When Do You Test?
At a Glance Guidelines for Visa’s EMV Chip Terminal Testing Requirements

In order to maintain the integrity of the payment infrastructure and a frictionless cardholder acceptance experience, Visa has developed test tools to be used on terminals (POS and ATM) to ensure correct terminal configuration, assist with integration testing, and ensure that Visa’s terminal requirements are being met.

Acquirers are required to use these test tools prior to terminal deployment to minimize the risk of interoperability problems. The following will assist you in determining when testing is required.

1. New or Change to Terminal Hardware and Software

Any time there are changes to chip processing on the terminal or within its infrastructure, ADVT testing is required. Visa testing requirements take place after both EMVCo Type Approval Level 1 and Level 2 terminal approval and precede terminal deployment.

2. New or Change to Acquirer, Gateway and Processor Paths

Acquirers may have combinations of multiple/split relationships involving acquirers, merchants, ISOs, gateways and VARs potentially requiring testing.
Frequently Asked Questions

Q: Is testing required on all devices if they are within a terminal family?
A: Testing is required for a single POS device within a terminal family (same EMV kernel, payment application, process path). Consult with your supplier to verify terminals fall within a terminal family.

Q: Does Visa require every terminal test results submission be reviewed/validated by Visa?
A: No. CCRT has been designed so after the first accepted report reviewed by Visa, a review of updates will not be required.

Q: As an acquirer, do I need to schedule Visa testing with each of my merchants?
A: There is no Visa requirement that terminal testing be conducted for each merchant location. Testing is, however, required for each unique terminal configuration.

Q: If I change the currency code/country code on the same U.S. acquirer host platform to support a U.S. territory, do I need to retest the terminal configuration?
A: There is no Visa requirement to retest the terminal configuration, however, if on a different host platform or different protocol then testing is required.

Q: If I change software that does not affect the payment application for chip processing (i.e., screen layout or graphics) do I need to retest the terminal configuration?
A: There is no Visa requirement to retest the terminal configuration, however, isolating the payment application will assist in identifying when testing is needed.

Q: If I add a new peripheral device (i.e., printer or cash dispenser module) do I need to retest the terminal configuration?
A: Unless the device is directly involved in the payment processing (i.e., a card reader), there is no Visa requirement to retest the terminal configuration.

Q: If I change to the terminal-to-host protocol which does not affect authorization messages, do I need to retest?
A: There is no Visa requirement to retest the terminal configuration as long as there are no changes to the payment application or authorization message for chip processing.

For More Information

Additional specifics on each of these toolkits, Visa clients can access Visa documentation on Visa Online. Visa-confirmed tool vendors can access documentation at https://technologypartner.visa.com

- Acquirer Device Validation Toolkit (ADVT) User Guide
- Contactless Device Evaluation Toolkit (CDET) User Guide
- Chip Compliance Report Tool (CCRT) User Guide
- Chip Compliance Report Tool (CCRT) Quick User Guide
- Visa Smart Debit/Credit and Visa payWave U.S. Acquirer Implementation Guide
- Visa Smart Debit/Credit ATM U.S. Acquirer Implementation Guide
- Visa Inc. U.S. EMV Chip Terminal Testing Requirements
- CVES Benefits

For more information

Acquirers should contact their Visa representative to discuss their testing requirements in further detail.