerts received via over-the-air EAS data tones be held while the possible presence of a matching IPAWS CAP alert is checked for and then used preferentially. There are a few other rules requiring changes on how the text for national alerts is constructed. A firmware update will be required to keep the ENDEC in compliance with the Part 11 rules. This update is only needed for ENDECs in the United States. The Q&A below will give you the information you need to know.

1. How do I buy the update?

Contact any of our distributors on the list at https://www.sagealertingsystems.com/Distributors.htm . You will need to provide the serial number of each ENDEC you need to update. Find the serial number by clicking the Version button on the ENDEC's web interface. Look for the line that starts with "SN:" - the rest of that line is the serial number. You may have a different serial number printed on the ENDEC, or on property tags, or in inventory files, but the version the ENDEC uses to validate the software update is the one shown on the version page of the ENDEC's web interface. This serial number is also shown when the ENDEC is rebooted. Restart your ENDEC by pressing the power button on the rear, wait until the display backlight goes out, then push the power button in again. At the ENDEC's from panel, after the boot completes, press the button under the "MSG" text shown on the LCD, then press the far-right button to scroll down to see the serial number.

The serial number is seven characters long - the letter B, followed by six digits. Give all seven characters to your distributor to buy the release. If your ENDEC qualifies for a free update (see below), do not contact your distributor for that ENDEC - you will be able to download the release directly from the Sage web page.

2. How do I know if an ENDEC qualifies for the free update?

Check the ENDEC's serial number:

- If B418750 through B429999, your ENDEC qualifies for the free update.
- If less than B418750, you must purchase an update though one of our distributors for that ENDEC.
- If from B430000 to B439999, you must purchase an update though one of our distributors for that ENDEC.

The update is free to ENDECs originally purchased from distributor stock one year (December 2021) prior to the adoption of then FCC's R&O on CAP prioritization and national alert text changes December 2022).

3. I've bought the update, or my ENDEC qualifies for a free update. What next?

The update will not be available until the release date, expected in June 2023, which will be announced on the Sage web site https://www.sagealertingsystems.com and via an email sent to our support list.

If you purchase the update on or after the release date, the download file will be available by 5pm ET on the next business day. You do not need to purchase or install the update until December 12, 2023, though it can be installed at any time after it is released.

Once we've released Rev96, our web site will have a download page with a form at the top where you can type in the serial number of your ENDEC. The serial number is seven characters long - the letter B, followed by six digits. Type all seven characters into the form on the Sage web site to download the update file.

The download will start after that. You must have purchased the update from one of our distributors, or your serial number must fall in the free update range to install the update. A purchased update file can only be installed on the serial number it was purchased for.

4. How do I install the update?

You will use the same techniques that you have always used to install updates. The update file is downloaded from a web site and stored on your PC. You then upload the file to the ENDEC using the Upload Firmware page of the ENDEC's web interface.

Complete details will be provided in release notes that will be available along with the update file on our web page.

5. If I don't install the update, what happens?

All EAS participants are required to follow the new CAP Prioritization rules (47 CFR 11.55(c)(2) effective December 12, 2023. The EAS participant's EAS system, upon receipt of an EAS protocol message, must wait for at least 10 seconds, and then check for a matching CAP message. If the CAP message is found, the CAP message must be used. There are also several changes (47 CFR 11.51(d)(3)) to how the text for national alerts is generated.

6. What else does this release contain?

The FCC has released a Notice of Proposed Rulemaking, highlighting the need for increased attention to security by EAS participants. While specific rules may or may not result from NPRM, it contains several suggestions on improvements EAS participants can make. Sage is adding or extending several features, such as login/logout and rejected login audit logs. We are also adding additional emailed logs in this release, sending weekly log summaries and emailing the existing conformance log. We hope that these changes will help make users more secure, and will reduce the amount of time the broadcaster's staff spends on acquiring the logs for review. There will also be several usability features in this release, to be announced later.

7. Future Updates?

Sage plans to continue to issue free updates for bug fixes, root certificates, and CAP signing certificates. As in the past, some minor FCC rules changes are also included in free releases. We hope for at least four years between major changes, as there was between the November 2019 Rev95 and the December 2023 Rev96.

There will be a free update for IPAWS certificates – the exact date depends on the when FEMA issues new intermediate certificates. The next expiration date for the current certificates is April 2024.