BARNES INTERNATIONAL

EMV Personalisation Validation Tool + Test Script Development Tool
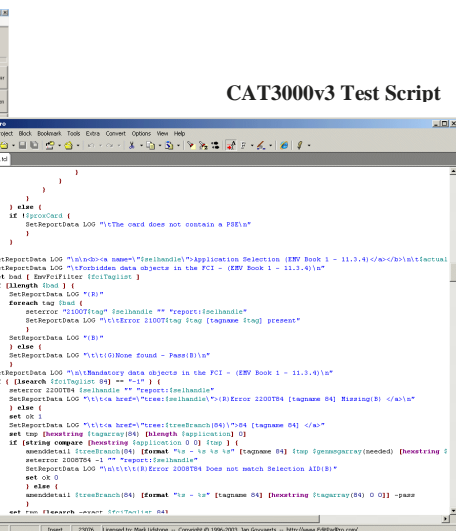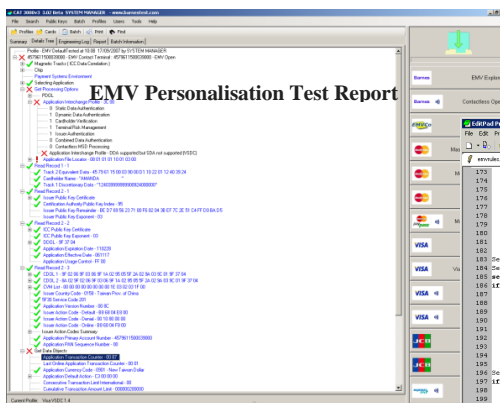
CAT3000v3

A cost effective, flexible and powerful script driven test development environment for contact and contactless chip applications

The CAT3000v3 is ideal for chip card developers, manufacturers and issuers who are looking for a more sophisticated validation tool for propriatory payment and/ or multi-application tests. CAT3000v3 users can easily and rapidly develop test suites for a wide variety of chip card applications such as EMV, GSM/3G/4G, Loyalty and E-security. In addition to the test script development capability, this tool is fully compatible with the Barnes EMV Personalisation Validation Test Tool (CPT3000v3) providing a powerful Level 2 test platform whatever the payment application.

EMV Personalisation Test Report

CAT3000v3 Test Script

Solution Highlights

☐ Script-based test suites can be run in isolation, or be linked together to perform multi-application tests in a single card insertion; this includes checks to both chip and magnetic strip data.

☐ An EMV payment application test suite is provided. New test scripts are written in the industry standard TCL scripting language.

☐ Supports all payment devices: contact and contactless cards, mobile phones, and tokens.

☐ Developed in collaboration with Visa and Mastercard, and used by Visa, Mastercard, American Express, Discover, JCB, major banks and card bureaux globally.

Contact, Contactless, Dual Interface Readers & PC/SC Reader Capability

CAT 3000v3CL
Contactless option
Various reader types supported, reading cards and phones

Features and Benefits

Multiple Application Tests
Applications can be tested individually or in a sequence. In a single card insertion, the tool confirms the data on the chip and magnetic stripe is correct and valid according to the issuer profile.

Multi-level User Interface
The tool is designed to be easy to use for both card developers and at the same time provides detailed technical information for IT and chip engineering staff, and non-technical operators. Test scripts and scenarios are selected from the database using clear dialog boxes.

Powerful Diagnostic Tools
Data displays include Card Test Result Summary; Detailed Test Result Tree and Full Engineering Log. Hyperlinks between the various levels of displays and directly to the EMV and payment scheme specification references allow the user to quickly identifiy and diagnose problems.

Industry Standard TCL Scripting Language
The TCL API gives the script programmer full control over the tools extensive facilities, including card operations, user interaction, results displays and log file generation. Example scripts and an extensive library of TCL procedures to perform commonly required chip card testing operations are included. Both the API and the library set are fully documented so that script developers can hit the ground running.

Adaptable Test Scenarios and Scipts
Users can easily define "QuickTest" profiles to test their own chip data requirements, in line with, or in place of, payment scheme requirements. Test scripts are not restricted to EMV; other types of smart card application can also be tested, for example payment, GSM/3G/4G, security and loyalty applications.

Cryptographic Authentication
Static (SDA), Dynamic (DDA) and Combine (CDA) data authentication is fully supported by the tool. RSA algorithms are also supported.

PCI Security
PCI compliant masking, log-out and user controls enable full control of personal cardholder data on screen and in reports.

Key Management
Complete with a comprehensive set of Visa, Mastercard and JCB public keys. Additional keys can be imported through a key management system.

Network Capability
The tool can be used in a networked environment with individualised user access levels and settings. Test scripts, profiles and reporting for multiple tools can be managed centrally, ensuring consistency across all units.

Remote Testing
Issuers and scheme authorities can securely evaluate and approve cards remotely, eliminating the costs and delays of sending sample cards around the world.

THE BARNES ADVANTAGE
Barnes is the chosen test tool of Banks & Issuers, Card Manufacturers, Personalisation Bureaux and Test Laboratories worldwide.

Here are some reasons why:

BUSINESS AGILITY
Barnes test tools are easy to use by both technical and non-technical users, and speed up card development and payment scheme certification.

COST ELIMINATION
The high business costs and wasted resources of producing and issuing invalid cards are eliminated.

RISK REDUCTION
The reputational risk of issuing invalid EMV cards to end customers is reduced.

FUTURE PROOFED
Barnes works in partnership with all major payment schemes. As scheme rules evolve, Barnes rapidly make updated test script packs available to customers via the Barnes website.

SERVICE EXCELLENCE
Our clients have every confidence that whatever their test requirement, the Barnes team is always on-hand to deliver expert advice and fast support.

Optional Solutions

EMV PVT for Mobile - CAT 3000v3ML
Validates mobile payment data over NFC and SWP interfaces.

EMV PVT for Contactless - CAT 3000v3CL
Validates contactless cards and ensures that dual interface cards deliver consistent information over both interfaces.

Payment Scheme Certification Test Modules
Allow certification tests to be performed to accelerate payment scheme approval.
- Mastercard CPV
- Visa GPR
- Discover D-PAS CPV
- JCB J/Smart & J/Speedy
- eftpos CPC
- NETS
- RuPay
- GIE CB
- ATH
- Credibanco

Technical Specification

Software:
- OS: Windows Vista, Windows 7, 8 and 10 (32-bit and 64-bit), Linux VM, Apple Parallels

Card Reader:
- Barnes 3K7 Triple Interface motorised card reader (contact only mode)
- Alternative manual reader is available for reading metal / titanium cards.
- PC/SC reader compatible

For CAT 3000v3 CL
- Contactless card and NFC reader options
- Barnes 3K7 Triple Interface reader (Magnetic Stripe, Contact and Contactless chip)

For CAT 3000v3 ML
- SWP reader

Barnes International Limited, The Loft, St. Clair's Farm, Wickham Road, Droxford, Hampshire, SO32 3PW, UK
Tel: +44 (0)1730 231313   Fax: +44 (0)1730 265353   Email: sales@barnestest.com   Web: www.barnestest.com

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