How to make your **cards work anywhere:** How can **issuers** use **simulators** to make **C–8 certification** easier?

A customer taps their card or phone, and it just works anywhere and anytime.

Is there anything more important than this for issuers?

What lies behind the simple tap?

It is a complex world of EMV certifications, kernel standards, and personalization rules.

As more and more people use contactless cards, issuers need to make sure that their cards can operate with thousands of terminals, networks, and locations.
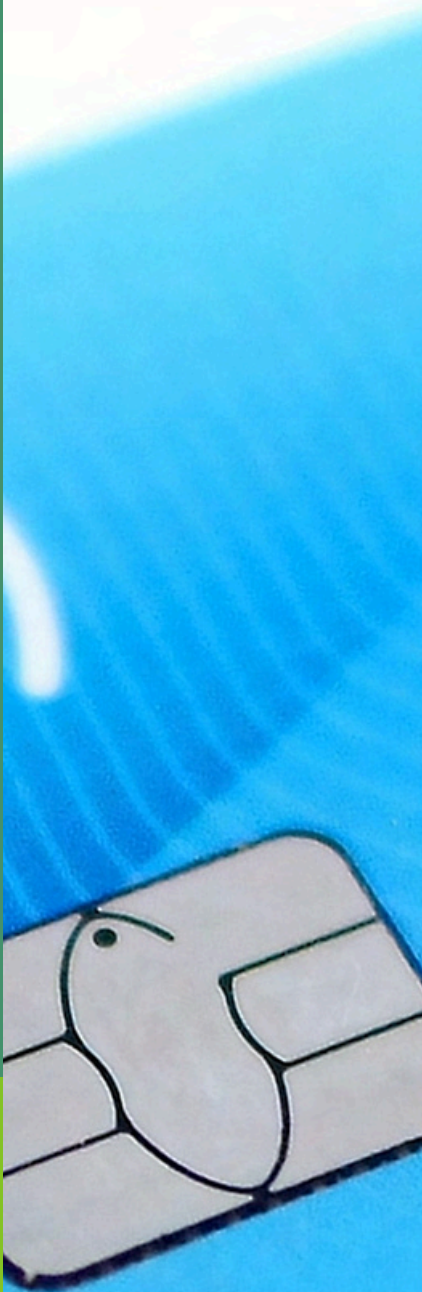
There are more than 20 distinct contactless kernels in use currently, and new standards, such as EMVCo contactless kernel 8 (C-8), are being introduced all the time. Issuers need to ensure that every card functions properly, without requiring recalls or customer complaints.

That's where terminal simulators come in.

Instead of relying only on physical terminals and trial-and-error in the field, issuers can now test, fix, and future-proof their cards in a virtual lab.

Karthik (Assistant Manager, Marketing) discusses this with Saba (Marketing Head) by asking a few key questions.

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Karthik: *Why is it hard for issuers to get EMV contactless certification?*

Saba: Every card has to work right on every terminal, whether it's a POS in London, an ATM in Mumbai, or a SoftPOS app in Brazil.

A personalization error in card data (say, a wrong CVM setting) might not show up during internal testing but could cause failures in the field.

That means unhappy customers and potentially costly card reissues.

What is even worse?

Even small changes, such as updating keys or enabling a new feature, can trigger recertification cycles. For issuers managing millions of cards, this becomes a never-ending activity.

Karthik: *What is C-8, and why should issuers care?*

Saba: C-8 is EMVCo's attempt to unify the contactless world. Instead of dozens of kernels, issuers can look forward to a single global standard.

For issuers, this matters because it means fewer differences across terminals, faster approvals of new card programs, and ensuring your cards stay compatible with tomorrow's POS and SoftPOS environments.

But during the transition, cards must work with both legacy kernels and the new C-8. This is where proactive testing is essential.

Karthik: *How can terminal simulators help issuers?*

Saba: A terminal simulator is like a simulated POS terminal on your laptop. Instead of buying multiple devices, issuers can emulate card transactions under different conditions.

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Examples:

How does it help card personalization testing?

You can simulate a tap before issuing a new card to ensure the data fields (AIP/AFL, CVM rules, cryptograms) match the scheme requirements.

How do you reproduce field issues?

If a customer says, "My card doesn't work at this store," you can recreate that exact terminal profile in the simulator and identify the issue, without flying engineers onsite.

Does this save time, avoid costly reissuances, and keep customers happy?

You bet, it does.

Saba:

Absolutely.

You can run pre-certification checks on simulators before sending cards for network certification.

For instance, if Visa requires a certain fast DDA setting, you can validate it virtually. If something fails, you fix it before submitting. That means fewer rounds of certification and quicker time-to-market for new products.

One issuer we worked with used simulation to validate a new co-branded card program. It passed the first time they sent it for certification, which saved weeks of waiting.

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Karthik: Does this take the place of real testing?

Saba:

No, you still need accredited labs and scheme tools to get final approval. But simulators make sure you're ready to pass the first time you go to the lab.

It's like rehearsing before a big performance. You don't want to discover errors when the spotlight is on.

Conclusion

For issuers, the biggest risk isn't new technology; it's a bad customer experience when a card fails at checkout.

Terminal simulators give you control: the ability to validate card profiles, test dual-network logic, reproduce issues instantly, and get ahead of certification bottlenecks.

They help you transition from reactive firefighting (fixing problems after customers complain) to proactive assurance (ensuring issues never reach the field).

As the industry shifts to C-8, issuers who embrace simulation will issue cards with confidence, speed up certifications, and most importantly, ensure that when a customer taps, it just works.

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