



**ePDQ**

**Cardholder Payment Interface (CPI) Upgrade Advice**

**V1.0 Released September 2008**

**COPYRIGHT NOTICE**

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means electronic or mechanical, including photocopying and recording, for any purpose, without the prior written permission of The Head of Product Development, Barclaycard Business, Barclays Bank PLC.

# Contents


<b>CONTENTS</b> .....	<b>2</b>
<b>PURPOSE OF THIS DOCUMENT</b> .....	<b>3</b>
<b>AUDIENCE</b> .....	<b>3</b>
<b>CONTACTING US</b> .....	<b>3</b>
<b>INTRODUCTION</b> .....	<b>4</b>
<b>MAJOR CPI ENHANCEMENTS</b> .....	<b>5</b>
1. ENHANCED CPI DESIGN .....	5
2. IMPROVED START-DATE VALIDATION.....	5
3. REMOVAL OF COLOUR AND FONT CUSTOMISATION OPTIONS.....	5
4. TRUNCATION OF 'MERCHANT DISPLAY NAME' .....	6
5. DYNAMIC 'PAYMENT STATUS' MESSAGE .....	6
6. OPTION TO MANDATE CARDHOLDER THE CARD SECURITY CODE (CSC) ENTRY.....	7
<b>CPI ADMINISTRATION TOOL CHANGES</b> .....	<b>9</b>
1. INTERNET AUTHENTICATION 'CONTINUE' OPTIONS .....	9
<b>DOCUMENTATION</b> .....	<b>9</b>
<b>APPENDIX</b> .....	<b>10</b>

## Purpose of this Document

This document details the changes we have made to the ePDQ CPI to support our upgraded and improved new CPI design. It is important to identify how some of these new features may change your use of the service as well as learning how some of the new functionality could benefit your business.

For clarity this document contains the following sections:

- Major CPI Enhancements
- CPI Administration Tool Changes

This details features and functionality that were not previously available in the ePDQ CPI. Where we feel the introduction of a new feature requires particular attention, we have marked this with the following symbol: .

## Audience

This document should be read by all users or integrators of the ePDQ CPI. This includes, but is not limited to:

- ePDQ Cardholder Payment Interface (CPI) users
- Merchant Development Partners
- Web Developers

If you are not sure which product you are using, please contact us.

## Contacting us

Please contact us on 0844 822 2099\*

Monday to Friday: 8.00am to 6pm

Alternatively you can email us at: [epdq@barclaycard.co.uk](mailto:epdq@barclaycard.co.uk)

***\* Calls may be monitored and recorded.***

## Introduction

Barclaycard Business is constantly looking for new ways to streamline and improve the products and services that are offered to our customers and that's why we have developed refreshingly new Cardholder Payment Interface (CPI) payment pages, designed to give our customers added functionality and a more intuitive cardholder experience. The new design has been driven by customer feedback and will be available to all CPI merchants.

If you are an existing ePDQ customer you will be familiar with the features of the CPI. However, you should ensure that you read and understand this document in order to use the new version of the ePDQ CPI successfully.

It is important that our Internet payment solutions continually evolve and offer functionality that suits our customers. The new features and functionality will be available to you following successful implementation.

New integration and operating guides will be made available following the implementation date, which will also detail the new features and how they can be applied to your use of the ePDQ Service.

# Major CPI Enhancements

This section details the enhancements to the ePDQ CPI payment pages that will become 'live' following successful implementation. Please note that some features described below may require additional integration work from you. If you have any questions regarding these features, please contact us.

***Please ensure you communicate these changes to your web site developer and users of the ePDQ Service.***

## ***1. Enhanced CPI Design***

👁 One of the most significant changes is that our new CPI payment pages have been completely redesigned with an attractive fresh new look, highly functional user-interface, clean modern lines and a simple yet effective one-page design. Our new CPI payment pages are now more effective and easier to use. Once implemented, you will notice the following aesthetic changes:

- A fresh new look design
- A single-page for customer entry of card and address details.
- A cleaner, more intuitive interface for your customers.
- Greater stylistic consistency throughout the customer journey.

Some screenshots of the new design can be found in the Appendix section of this document on page 9.

**NOTE:** Most customers will require no additional work to make use of these changes. The enhanced CPI payment pages are designed to be fully compatible with your current ePDQ CPI integration.

## ***2. Improved Start-Date Validation***

👁 To improve the quality of the cardholder data captured on the ePDQ CPI payment pages, supplying a partial card Start-Date will no longer be possible. Credit or debit-card Start-Dates must now be complete with a month and year attribute when being populated by the card-holder on the ePDQ CPI payment pages.

No additional work is required in order to benefit from this change.

## ***3. Removal of Colour and Font Customisation Options***

👁 In order to provide a consistent ePDQ CPI customer experience for all users of the payment pages, and to maintain the aesthetic integrity of the enhancements that we have made as detailed above, it has been necessary to remove certain customisation options that were previously available. This change also ensures that the payment

pages presented to your customers are compliant with the Disability Discrimination Act (DDA).

Those customisation options that, following the upgrade, will no longer be available are as follows:


- Background colour.
- Font colour.

In the unlikely event that your existing ePDQ CPI integration presents colour and font information to your customers that are different from their default values, this aspect of your ePDQ CPI integration will no longer function as intended.

Instead, following upgrade date, all users of the ePDQ CPI payment pages will be presented with a consistent aesthetic design, as demonstrated in the Appendix section of this document (page 9).

**NOTE:** This change should not require any additional work to your current ePDQ CPI integration. However, you may require the help of your web-developer (or the party responsible for undertaking your original integration) to complete your understanding of the impact of this change on your existing ePDQ CPI integration.

#### **4. Truncation of 'Merchant Display Name'**

 In order to comply with Verified by Visa (VbV) Internet Authentication requirements, the value passed across to the CPI in the '*merchantdisplayname*' field by your ePDQ CPI integration will now be truncated to a 25-character maximum string length.

Therefore, once the CPI upgrade has been completed, if the value you are currently passing across to the CPI in the '*merchantdisplayname*' field is longer than 25 characters, any trailing characters beyond the 25-character limit will be removed.

As a result, you may notice that the trading/merchant name that your cardholders are presented with when they are redirected to the ePDQ CPI payment page has been shortened, unless either of the following conditions is true:

- Your '*merchantdisplayname*' field value is shorter than 25 characters.
- You are presenting your secured company logo in place of the text-format of the merchant/trading name on the ePDQ CPI.

**NOTE:** You may require the help of your web-developer (or the party responsible for completing your original integration) to complete your understanding of the impact of this change on your ePDQ CPI integration.

#### **5. Dynamic 'Payment Status' Message**

👁 In order to provide a smoother, more user-friendly experience for your cardholders, and to encourage cardholders to return to your trading website once a payment has been completed, we are making minor changes to the 'Payment Status' page of the ePDQ CPI.

The transaction result message and button-text on the Payment Status page of the redesigned ePDQ CPI payment pages is now dynamic, and will change according to the result of the transaction.

If the cardholder's payment is successful:

- The final button to redirect the cardholder back to your trading website will now read "*Complete Payment*".
- The message alongside the 'Payment Status – Success' text, and above the dynamic '*Complete Payment*' button will now read "*Click 'Complete Payment' to confirm your payment and process your order*".

In contrast, should the cardholder's payment be unsuccessful:

- The final button to redirect the cardholder back to your trading website will now read "*Continue*".
- The message alongside the '*Payment Status – Declined*' text, and above the dynamic '*Continue*' button will now read "*Please click the 'Continue' button*".

## 6. **Option to Mandate Cardholder the Card Security Code (CSC) Entry**

👁 Through a small amendment to your integration, you now have the option to ensure that your cardholders enter a Card Security Code (CSC) on the CPI payment pages where applicable.

N.B. The CSC code appears on the reverse side of the cardholder's credit/debit card, and is typically a 3-digit numerical code imprinted on or alongside the magnetic stripe. On American Express cards, this code is normally four digits in length and appears on the front of the card.

In order to make use of this feature, you must amend your current ePDQ CPI integration to encrypt an additional field named '*mandatecsc*' along with other encrypted values such as '*orderid*' and '*total*' when your cardholder is redirected to the ePDQ CPI.

- Set the '*mandatecsc*' field to the numeric value '1' to enable mandatory CSC input for any given cardholder transaction.
- Set the '*mandatecsc*' field to the numeric value '0' to disable mandatory CSC input for any given cardholder transaction.

**NOTE:** For security reasons, this value must be encrypted and may not be passed to the ePDQ CPI in a "plain text" state. However, if you do not wish to make use of the option to mandate the cardholder's CSC code, no changes to your current CPI integration will be required.

Full details on how to use this new feature will be available after the implementation and can be found in the CPI 'Integration Enhancements' Guide (see **Documentation** section).

## CPI Administration Tool Changes

This section details the changes that we have made to the ePDQ CPI Administration Tool, which is used to configure the integration options for your ePDQ CPI integration. These changes will become available following successful implementation. If you have any questions regarding these features, please contact us.

***Please ensure you communicate these changes to your web site developer and users of the ePDQ Service.***

### **1. Internet Authentication 'Continue' Options**

👁 It is now possible for you to change your Internet Authentication 'continue' options on the ePDQ CPI Administration Tool, allowing you greater control and flexibility over the manner in which Verified by Visa (VbV) and MasterCard SecureCode transactions are handled by the ePDQ CPI.

Previously, in order to amend these options, you would require knowledge of the CPI integration 'passphrase', a value typically known only to the web-developer conducting the ePDQ CPI integration on your behalf.

Following the ePDQ CPI upgrade however, you will no longer be required to have knowledge of the 'passphrase' value in order to change the logical 'continue' options for the Verified by Visa (VbV) and MasterCard SecureCode transactions that pass through your ePDQ CPI integration.

Hence, you may now access the ePDQ CPI Administration Tool to change whether or not your ePDQ CPI payment pages should continue to authorise a transaction after it has a failed Internet Authentication (VbV or SecureCode) attempt.

## Documentation

A full set of revised ePDQ CPI integration and operating guides will be made available following the upgrade. These will be available from the ePDQ nextsteps pages, which were made available to you on initial application or which can be obtained at:-

[http://www.barclaycardbusiness.co.uk/information\\_zone/epdq/cpi.html](http://www.barclaycardbusiness.co.uk/information_zone/epdq/cpi.html)

To access this address you will need the following:-

**Username:** nextstep



**Password:** welcome

Please note that these documents will not be made available until after the upgrade.







# Appendix



**Example #1:** Three-box (delivery-information included) cardholder entry page, without pre-population of address details and no merchant text/logo.

Secure, reliable internet payments from



---





**Payment Information - Total Payment Value: £12.34**

### 1 – Card Details

Card Type \*

Card Number \*

Expiry Date \*  
mm  yy

Valid From  
mm  yy  † UK Maestro/ Solo only

Issue Number  
 † UK Maestro / Solo only

Card Security Code  
 [What is this?](#)

### 2 – Cardholder Information

Full Name \*

Address Line 1 \*

Address Line 2

Address Line 3

Town / City \*

County \*

Post / Zip Code \*    State (\* if US)  
    --

Country \*

Telephone Number \*

Email Address \*

### 3 – Delivery Information

Please tick box if delivery address is the same

Full Name \*

Address Line 1 \*

Address Line 2

Address Line 3

Town / City \*

County \*

Post / Zip Code \*    State (\* if US)  
    --

Country \*



Telephone Number

\* Indicates a mandatory field  
† Mandatory field for Maestro cards issued in the UK and Solo cards









# Appendix

**Example #2:** Two-box (delivery-information omitted) cardholder entry page, without pre-population of address details and no merchant text/logo.

Secure, reliable internet payments from

---

**Payment Information - Total Payment Value: £12.34**

### 1 – Card Details

Card Type *	<input type="text" value="Select..."/>
Card Number *	<input type="text"/>
Expiry Date *	<input type="text" value="mm"/> <input type="text" value="yy"/>
Valid From	<input type="text" value="mm"/> <input type="text" value="yy"/> † UK Maestro / Solo only
Issue Number	<input type="text"/> † UK Maestro / Solo only
Card Security Code	<input type="text"/> <a href="#">What is this?</a>

### 2 – Cardholder Information

Full Name *	<input type="text"/>
Address Line 1 *	<input type="text"/>
Address Line 2	<input type="text"/>
Address Line 3	<input type="text"/>
Town / City *	<input type="text"/>
Country	<input type="text"/>
Post / Zip Code *	<input type="text"/> State (* if US) <input type="text" value="--"/>
Country *	<input type="text" value="United Kingdom"/>
Telephone Number	<input type="text"/>
Email Address *	<input type="text"/>



---

\* Indicates a mandatory field  
† Mandatory field for Maestro cards issued in the UK and Solo cards







# Appendix



**Example #3:** Revised Internet Authentication (Verified by Visa / MasterCard SecureCode) page, where applicable.

Secure, reliable internet payments from

---



     

---

**Cardholder Check**


Your card issuer indicated that they require you to authenticate this transaction. This confirms that you are the genuine cardholder and wish to proceed with this purchase.

Please submit your Verified by Visa password.

Merchant: ePDQ Test  
Amount: **GBP 10.00**  
Date: 30.05.08  
Card number: XXXX XXXX XXXX 0216  
Personal Message: Welcome  
Password:

[Forgot your password?](#)



 [Help](#)

© Copyright 2002, Visa U.S.A. All rights reserved.








# Appendix



Example #4: Transaction results page.

Secure, reliable internet payments from

---

**Payment Status – Success** [Click 'Complete Payment' to confirm your payment and process your order](#)

**Transaction Details**

Payment Status:	Success
Date / Time:	May 15 2008 13:55:35
Merchant:	Example Store
Approval Code:	4804eaf3-1c95-3000-000e-080020d21c8f
Payment ID:	123456
Amount:	£299.99
Card Number:	XXXX XXXX XXXX 1234
Expiry Date:	05/2020

**Delivery Address**

Delivery Address:

Email:

---

\* Please print this for your records (landscape format) [Click 'Complete Payment' to confirm your payment and process your order](#)