

T3#005 - Signature Mapping Principles Webinar | June 11th, 2024

Questions & Answers

Question: When devices T-tapped, isn't in best practice to replace one at a time and wait?

Answer: It is best practice to replace one device and allow it to map in before replacing the next device.

Question: If you pull a map and no devices, show what is the next step?

Answer: As long the devices are communicating this is indicative of a wiring/device issue on the loop. First step you could try is reinitializing the loop which sometimes works. If a map is generated after the reinitialize, you will need to download the database back into the loop controller. Typically, you will need to run the Siga-HDT on the loop. Be sure that you use the HDT software and latest firmware. The software has many more helpful features that the handheld tool does not have. If the issue cannot be resolved using the HDT, the loop will need to be broken down and reinitialized until the issue is located but this method should be used as a last resort.

Question: Does EST have a recommended limit of T-Taps on a Class B SLC that is found to slow down or even prevent mapping from occurring?

Answer: We support a max of 124T-taps, in a perfect world you wouldn't want any T-taps, but a loop should map successfully if you do not exceed 124 total T-taps

Question: Is the current draw for mapping less than the alarm current? Does the device only need one side of the negative to be normal or alarm condition?

Answer: As long as that single negative leg is the one providing the voltage, the device should still communicate and be capable of activating an alarm.

Question: Do ins and outs matter related to Mapping since a module and Siga-SD will always kick back a negative differential?

Answer: We have heard mixed opinions on this. In most cases I don't think it makes a difference and have seen reversed ins and outs map, but the devices really should be wired consistently and according to the installation sheet. I have witnessed a reversed in/out cause a map fault. If a map fault remains after exhausting all methods of trouble shooting, I would recommend addressing any reversed in/outs.

Question: What does a Class "A" map look like vs a Class "B" look like?

Answer: If no T-taps on either map then they will look identical as a straight line. The map does not display the return wire on a class A map.

Question: So, both should be a straight line, but the Class A should show a line straight back? this should reflect a line back on mapping?

Answer: If you had a class A and class B loop wired identical, they would look the same on the map. There is no line back on the map for class A.

Question: I've noticed that the EST4 with mapping disabled, it does not skip to step 5 and program the personality to the device as it does with the EST3.

Answer: When mapping is disabled on the EST4, it should start the device supervision and sensor initialization once the device counts complete. On a new project we recommend disabling mapping until all devices are installed to ensure all devices receive their configured personality. If mapping is enabled

and does not complete, the devices will not receive their personality programming via device supervision and sensor initialization. This can cause issues with testing especially when it comes to testing sounder/relay bases.

Question: Is the fact that you only need one side of the negative the reason the smoke is not in comm fault and works fine for alarm but when the voltage drop is checked across the resistor a bad connection from the spring contact can cause a map fault.

Answer: Yes, a bad connection between the device and base can alter the current draw during mapping. This is why when using the HDT you will see devices listed as "Failed" in the contact analysis or Mapping Consistency section of the report.

Question: Will a system map with a splice that is more than just a T tap otherwise known as a star tap?

Answer: A star tap is going to create issue for you and lead to a map fault or not successfully mapping the loop

Question: In the case of a balanced map, replacing base type (SIGA-SB to SIGA-IB), could solve the problem?

Answer: Changing the base will not unbalance the map. You would need to add a device or add a T-Tap to unbalance the loop.

Question: Do you have to do a rule compile for only clearing a map fault?

Answer: No, if clearing a Map Fault you can upload the current map, Commit All, perform a Signature Conversion, then download back to the loop controller

Question: Does a longer section of wire create a different current therefore a different signature than a similar leg with same device count?

Answer: I would say only if there was a capacitance difference on one run to another. If you have noise or capacitance on a leg of the SLC that can create mapping issues for you.

Question: Will there be updated compatibility for windows 11 for the HDT software?

Answer: There is no Windows compatibility listed on the release notes. If you have had issues running the software on a Windows 11 PC, please create a case with tech support and we can look further into it.

Question: I am referring to balanced maps, if one section of wire is longer and creates different current would it not be able to distinguish it as different in that a similar leg and not be balanced?

Answer: On a balanced map it's going to be all about the series or branch connections of the devices the loop controller senses on each leg.

Question: Can we use the HDT on Kidde GSA devices?

Answer: The Siga-HDT would only identify the GSA modules but not the detectors. The KI-HDT would need to be used with the GSA and KI series devices. The KI-HDT also supports the FX and KIR addressable devices.

Question: Can an old base spring clip loose its "spring" and cause a bad connection not to mention oxidization over time

Answer: Yes; that can happen. You can fix that by gently pulling the spring clip up to make better contact with the base. Also make sure the base is not too tight against the backbox.

Question: Is it the best practice to have the serial numbers entered in the program prior to field downloading?

Answer: It depends on the installer; If you want to dictate device addresses to the loop controller than use your expected data (entering the devices ahead of time) If you are "ok" with the loop controller assigning the device address, you can simply upload the map and Accept All, then send that back to the loop controller.

Additionally, if you have mapping enabled and the devices are not installed, you will end up with a card database out of sync with CPU. Which is fine if you are ok with the trouble being on the system.

Question: When is Edwards going to include the EST3 loop diagnostics in EST4?

Answer: There is the loop diagnostics window in the 4-CU, but it does not include the bar graph like EST3. EST4 also has a detailed diagnostics button that will produce a report which has many details.

Question: What is happening on a map like the one below?

Detector Count:,49 , Module Count:,49 , Total Count:,98

Collecting Device Information...

Devices Found:

```
[S001] D00105 "2101127235" FX v5.5 Unknown (Manufactured: ??/??/????) Duplicate Serial
Number! Duplicate DA
[S003] D00105 "2101127235" FX v5.5 Unknown (Manufactured: ??/??/????) Duplicate Serial
Number! Duplicate DA
[S005] D00105 "2101127235" FX v5.5 Unknown (Manufactured: ??/??/????) Duplicate Serial
Number! Duplicate DA
[S007] D00105 "2101127235" FX v5.5 Unknown (Manufactured: ??/??/????) Duplicate Serial
Number! Duplicate DA
[S015] D00105 "2101127235" FX v5.5 Unknown (Manufactured: ??/??/????) Duplicate Serial
Number! Duplicate DA
[S016] D00105 "2101127235" FX v5.5 Unknown (Manufactured: ??/??/????) Duplicate Serial
Number! Duplicate DA
[S018] D00105 "2101127235" FX v5.5 Unknown (Manufactured: ??/??/????) Duplicate Serial
Number! Duplicate DA
[S019] D00105 "2101127235" FX v5.5 Unknown (Manufact
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Answer: There is a bad device on this loop. Recommend breaking the loop down and running the Siga-HDT to locate the faulty device(s).

Question: If I have 6 bad devices causing a map fault, can I change all of them and have it remap at once?

Answer: Yes, but it would likely need to be reconciled on the map in the panel software. Recommend changing one at a time allowing them to map in individually.

Question: With EST4, can you just use the SIGA-HDT, when replacing devices, or do you need to use the 4-CU - Clean/Replace feature?

Answer: The Siga-HDT should not be used for device replacement unless there is a map fault on the loop that cannot be resolved with the 4-CU after the device is replaced.

Question: Can you do an output status on EST ?

Answer: You can view the status of the output in the node status report which in EST4 will show the counter of the output which is very helpful for troubleshooting.

Question: Is there going to be a change that allows IPHS devices to be replaced without programming? OSHD are the closest replacement?

Answer: I would say no since the Ion detectors are discontinued.

Question: Can they make mapping on EST4 more like EST3?

Answer: Feedback has been shared with the product management and engineering teams.

Question: Can you show loop statistics in EST4?

Answer: EST4 does not have loop statistics. The closest to this would be the detailed signature diagnostics report.

Question: Are the GSA modules the same protocol as the EST?

Answer: The GSA line is for the Vigilant or Kidde channel. You can run GSA modules on EST panels, but keep in mind that they are not UL Listed with an Edwards panel. Detectors cannot be cross branded.

Question: In the reasons for map faults earlier I noticed incorrect in and out wasn't listed. Shouldn't it be?

Answer: I would check incorrect in/outs as a last resort when troubleshooting a map fault.

Question: Under what circumstances would you use the different EST4 mapping options, i.e. Install, Clean/Replace, etc.? I have had issues using Clean/Replace when swapping a like-device. I would have issues with it committing the change. I have tried removing the old device on the map and selecting Map with Existing Device. Is that the procedure?

Answer: For the functions of the different options, please refer to the EST4 Signature Mapping User Guide which is available on MyEddie.

Question: Where is the zoom in the 4-CU map window?

Answer: Hold control and use the mouse scroll wheel or select the overview button and there is a zoom in/out option button.

Mapping

