EMV® Chip News

October 2019

Getting Started on Quick Chip or Contactless Chip Frequently Asked Questions

Did you know?

Reminder: Use Track 2 Equivalent Data for both Contact and Contactless Chip Transactions

The terminal must always transmit the full, unmodified contents of the Track 2 Equivalent Data in the chip to the acquirer including the Issuer Discretionary data. The terminal should not construct the data in the magnetic stripe field in the online authorization message based on the individual data elements in the magnetic stripe or chip. The device should also ensure that if a transaction is processed as magnetic stripe, the track data used in the transaction is read from the magnetic stripe and correspondingly, if a transaction is processed as chip, the track data used should be read from the chip.

Because the data on the chip may differ from the data on the magnetic stripe, the POS Entry Mode Code field (V.I.P. Field 22) in the online authorization message that indicates the source of the track data (magnetic stripe or chip) must be accurate to avoid unnecessary declines. **Note:** Track 1 should not be supported in the authorization message.

> **If you missed the April 2019 contactless requirements deadline, qVSDC must be supported on all devices supporting Tap to Pay**
>
> Any terminals that are not qVSDC-enabled by 13 April 2019 will be non-compliant. Please work with your Acquirers and POS solution providers to ensure you have a migration plan and are processing qVSDC if accepting contactless payments. Visa's streamlined contactless Level 3 chip certification can accelerate the adoption of qVSDC. Contact Cindy Kohler at kohler@visa.com if you should have any questions.

Clarification to the May EMV Newsletter 2019 in regards to the Electronic Payment Server (EPS) certification process

In order to simplify and remove any confusion, reference to a Terminal Management System architecture has been removed from the EPS certification process.

In May, Visa introduced a new Level 3 (L3) testing process when using an EPS architecture in the U.S. to streamline L3 testing. It would benefit all terminal device types (e.g., ATM, AFD, POS, mPOS). It aims to remove redundant testing.

An EPS is defined as a server solution that manages messaging and updates to the attached EMV terminals. The EPS is a local or cloud-based server that manages, for example, the set of commands and scripts that configure, initiate and control payment transactions sent to the attached thin client terminals. This includes passing commands and data usually via a proprietary or scripting language to configure, control and manage EMV transactions. The EPS provides an abstraction layer between the EPS and the EMV kernel and a uniform interface between the EPS and the acquirer host or gateway. In addition, where a gateway uses a uniform proprietary message format for every single POS/PINPAD endpoint, the gateway may fall under the definition of an EPS.
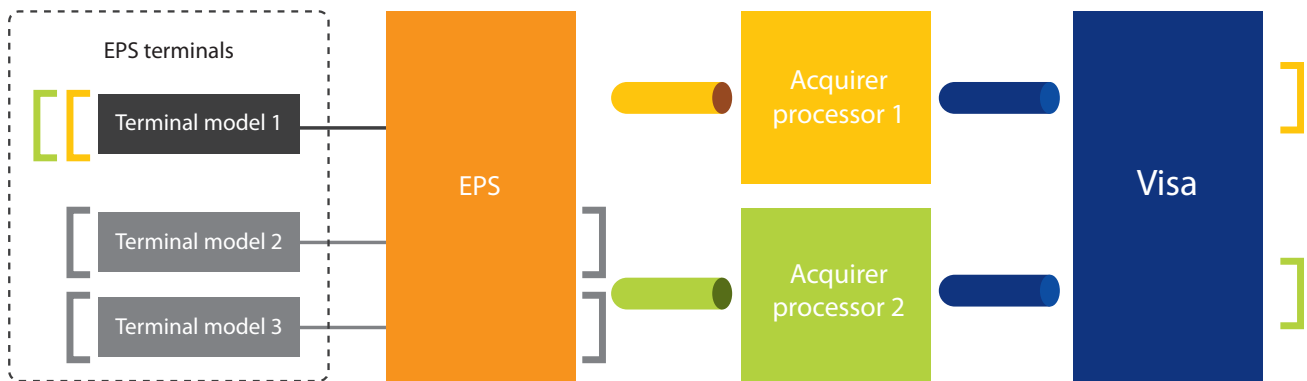
Below is an illustration and the steps to follow to take advantage of the streamlined EPS certification process:

Step 1

Perform one formal L3 certification (no changes to the acquirer processor L3 certification process) per acquirer processor's platform/message format.

– The testing must be performed using a terminal that contains the **super set of functionalities** (i.e., catering for all the functionalities supported by the EPS—referred to as terminal model 1 in the graphic above).

– At a minimum the U.S. Quick Chip Minimum Terminal Configuration ADVT/CDET Use Cases document must be used in the U.S, based on the terminal configuration. Refer to the latest version of the document on Visa Technology Partner (VTP) for details. Use either a U.S. Visa-Confirmed Acceptance Test Tool **OR** Visa's mobile CDET (mCDET) app available on Google Play (for U.S. CDET testing only) **OR** Visa Mobile Card Perso (VMCP) available on VTP.

   Note: The majority of U.S. acquirer certifications use a U.S. Visa-Confirmed Acceptance Test Tool. For a list of Visa U.S. Confirmed Third Party Chip Acceptance Tool Suppliers, see *EMVCo-qualified* and *Visa-confirmed Test Tools* at technologypartner.visa.com.

Step 2

Any additional testing is performed based on the acquirer processor's requirements using terminal model 1.

Note: If the EPS certification has been successfully completed, the pipe between the EPS and the acquirer processor (illustrated in yellow and green in the diagram above) would no longer change.

Step 3

Adding a terminal device (e.g., terminal model 2 or 3) to a certified EPS **with equal or less functionality**.

– L3 certification for EPS can be performed independently of the acquirer processor for any terminal **with equal or less functionality** than terminal model 1 (in this document referred to as terminal model 2, terminal model 3, etc.). Terminal models may come from different terminal vendors. If EPS certification is successfully completed, then self-certification may be performed for any additional terminal devices added to the EPS. In that case, formal end-to-end L3 certification with the acquirer processor may not be required.

– At a minimum the *U.S. Quick Chip Minimum Terminal Configuration ADVT/CDET Use Cases* document must be used in the U.S, based on the terminal configuration, and logs must be retained for a minimum of 5 years. If the applicable test cases are successfully completed, then from Visa's point of view, L3 testing is completed. Refer to the latest version of the document on Visa Technology Partner (VTP) for details. Use either a U.S. Visa-Confirmed Acceptance Test Tool **OR** Visa's mobile CDET (mCDET) app available on Google Play (for U.S. CDET testing only) **OR** Visa Mobile Card Perso (VMCP) available on VTP.

   Note: The majority of U.S. acquirer certifications use a *U.S. Visa-Confirmed Acceptance Test Tool*. For a list of Visa U.S. Confirmed Third Party Chip Acceptance Tool Suppliers, see *EMVCo-qualified* and *Visa-confirmed* Test Tools at technologypartner.visa.com.

– Proprietary test cases (outside the scope of payment network L3 self-certification) may be added to test between the terminal and EPS.

- At minimum a notification email attesting successful completion of L3 testing (all test results "pass") must be sent to acquirer/processor or for organizations still submitting test results into Chip Compliance Reporting Tool (CCRT), submit without requesting Visa review. CCRT will auto-accept the submission. (Optionally include logs based on acquirer/processor requirements).

- Merchants, VARs, ISVs, etc. must follow the acquirer/processor and Visa process and requirements.

- The entity (Merchants, VARs, ISVs, etc.) should have sufficient experience and expertise in EMV terminal testing to appropriately identify the required test cases for the device and configuration under test, perform EMV test debugging without the support of a processor or acquirer and have an established history of performing iteration-free EMV terminal certification projects.

Merchants, VARs, ISVs, etc should reach out to their acquirer processors to determine if they support an EPS certification process. **Note:** As a reminder, acquirer processor host testing is to be performed once for each platform. Testing with each global payment network was required to be completed by April 2013, as per global payment network mandates. Any new acquirer processor endpoints are required to perform host testing that includes chip data.

> U.S. Payments Forum Options for Reducing Level 3 EMV Certification Time for Retailer Systems Using Electronic Payment Servers (EPS) white paper now published.

Reminder About VAR Mailbox

For inquiries or questions, please contact VisaTechPartnerships@visa.com.

In the meantime, please visit these Visa chip sites for more information about EMV:

Visachip.com

Visa Technology Partner

EMV Testing and Certification White Paper: *Current Global Payment Network Requirements for the U.S. Acquiring Community*

EMV Level 3 Contactless Certification Recommended Solutions to Reduce Deployment Time document can be found here:

https://www.uspaymentsforum.org/forum-published-resources/

Visa Approval Services

Refer to Approval Services monthly approved products lists for chip payment devices that were granted Letter of Approval (LOA) upon completion of Visa's contactless Level 2 kernel testing and approval process. The complete list is available on Visa Technology Partner website at: https://technologypartner.visa.com/Testing/TestMaterials.aspx

For any other questions on the Approval Services' testing and approval process for contactless chip payment devices, please contact ApprovalServices@visa.com.

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