



CashRegister: Merchant Administration Guide

Version 3.2

© 1998 CyberCash, Inc. All rights reserved.

CyberCoin is a registered trademark of CyberCash. CyberCash, CashRegister, Secure Internet Payment System, PayNow, and the CyberCash logo are trademarks of CyberCash, Inc. All other products mentioned in this document are trademarks of their respective companies.

February 1998

Table of Contents

List of Tables vii

Introduction

Purpose 1
Audience 1
Prerequisites 2
Style Conventions 2
What's in this Document 3
What's in this Documentation Set? 3

CHAPTER 1

Getting Started with Transaction Management

Understanding the Terminology 5
Understanding How to Manage Transactions 8
Accessing the Administrative Interface for Managing Transactions 10

CHAPTER 2

Managing Credit Card Transactions

Understanding Credit Card
Processing Models 11
 About the Host-based, AuthCapture
 Processing Flow 14
 About the Host-based, PostAuthCapture
 Processing Flow 16
 About the Terminal-based Processing Flow 18
Managing Transactions in the Host-based,
AuthCapture Processing Environment 21
 Getting Payments from Authorization through
 Settlement 21
 Performing Other Administrative Tasks 23
Managing Transactions in the Host-based,
PostAuthCapture Processing Environment 27
 Getting Payments from Authorization through
 Settlement 27
 Performing Other Tasks 31
Managing Transactions in the Terminal-based
Processing Environment 34
 Understanding Batch Terminology 34
 Getting Payments from Authorization through
 Settlement 35
 Performing Other Tasks 40
Managing Electronic Check Processing (ECP)
Transactions 46
 Accepting Electronic Check Processing (ECP)
 Payments 46
 Refunding ECP Payments 48
Performing Other Administrative Tasks 49
 Viewing the Current Status of Orders 49
 Performing Database Queries 52
 Using the Order Details Page 58
Performing Queries Using
Specific Information 60
 Performing a Query Using a Transaction ID 60
 Performing a Query Using a
 Credit Card Number 62
Frequently Asked Questions 63

CHAPTER 3

Managing PayNow Transactions

Understanding Check Processing 65
Looking up Transaction History by Order ID 68
Viewing the Current Day’s Activity 70
Querying the Database. 71
 Sample Searches 72
 Viewing Query Results. 73
Viewing the Current Status of Orders 76

Appendix

APPENDIX A

Action Codes 81
Glossary 87
Index 93

List of Tables

TABLE 1:	CashRegister Documentation	3
TABLE 2:	Key Terms	6
TABLE 3:	Overview of Processing Models	12
TABLE 4:	Processors and Processing Models	13
TABLE 5:	Merchant Task Checklist	14
TABLE 6:	Terms Used by Each Processor	35
TABLE 7:	Order Status Query Results Field Descriptions.	51
TABLE 8:	Query Results Field Descriptions	57
TABLE 9:	Order Detail Field Descriptions	59
TABLE 10:	Check Transaction States	66
TABLE 11:	Check Details Field Descriptions	69
TABLE 12:	Today's Activity Report Field Descriptions	71
TABLE 13:	Check Details Field Descriptions	75
TABLE 14:	Order Status Query Results Field Descriptions.	78
TABLE 15:	Action Codes	82

Introduction

Purpose

This guide provides information on managing payments using the Web-based administration interface. It guides you through administrative payment tasks from authorization to settlement, and covers possible subsequent tasks, such as voiding transactions and crediting consumers' accounts in appropriate situations.

Audience

This guide is written for the merchant or merchant's agent responsible for managing consumer payments. It assumes that the reader knows how to use a Web browser.

Prerequisites

Before you start using the administrative capabilities, you should have completed the following tasks:

- signed to the CyberCash Merchant Agreement
- made the required arrangement with a CyberCash-affiliated bank
- registered as a CyberCash merchant and received a CyberCash ID
- installed and integrated the Merchant Connection Kit (MCK)

In addition, you should have a CyberCash-provided URL and login (user name and password), which are required to access the administrative interface to the CashRegister for your store's transactions. If you have completed the above tasks and have not received the URL and login, send an email message to **merchant-support@cybercash.com**.

Style Conventions

This section describes the styles that are used in this document.

Bold type indicates items such as file names, window names, and buttons.

Italics type indicates a reference to another section of this document, a reference to another document, or terms that are defined within the text.

NOTE: Indicates suggestions or additional, detailed information.

!!! Indicates actions you must take or avoid for the system to operate properly.

What's in this Document

This guide contains the following sections:

- Chapter 1, *Getting Started with Transaction Management*, defines some key terms, gives an overview of how to manage transactions, and describes how to access the administrative interface that enables you to manage your store's transactions.
- Chapter 2, *Managing Credit Card Transactions*, provides an overview of credit card processing models and describes the tasks you will need to handle credit card transactions for your store.
- Chapter 3, *Managing PayNow Transactions*, provides an overview of how checks are processed and describes the tasks you will need to perform to handle electronic check transactions for your store.
- *Glossary* defines terms that may be unfamiliar to you.
- Appendix A, *Action Codes*, provides descriptions of various action codes.

What's in this Documentation Set?

There are two documents, including this guide, in this documentation set. All documents are available at

www.cybercash.com

Table 1 describes the available CashRegister documentation.

TABLE 1: CASHREGISTER DOCUMENTATION

TITLE	DESCRIPTION
<i>Merchant Connection Kit: Getting Started Guide</i>	Explains the procedures for registering as a merchant, downloading and installing the MCK, and integrating your storefront with CyberCash.
<i>CashRegister: Merchant Administration Guide</i>	Explains all of the CyberCash administration features.

Getting Started with Transaction Management

This chapter provides you with some terminology that you should be familiar with as an Internet merchant using the CyberCash secure payment system. In addition, it explains how the CyberCash transaction management process works and details how you can access the transaction database to manage transactions.

Understanding the Terminology

If you are a new Internet merchant, there are a few key terms that you will want to be familiar with as you read this document and interact with your customers, and CyberCash personnel. These terms are listed in Table 2, page 6, a complete glossary is included at the end of this document for further reference.

TABLE 2: KEY TERMS

TERM	DEFINITION/EXPLANATION
authorization	The process whereby a merchant obtains approval from a card holder's credit card company, by way of the merchant's processor, for the amount of a consumer's credit card payment. The result is usually <i>approved</i> or <i>declined</i> .
capture	The process of settling an existing authorization.
ECP (Electronic Check Processing)	A service offered by First USA Paymentech (FUSAP) that enables merchants to accept electronic check transactions through the credit card processing model.
Merchant Connection Kit™	A component of the CyberCash secure payment system that resides with the merchant's store and communicates with CyberCash. It contains scripts that allow the merchant's store to be linked directly to the CyberCash service.
merchant registration	A Web site for new and existing merchants. Based on inputs from new merchants, CyberCash returns a CyberCash ID and other materials that are required for you to use the payment system. For existing merchants, it provides a way to modify particular set up arrangements, such as the payment options you accept and your processor (existing merchants are provided with a unique login).
payment options	The instruments that the CyberCash payment system enables merchants to accept at their stores. In this version, you can choose to accept credit cards and/or checks. Supported credit cards include American Express, Carte Blanche, Diner's Club, Discover, JCB, MasterCard, and Visa.
PayNow™	CyberCash's electronic check payment service.

TABLE 2: KEY TERMS (CONT.)

TERM	DEFINITION/EXPLANATION
processing models	<p>Three methods by which credit card payments are approved (authorized), captured, and settled by various processors. The model you use depends on the type of products or services you offer and your banking relationship. The processing models are Host-based AuthCapture, Host-based PostAuthCapture, and Terminal-based. For details on the processing models, see <i>Understanding Credit Card Processing Models</i>, page 11.</p>
processor	<p>A financial institution that is responsible for capturing a consumer’s credit card payment and settling the transaction by crediting a merchant’s account. Your bank has a relationship with one or more processors and is responsible for telling you which processor will handle your store’s credit card transactions. CyberCash supports the following processors:</p> <ul style="list-style-type: none"> • First Data Corporation (FDC) • First USA Paymentech (FUSA or FUSAP) • Global Payment Systems Atlanta (GPS-ATL, formerly NDC) • Global Payment Systems St. Louis (GPS-STL, formerly MAPP) • NOVA • Vital (VisaNet) • CKFRE • Wells Fargo

TABLE 2: KEY TERMS (CONT.)

TERM	DEFINITION/EXPLANATION
settlement	The process whereby a processor credits a merchant's account for the amount of a consumer's credit card payment. Settlement occurs after a payment has been authorized and captured.
transaction	A financial interaction that changes the financial position of the parties involved. For example, a check payment is a transaction that debits the consumer's checking account and credits the merchant's bank account. A transaction can be a payment for goods or services, a refund, a void on a sale of goods or services, or a void on a refund.

Understanding How to Manage Transactions

As an Internet merchant, you will need to perform tasks related to the processing of electronic payments. Transaction management tasks depend on a number of factors, including the following:

- the payment options you accept at your store
- the type of products and/or services you offer at your store
- the banking relationship you have established and the financial processor that your bank works with

If you accept credit cards, the transaction management tasks you need to perform depend on your business model. For example, if customers pay a regular monthly service charge by going to your Internet store and using a credit card, your tasks would be different from an Internet merchant who sells physical goods. These tasks are related to the credit card processing model that you will follow, based on the processor your bank assigns you. For details on credit card processing models, see *Managing Credit Card Transactions*, page 11.

If you accept electronic checks as the only method of payment, one of your transaction management tasks, for example, might be to follow up on the status of a check payment to see if the money has been deposited in your bank account.

In the CyberCash payment system, the MCK, which you or your contracted party has customized and integrated with your storefront, sends transactions securely through CyberCash for processing (for a diagram of the flow, see the *Merchant Connection Kit: Getting Started Guide*, available at www.cybercash.com). To act upon any transaction or to get information on the status of a transaction, you must access the Web-based administrative interface to CyberCash. Because each merchant's transactions are private, accessing the administrative interface requires that you use a Secure Socket Layer (SSL) compliant Web browser, and a CyberCash-provided, unique URL and login (username and password). This prevents all other merchants from gaining access to your store's transactions.

The administrative interface provides transaction management capabilities for both credit card and check transactions, enabling you to follow payments from initiation through settlement and to perform follow-up actions such as queries, voids, and refunds as necessary. If you accept both methods of payment, you will be able to access both sets of operations. If you accept one of the two payment options, the operations that are displayed on the administrative interface are only those operations that apply to the payment option you accept. For example, if you accept credit cards as your only form of payment, the administrative operations that are displayed apply to credit card transactions only, and no check operations are available to you.

NOTE: Should you decide to add the other payment option, you must return to the merchant registration site (amps.cybercash.com) and provide the required information before the administrative interface for that payment option can be made available to you.

The last section of this chapter provides information on how to access the administrative Web pages.

Accessing the Administrative Interface for Managing Transactions

After you registered as a merchant with CyberCash, you should have received your unique URL and login for the administrative interface. If you did not, send an email message to **merchant-support@cybercash.com** to request this information. When you receive it, keep it in a secure place.

To access the administrative interface:

1. Use an SSL-compliant Web browser to access the URL of your administrative Web page.
2. When prompted, type your username and password.
A Web page is displayed that provides you access to the administrative functions you can perform. From this page, click the operation you need to perform.

For details on tasks related to credit card transactions, see *Managing Credit Card Transactions*, page 11. For details on tasks related to check transactions, see *Managing PayNow Transactions*, page 65.

Managing Credit Card Transactions

This chapter provides details on performing various administrative tasks related to credit card transactions. Because the tasks vary depending on the processing model you use (based on your business model) and the processor you use, an overview of the models and processors is presented first.

NOTE: Some parameters you set during merchant registration affect the tasks you have to perform on your credit card transactions.

Understanding Credit Card Processing Models

When your customers use credit cards to pay for goods and services, there are certain procedures you must follow. For example, you must get approval for the amount of the purchase. The approval and the eventual transfer of funds from the consumer to you occurs by way of financial processors. Processors work behind the scenes to handle credit card transactions, from authorization through settlement. Although there are many financial processors, all of them fall into three basic models for credit card processing. Your CyberCash-enabled bank assigned a processor to you based on your type of business, for example, immediate fulfillment of physical goods.

Table 3 provides a description of each processing model and a sample business model that aligns with each type of processing.

NOTE: Your CyberCash-affiliated bank determines which processing model and processor you will use. Table 3 is provided for informational purposes only.

TABLE 3: OVERVIEW OF PROCESSING MODELS

PROCESSING MODEL	DESCRIPTION	SAMPLE BUSINESS MODEL
Host-based, AuthCapture	Payments are authorized and captured at the same time, and then stored in a batch file at the processor.	Merchant offers Internet connectivity services that customers pay for each month using a credit card, or merchant sells digital goods, such as software, that is delivered to the consumer on the same day as the purchase (immediate fulfillment).
Host-based, PostAuthCapture	Payments are authorized and captured in two different interactions, and then stored in a batch file at the processor.	Merchant sells physical goods and may not always ship the ordered goods on the same day the order was received (delayed or future fulfillment).
Terminal-based	Payments are authorized immediately and stored in a batch file at your store. Batch files are sent to the processor, through CyberCash, for settlement.	Merchant offers services or sells digital or physical goods for either immediate or future fulfillment.

Table 4 shows the list of CyberCash-supported processors and the processing models they use.

TABLE 4: PROCESSORS AND PROCESSING MODELS

PROCESSOR	PROCESSING MODEL
First Data Corporation (FDC)	Terminal-based
First USA Paymentech (FUSA or FUSAP)	Terminal-based
Global Payment Systems Atlanta (GPS-ATL, formerly NDC)	Host-based, AuthCapture
	Terminal-based
Global Payment Systems Atlanta (GPS-STL, formerly MAPP)	Host-based, AuthCapture
	Host-based, PostAuthCapture
NOVA	Host-based, AuthCapture (fulfill immediate)
	Host-based, PostAuthCapture (fulfill future)
CheckFree	Host-based, AuthCapture (fulfill immediate)
	Host-based, PostAuthCapture (fulfill future)
Vital (VisaNet)	Terminal-based
Wells Fargo	Host-based, AuthCapture
	Host-based, PostAuthCapture

Regardless of the processing model, each credit card payment transaction goes through three phases:

- authorization (of the purchase amount)
- capture (of the authorization to a batch file)
- settlement

The tasks you perform and the tasks your processor performs on your behalf vary by processing model. The checklist shown in Table 5 identifies the functions that need to be performed by merchants in each model.

TABLE 5: MERCHANT TASK CHECKLIST

PROCESSING MODEL	AUTHORIZATION	CAPTURE	SETTLEMENT
Host-based, AuthCapture	➤		
Host-based, PostAuthCapture	➤	➤	
Terminal-based	➤	➤	➤

About the Host-based, AuthCapture Processing Flow

If your bank has assigned you to a processor using this model, you probably offer a service, sell digital goods, or ship orders of physical goods within 24 hours of when they are placed (the *immediate fulfillment business model*). In this model, the payment is captured at the same time the credit card amount is authorized. Figure 1, page 15, shows the flow for a simultaneous authorization and capture.

In this model, the transactions are stored in a batch file at the processor. The processor settles the batched transactions during certain times of the day, known as *processing windows*. If you use this processing model, you only need to get an authorization for the purchase amount. The capture of the authorization into the batch and the settlement of the transaction are done for you by the processor at the time of the authorization.

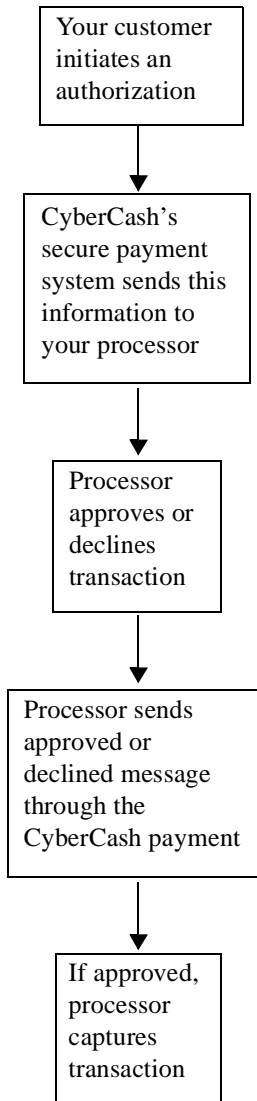


FIGURE 1: PROCESSING FLOW FOR THE HOST-BASED, AUTHCAPTURE MODEL

About the Host-based, PostAuthCapture Processing Flow

When you fulfill orders more than one day after receiving them, you must authorize and capture transactions separately. Authorization is performed at the time the consumer wants to make the purchase. Capture is performed when you ship the order.

Figure 2 shows the authorization flow. Figure 3, page 17 shows the capture flow.

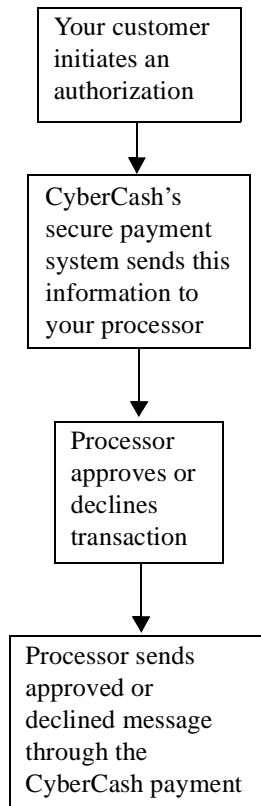


FIGURE 2: AUTHORIZATION FLOW FOR THE HOST-BASED, POSTAUTHCAPTURE MODEL

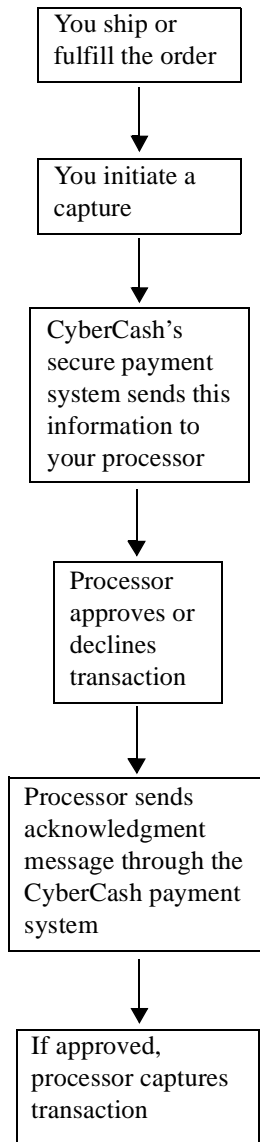


FIGURE 3: CAPTURE FLOW FOR THE HOST-BASED, POSTAUTHCAPTURE MODEL

In this model, the transactions are stored in a batch file at the processor. The processor settles the batched transactions during certain times of the day, known as *processing windows*. If you use this processing model, you must get authorization for the purchase amount and subsequently capture the authorization when you are ready to ship the goods. The settlement of the transactions is done for you by the processor.

About the Terminal-based Processing Flow

In the terminal-based processing environment, authorization for a credit card purchase is obtained. Then it is captured in a batch by marking the transaction. The process of marking transactions is also referred to as *assembling a batch*. Once a batch is assembled, it can be submitted to the processor for settlement.

In this model, the transactions are stored in a batch file at CyberCash. The processor settles the batched transactions when you submit the batch to the processor. If you use this processing model, you must get authorization for the purchase amount, capture of the authorization into the batch by marking the transaction, and submit the batch to the processor for settlement.

NOTE: If you provide immediate fulfillment, you can enable the Auto-Mark feature during merchant registration. Auto-Marking automatically captures all transactions into batch files. Any transactions that you need to remove from the batch prior to submitting the batch for settlement will have to be manually unmarked using the administrative interface.

If you enabled the Auto-Settle feature during merchant registration, your batches will be submitted for settlement automatically depending on the batch size or time of day you indicated during registration. If you want to submit batches for settlement between the Auto-Settle intervals, you can do so using the administrative interface.

Figure 4 shows how a transaction is authorized using a terminal-based processor. Figure 5, page 20, shows how a transaction is captured and settled in a batch using a terminal-based processor.

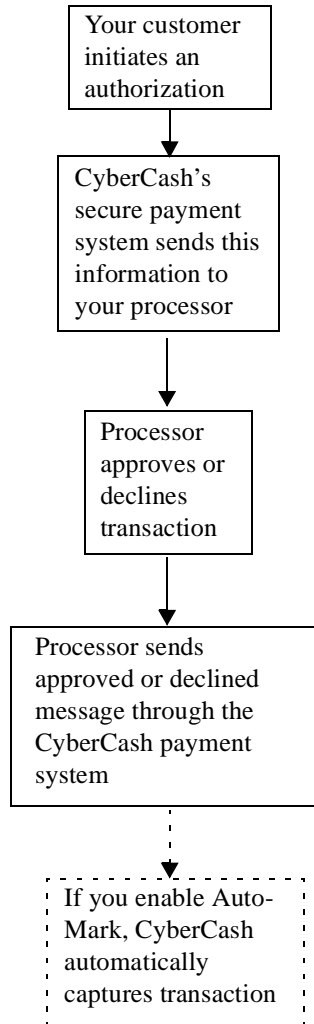


FIGURE 4: AUTHORIZATION FLOW FOR THE TERMINAL-BASED MODEL

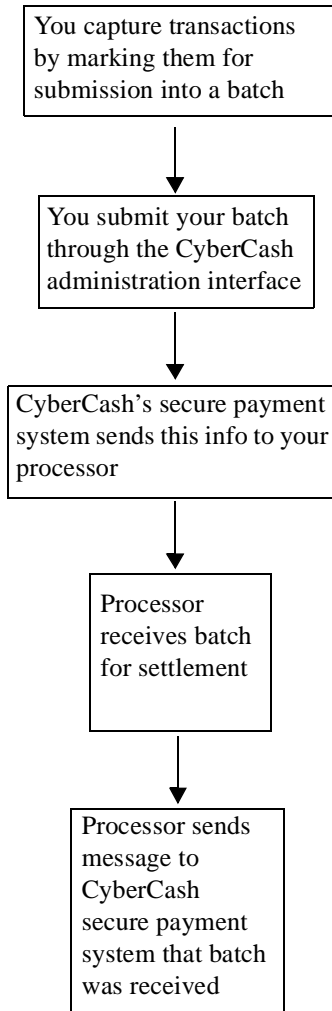


FIGURE 5: CAPTURE AND SETTLEMENT FLOW FOR A TERMINAL-BASED PROCESSOR

Managing Transactions in the Host-based, AuthCapture Processing Environment

In this processing model, getting an authorization is your only task related to payments. However, you may find it necessary to perform other tasks, such as refunding the price of a consumer's purchase or voiding a transaction, if the consumer decides not to make a purchase. The remainder of this section details the tasks you can perform using the administrative interface.

Getting Payments from Authorization through Settlement

In most cases, the Merchant Connection Kit (MCK) scripts that you customized to support your storefront handle the receipt of information (such as the credit card number, the purchase amount, and so on) from the consumer, and transports that information securely to CyberCash. In some cases, for example, if consumers are unable to use your storefront mechanism for entering their orders, you may need to enter consumers' purchases directly into CyberCash using the **Direct Card Input** page of the administrative interface.

After a payment transaction has been submitted to CyberCash, either through the MCK or through the administrative interface, you will receive a notice of authorization. Once you receive the authorization notice, your processor will capture and settle the transaction.

Authorizing a Payment through the Administrative Interface. The administrative interface allows you to manually enter a customer's order for processing payments.

To manually enter a payment:

1. On the **Merchant Administration Server** page, click **Input a credit card directly and do captures or returns**.

The **Merchant Direct Card Input** page (Figure 6) is displayed.

Sample AuthCapture Merchant

Merchant Direct Card Input Screen

Order ID:

Amount:

Card Number: **Expiration:** (mm/yy)

Customer Name:

Card billing information

Street address:

City:

State:

Zip Code:

Country:

Type of operation:

FIGURE 6: THE DIRECT CARD INPUT PAGE

2. Specify the following parameters:
 - order ID (order IDs should be unique and a maximum of 25 characters)
 - amount of the purchase
 - credit card number
 - expiration date of the card
 - customer name
 - billing information

3. From the **Type of operation** menu, choose **Authorization**.

4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

NOTE: If your submission results in an error (bad card number, invalid expiration date, or insufficient credit), verify that the information is typed correctly, and try again. Other types of errors may indicate that the transaction cannot be processed at that time. Try submitting the request again at a later time.

The payment is submitted and the authorization is returned. The processor captures and settles the payment within a payment window. If the customer decides to cancel the purchase, you will need to perform a void or a refund. The following section, *Performing Other Administrative Tasks*, covers these operations.

Performing Other Administrative Tasks

Following up on the status of a direct card input payment transaction and performing voids or returns are tasks you may need to perform. Use the administrative interface to accomplish these tasks.

Voiding Transactions. You can void a transaction if the batch that contains the original transaction has not been closed by your processor. If the batch has been closed, you should perform a return as described below in *Refunding a Customer's Money*, page 25. Orders that are authorized or captured are eligible for voiding. Pending orders are not eligible for voiding. To check the status of any order to see if it is eligible for voiding, use the **Review Order Status** option on the **Merchant Administration Server** page (for details, see *Viewing the Current Status of Orders*, page 49).

NOTE: If a voided transaction has timed out and is in a pending state, you should revoid the transaction.

To void a transaction:

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do PostAuths/Voids>Returns**.

The **Transaction Query** page (Figure 7, page 24) is displayed.

Transaction Query

Search for:

All Cards and All Transactions

With a status of:

Maximum number of transactions to display:

You may leave this field blank to get *all* transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

Date range:

You may leave either or both dates blank for open ended searches

First day: (month/day/year)

Last day: (month/day/year)

FIGURE 7: THE TRANSACTION QUERY PAGE

2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to void. For example, if you know the order ID of the transaction to be voided, specify it on this screen.
3. Click **Begin Search**.
The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.
4. Click the order ID of the transaction to be voided.
The **Order Detail** page is displayed with the details of the transaction.
5. On the **Order Detail** page, click **Void**.
The **Void** page is displayed showing whether the void was successful. If the void was not successful, it may be because the batch containing the original transaction has already been closed by your processor. In this case, perform a refund transaction. For details on performing a refund, see *Refunding a Customer's Money*, page 25.

Refunding a Customer's Money. You may need to perform a refund on a transaction if a customer decides to return the merchandise, for example. A refund, or return, is performed when the processor has already closed the batch that contains the original transaction. If the batch has not been closed, you should void the transaction as described in *Voiding Transactions*, page 23. Orders that are authorized or captured are eligible for voiding. Pending orders are not eligible for voiding. To check the status of any order to see if it is eligible to be voided, use the **Review Order Status** option on the **Merchant Administration Server** page (for details, see *Viewing the Current Status of Orders*, page 49).

Refunds can be for a portion of the original charge, the exact amount of the original charge, or an amount that is greater than the original charge. Refunds can be issued to the credit card that was used for the original purchase or a different card of the same card holder.

If the refund amount is greater than the original amount and/or the refund is being made to a different card than was used for the original transaction, you must create a new order ID. In all other cases, a refund can be associated with the order ID of the original transaction.

NOTE: The way order IDs are created in the system depends on how your scripts are written. When you need to manually create an order ID, in refunding money for example, search for the original transaction to get the original order ID. Then use the original order ID plus an extension, such as an alphabetic character. For example, if the order ID for the original transaction consists of an item number, 123, a hyphen, and the date, 1 December 1997 (original order ID is 123-12-1-97), the order ID you create to perform a refund might be 123-12-1-97-A.

To refund the exact amount or portion of the original transaction, or to credit the card that was used for the original purchase (refunds associated with existing order IDs):

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do PostAuths/Voids>Returns**.
The **Transaction Query** page (Figure 7, page 24) is displayed.
2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to refund. For example, if you know the order ID of the transaction you need to refund, specify it on this screen.
3. Click **Begin Search**.
The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.

4. Click the order ID of the transaction to be refunded.
The **Order Detail** page is displayed with a detailed summary of the transaction.
5. On the **Order Detail** page, specify the amount to be refunded in the **Amount** field (the default value is the amount of the original transaction), and click **Return**.
The **Return** page is displayed showing that the refund was successful.

To perform a return for an amount greater than the original transaction or to credit a card that is different from the one used in the original transaction (refunds associated with new order IDs):

1. On the **Merchant Administration Server** page, click **Input a credit card directly and do captures or returns**.
The **Direct Card Input** page (Figure 8) is displayed.

Sample AuthCapture Merchant

Merchant Direct Card Input Screen

Order ID:

Amount:

Card Number: **Expiration:** (mm/yy)

Customer Name:

Card billing information

Street address:

City:

State:

Zip Code:

Country:

Type of operation:

FIGURE 8: THE DIRECT CARD INPUT PAGE

2. Specify the following parameters:
 - order ID (must be a new order ID that is not associated with the original transaction)
 - amount to be refunded
 - credit card number receiving the refund
 - expiration date of the card receiving the refund
 - customer name
 - billing information
3. From the **Type of operation** menu, choose **Return**.
4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

Managing Transactions in the Host-based, PostAuthCapture Processing Environment

In this processing model, authorizing a transaction at the time of payment and capturing the authorization at the time of shipment are the tasks you need to perform. Other tasks, such as refunding the price of a consumer's purchase or voiding a transaction if the consumer decides not to make a purchase, are also available in the administrative interface.

Getting Payments from Authorization through Settlement

In most cases, the MCK scripts that you customized to support your storefront handle the receipt of information, such as the credit card number, the purchase amount, and so on, from the consumer and transports that information securely to CyberCash.

In some cases, for example, if consumers are unable to use your storefront mechanism for entering their orders, you may need to enter consumers' purchases directly into CyberCash using the **Direct Card Input** page of the administrative interface.

After a payment transaction has been submitted to CyberCash, either through the MCK or through the administrative interface, you will receive a notice of authorization. When you are ready to ship the goods to the customer, you will need to capture the authorization.

NOTE: If you can only fulfill part of an order (for example, if you don't have the full order in stock), you should either wait until the entire order can be shipped before capturing the payment or make a partial shipment and capture only the amount of the part that is being shipped. If you choose to ship orders incrementally, create another order for each subsequent shipment.

Authorizing a Payment through the Administrative Interface. The administrative interface allows you to manually enter a customer's order for processing payments and getting an authorization.

To manually enter a payment for authorization:

1. On the **Merchant Administration Server** page, click **Input a credit card directly and do authorizations or returns**.

The **Merchant Direct Card Input** page (Figure 9) is displayed.

Sample PostAuthCapture

Merchant Direct Card Input Screen

Order ID:

Amount:

Card Number: **Expiration:** (mm/yy)

Customer Name:

Card billing information

Street address:

City:

State:

Zip Code:

Country:

Type of operation:

FIGURE 9: THE MERCHANT DIRECT CARD INPUT PAGE

2. Specify the following parameters:

- order ID
- amount tendered
- credit card number
- expiration date of the card
- customer name
- billing information

3. From the **Type of operation** menu, choose **Authorization**.

4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

NOTE: If your submission results in an error (bad card number, invalid expiration date, or insufficient credit), verify that the information is typed correctly, and try again. Other types of errors may indicate that the transaction cannot be processed at that time. Try submitting the request again at a later time.

The payment is submitted and the authorization is returned. Your next step is to capture the authorization when you are ready to ship the goods to the customer.

Capturing the Authorization. An authorization should be captured at the time that you are ready to ship a customer's order.

To capture an authorization (perform a PostAuthCapture):

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do PostAuths/Voids>Returns**.

The **Transaction Query** page (Figure 10, page 30) is displayed.

Transaction Query

Search for:

All Cards and All Transactions

With a status of: success

Maximum number of transactions to display: 200

You may leave this field blank to get *all* transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

Date range:

You may leave either or both dates blank for open ended searches

First day: 02/09/98 (month/day/year)

Last day: 02/09/98 (month/day/year)

FIGURE 10: THE TRANSACTION QUERY PAGE

2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to capture. For example, if you know the order ID of the transaction you need to capture, specify it on this screen. If you do not know the specific order ID, you can search for transactions that have been **Authorized but never captured**.
3. Click **Begin Search**.
The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.
4. Click the order ID of the transaction to be captured.
The **Order Detail** page is displayed with a detailed summary of the transaction.
5. On the **Order Detail** page, click **Capture**.
The **Capture** page is displayed showing that the capture was successful.

Performing Other Tasks

Following up on the status of a direct card input payment transaction and performing voids or returns are tasks you may need to perform. Use the administrative interface to accomplish these tasks.

Voiding Transactions. You can void a transaction if the batch that contains the original transaction has not been closed by your processor. If the batch has been closed, you should perform a return as described in *Refunding a Customer's Money*, page 32. Orders that are authorized or captured are eligible for voiding. Pending orders are not eligible for voiding. To check the status of any order to see if it is eligible to be voided, use the **Review Order Status** option on the **Merchant Administration Server** page (for details, see *Viewing the Current Status of Orders*, page 49).

To void a transaction:

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do PostAuths/Voids>Returns**.
The **Transaction Query** page (Figure 10, page 30) is displayed.
2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to void. For example, if you know the order ID of the transaction you need to void, specify it on this screen.
3. Click **Begin Search**.
The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.
4. Click the order ID of the transaction to be voided.
The **Order Detail** page is displayed with a detailed summary of the transaction.
5. On the **Order Detail** page, click **Void**.
The **Void** page is displayed showing that the void was successful. If the void was not successful, it may be because the batch containing the original transaction has already been closed by your processor. In this case, perform a refund transaction.

Refunding a Customer's Money. You may need to perform a refund on a transaction if a customer decides to return the merchandise, for example. A refund, or return, is performed when the processor has already closed the batch that contains the original transaction. If the batch has not been closed, you should void the transaction as described in *Voiding Transactions*, page 31. Orders that are authorized or captured are eligible for voiding. Pending orders are not eligible for voiding. To check the status of any order to see if it is eligible to be voided, use the **Review Order Status** option on the **Merchant Administration Server** page (for details, see *Viewing the Current Status of Orders*, page 49).

Refunds can be for a portion of the original charge, the exact amount of the original charge, or an amount that is greater than the original charge. Refunds can be issued to the credit card that was used for the original purchase or a different card of the same card holder.

If the refund amount is greater than the original amount and/or the refund is being made to a different card than was used for the original transaction, you must create a new order ID. In all other cases, a refund can be associated with the order ID of the original transaction.

NOTE: The way order IDs are created in the system depends on how your scripts are written. When you need to manually create an order ID, in refunding money for example, search for the original transaction to get the original order ID. Then use the original order ID plus an extension, such as an alphabetic character. For example, if the order ID for the original transaction consists of an item number, 123, a hyphen, and the date, 1 December 1997 (original order ID is 123-12-1-97), the order ID you create to perform a refund might be 123-12-1-97-A.

To refund the exact amount or portion of the original transaction, or to credit the card that was used for the original purchase (refunds associated with existing order IDs):

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do PostAuths/Voids>Returns**. The **Transaction Query** page (Figure 10, page 30) is displayed.
2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to refund. For example, if you know the order ID of the transaction you need to refund, specify it on this screen.
3. Click **Begin Search**. The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.

4. Click the order ID of the transaction to be refunded.
The **Order Detail** page is displayed with a detailed summary of the transaction.
5. On the **Order Detail** page, specify the amount to be refunded in the **Amount** field (the default value is the amount of the original transaction), and click **Return**.
The **Return** page is displayed showing that the refund was successful.

To perform a return for an amount greater than the original transaction or to credit a card that is different from the one used in the original transaction (refunds associated with new order IDs):

1. On the **Merchant Administration Server** page, click **Input a credit card directly and do authorizations or returns**.
The **Merchant Direct Card Input** page (Figure 11) is displayed.

Sample PostAuthCapture

Merchant Direct Card Input Screen

Order ID:

Amount:

Card Number: **Expiration:** (mm/yy)

Customer Name:

Card billing information

Street address:

City:

State:

Zip Code:

Country:

Type of operation:

FIGURE 11: THE MERCHANT DIRECT CARD INPUT PAGE

2. Specify the following parameters:
 - order ID (must be a new order ID that is not associated with the original transaction)
 - amount to be refunded
 - credit card number receiving the refund
 - expiration date of the card receiving the refund
 - customer name
 - billing information
3. From the **Type of operation** menu, choose **Return**.
4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

Managing Transactions in the Terminal-based Processing Environment

In this processing model, you need to authorize, capture, and settle payment transactions. Settlement occurs by creating batch files and submitting the batches to the processor. Other tasks, such as refunding the price of a consumer's purchase or voiding a transaction if the consumer decides not to make a purchase, are also available in the administrative interface.

Understanding Batch Terminology

The structure of a batch is similar for all processors who offer terminal-based processing. There is a *batch header*, which indicates the beginning of the batch to the processor. The header is followed by *settle sales* and *settle return* transactions. For sales, settle sales is what captures the transactions. For returns, settle return is what credits a customer's account. The last component is the *batch trailer*, which indicates to the processor that there are no more transactions in the batch.

Your processor may use different terms, but the function of each component remains the same. Table 6, page 35, lists the terms each processor uses.

TABLE 6: TERMS USED BY EACH PROCESSOR

PROCESSOR	TERMS USED
FDC	summary ID settle sales settle return close batch
NDC	balance transaction settle sales settle return settle last sales OR settle last return NOTE: Use the one that indicates the last transaction in the batch. For example, if the last transaction in the batch is a refund, use <i>settle last return</i> .
VITAL	batch header settle sales settle return batch trailer
FUSAP	batch header settle sales settle return batch trailer

Getting Payments from Authorization through Settlement

In most cases, the MCK scripts that you customized to support your storefront handle the receipt of information, such as the credit card number, the purchase amount, and so on, from the consumer and transports that information securely to CyberCash. In some cases, for example, if consumers are unable to use your storefront mechanism for entering their orders, you may need to enter consumers' purchases directly into CyberCash using the **Direct Card Input** page of the administrative interface.

After a payment transaction has been submitted to CyberCash, either through the MCK or through the administrative interface, you will receive a notice of authorization. When you are ready to ship the goods to the customer, you will need to capture the authorization.

NOTE: If you provide immediate fulfillment, you can enable the Auto-Mark feature during merchant registration to automatically capture all successfully authorized transactions.

Authorizing a Payment through the Administrative Interface. The administrative interface allows you to manually enter a customer's order for processing payments and getting an authorization.

To manually enter a payment for authorization:

1. On the **Merchant Administration Server** page, click **Input a credit card directly and do authorization or returns**.

The **Merchant Direct Card Input** page (Figure 12) is displayed.

Sample Terminal-based Merchant

Merchant Direct Card Input Screen

Order ID:

Amount:

Card Number: **Expiration:** (mm/yy)

Customer Name:

Card billing information

Street address:

City:

State:

Zip Code:

Country:

Type of operation:

FIGURE 12: THE MERCHANT DIRECT CARD INPUT PAGE

2. Specify the following parameters shown:
 - order ID
 - amount tendered
 - card number
 - expiration date
 - customer name
 - billing information
3. From the **Type of operation** menu, choose **Authorization**.
4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

NOTE: If your submission results in an error (bad card number, invalid expiration date, or insufficient credit), verify that the information is typed correctly, and try again. Other types of errors may indicate that the transaction cannot be processed at that time. Try submitting the request again at a later time.

The payment is submitted and the authorization is returned. Your next step is to capture the authorization when you are ready to ship the goods to the customer.

Capturing the Authorization. In the terminal-based environment, an authorization is captured by marking it for inclusion in a batch file.

NOTE: If you selected the Auto-Mark feature during merchant registration, all transactions will automatically be marked for inclusion in a batch. If you did not select the Auto-Mark feature, you can manually mark items for a batch by following the instructions in this section. If you did not select Auto-Mark during registration and would like to have all transactions automatically marked for inclusion in a batch, return to the **Merchant Registration** page (amps.cybercash.com) and modify your registration. Until you receive notification from CyberCash that your modification has taken effect, continue to manually mark transactions for batching.

To capture an authorization (or to mark a transaction for a batch):

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do Marking/Unmarking>Returns**. The **Transaction Query** page (Figure 13) is displayed.

The screenshot shows the 'Transaction Query' page. It has a title 'Transaction Query' and a section 'Search for:'. Under 'Search for:', there are two dropdown menus: 'All Cards' and 'All Transactions', separated by the word 'and'. Below these is a dropdown menu for 'With a status of:' set to 'success'. There is a text input field for 'Maximum number of transactions to display:' with the value '200'. A note below states: 'You may leave this field blank to get all transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.' Below this is a section 'Date range:' with a note: 'You may leave either or both dates blank for open ended searches'. There are two date input fields: 'First day:' with the value '02/09/98' and 'Last day:' with the value '02/09/98', both with '(month/day/year)' labels.

FIGURE 13: THE TRANSACTION QUERY PAGE

2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to capture. For example, if you know the order ID of the transaction you need to capture, specify it on this screen. If you do not know the specific order ID, you can search for transactions that have been **Authorized but never marked**.
3. Click **Begin Search**.
The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.
4. Click the order ID of the transaction to be marked.
The **Order Detail** page is displayed with a detailed summary of the transaction.
5. On the **Order Detail** page, click **Mark**.
The **Marked for Batching** page is displayed showing that the transaction is marked for inclusion in a batch file.

The CyberCash payment system enables you to have 99 transactions in each batch. The system will automatically close a batch after it reaches 99 transactions. However, even if you process fewer than 99 transactions per day, CyberCash recommends that you submit a batch file at least once each day. *Assembling and Submitting a Batch File for Settlement* describes how to submit batches using the administrative interface.

Assembling and Submitting a Batch File for Settlement. The final step in processing transactions is to submit your batch file to your processor for settlement using the administrative interface.

NOTE: If you enabled the Auto-Settle feature during merchant registration, your batches will be submitted for settlement automatically depending on the batch size or time of day you indicated during registration. If you want to submit batches for settlement between the Auto-Settle intervals, you can do so using the following procedure.

To assemble and submit a batch for settlement:

1. On the **Merchant Administration Server** page, click **Assemble and Submit a Batch**.

The **Batch Creation** page (Figure 14) is displayed.

Batch Creation

This screen allows you to select eligible transactions which will be added to a batch and sent to your processor for settlement.

You may consider all eligible transactions, or limit the candidates to only marked authorization or return transactions. You may also choose to batch only those transactions using a specific credit card.

Search for:

and

Maximum number of transactions to display:

You may leave this field blank to get *all* transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

FIGURE 14: THE BATCH CREATION PAGE

2. Specify the following information:

- payment method
- eligible transaction types
- maximum number of transactions to display

3. Click **Begin Search**.

The **Query Results** page is displayed, showing a summary of the order information. All eligible transactions are marked with check marks. If you choose not to include one or more of the selected orders in the batch (perhaps because, there is a transaction you want to void, or if there was a complication in fulfillment), click the check-marked box to unmark the order.

4. Click **Commit Batch** to send the assembled batch to the processor for settlement.

After you submit a batch for processing, the message that is displayed gives the status of your submittal. It does not give the status of processed transactions in your submitted batch. To get the status of transactions in submitted batches, you must review a batch. For information on reviewing a batch, see *Reviewing Batches*, page 44.

NOTE: Settlement for a given transaction within a batch means that the amounts of the purchases in the batch are credited to you and that refunds in the batch are credited the customers' cards.

Performing Other Tasks

Following up on the status of a direct card input payment transaction and performing voids or returns are tasks you may need to perform. Use the administrative interface to accomplish these tasks.

Voiding Transactions. Performing a void in the terminal-based environment requires locating the transaction to be voided and unmarking it before submitting the batch for processing. If you are unsure of whether the batch containing the original transaction has been processed, perform a transaction query to determine its status. For instructions, see *Reviewing Batches*, page 44.

To void a transaction, or to unmark it so that it will not be included in a batch:

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do Marking/Unmarking>Returns**.
The **Transaction Query** (Figure 13, page 38) page is displayed.
2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to capture. For example, if you know the order ID of the transaction you need to capture, specify it on this screen. If you do not know the specific order ID, you can search for transactions that have been **Marked for batching**.
3. Click **Begin Search**.
The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.
4. Click the order ID of the transaction to be unmarked.
The **Order Detail** page is displayed with a detailed summary of the transaction.
5. On the **Order Detail** page, click **Unmark**.
The **Void** page is displayed showing that the transaction is not included in a batch file.

Refunding a Customer's Money. You may need to perform a refund on a transaction if a customer decides to return the merchandise, for example. A refund, or return, is performed when you have already submitted the batch containing the original transaction. If you have not already submitted the batch for settlement, you should void the transaction as described in *Voiding Transactions*, page 40. If you have submitted the batch that contains the original transaction, perform a refund. If you are unsure of whether the batch containing the original transaction has been processed, perform a transaction query to determine its status. For instructions, see *Reviewing Batches*, page 44.

Refunds can be for a portion of the original charge, the exact amount of the original charge, or an amount that is greater than the original charge. Refunds can be issued to the credit card that was used for the original purchase or a different card of the same card holder.

If the refund amount is greater than the original amount and/or the refund is being made to a different card than was used for the original transaction, you must create a new order ID. In all other cases, a refund can be associated with the order ID of the original transaction.

NOTE: The way order IDs are created in the system depends on how your scripts are written. When you need to manually create an order ID, in refunding money for example, search for the original transaction to get the original order ID. Then use the original order ID plus an extension, such as an alphabetic character. For example, if the order ID for the original transaction consists of an item number, 123, a hyphen, and the date, 1 December 1997 (original order ID is 123-12-1-97), the order ID you create to perform a refund might be 123-12-1-97-A.

To refund the exact amount or portion of the original transaction, or to credit the card that was used for the original purchase (refunds associated with existing order IDs):

1. On the **Merchant Administration Server** page, click **Query Local Database and/or do Marking/Unmarking>Returns**. The **Transaction Query** page (Figure 15) is displayed.

The screenshot shows a web form titled "Transaction Query". Under the heading "Search for:", there are two dropdown menus: "All Cards" and "All Transactions", separated by the word "and". Below this is a field "With a status of:" with a dropdown menu set to "success". Further down is "Maximum number of transactions to display:" with a text input field containing "200". A note below states: "You may leave this field blank to get all transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle." A horizontal line separates this section from the "Date range:" section. Under "Date range:", a note says "You may leave either or both dates blank for open ended searches". There are two date input fields: "First day:" and "Last day:", both containing "02/09/98" and followed by "(month/day/year)".

FIGURE 15: THE TRANSACTION QUERY PAGE

2. Use the available search parameters on the **Transaction Query** page to find the transaction you need to refund. For example, if you know the order ID of the transaction you need to refund, specify it on this screen.

3. Click **Begin Search**.

The completed search yields the **Query Results** page. This page displays a summary of all transactions meeting the criteria you specified.

4. Click the order ID of the transaction to be refunded.

The **Order Detail** page is displayed with a detailed summary of the transaction.

5. On the **Order Detail** page, specify the amount to be refunded in the **Amount** field (the default value is the amount of the original transaction), and click **Return**.

The **Return** page is displayed showing that the refund was successful.

To return an amount greater than the original transaction or to credit a card that is different from the one used in the original transaction (refunds associated with new order IDs):

1. On the **Merchant Administration Server** page, click **Input a credit card directly and do authorizations or returns**.

The **Merchant Direct Card Input** page (Figure 16) is displayed.

Sample Terminal-based Merchant

Merchant Direct Card Input Screen

Order ID:

Amount:

Card Number: **Expiration:** (mm/yy)

Customer Name:

Card billing information

Street address:

City:

State:

Zip Code:

Country:

Type of operation:

FIGURE 16: THE MERCHANT DIRECT CARD INPUT PAGE

2. Specify the following parameters:
 - order ID (must be a new order ID, not the original order ID)
 - amount to be refunded
 - credit card number receiving the refund
 - expiration date of the card receiving the refund
 - customer name
 - billing information
3. From the **Type of operation** menu, choose **Return**.
4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

Reviewing Batches. The **Review Batches** option enables you to review details about specific batches. After you submit a batch for processing, the **Batch Response** page is displayed, giving the status of your submittal through the CyberCash payment system, and the status of individual transactions within those batches. This function does not reflect the processing status of your submitted batch. Use the **Review Batches** feature to get information about the processing status of your batches.

NOTE: If your processor is Vital or FUSAP, check the status of your batches immediately after you submit them.

To review batches:

1. On the **Merchant Administration Server** page, click **Review Batches**. The **Batch Status Query** page (Figure 17) is displayed.

Batch Status Query

Search for all batches:

With response status: **and batch status:**

Maximum number of transactions to display:

You may leave this field blank to get *all* transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

Date range:

You may leave either or both dates blank for open ended searches

First day: (month/day/year)

Last day: (month/day/year)

Optional search parameter:

Leave this blank if you don't care.

Batch ID:

FIGURE 17: THE BATCH STATUS QUERY PAGE

2. Specify the following information:
 - response status
 - batch status
 - maximum number of batches to display
 - date range of submitted batches to search for
 - batch ID
3. Click **Begin Search**.
 The **Query Results** page is displayed. The batches that meet the search criteria are displayed in an “unrolled” format, such that you can see each item in the batch. To get additional information about any particular batch, click its Batch ID.

NOTE: If you find during your query that you have a batch with a status of *pending* (*p*), you may need to manually retry sending it.

To retry sending a batch:

1. Click the pending batch in the query.
Retry is displayed.
2. Click **Retry**.

Managing Electronic Check Processing (ECP) Transactions

If First USA Paymentech (FUSAP) is not your processor, skip this section.

If FUSAP is your processor, and you accept electronic checks through FUSAP's Electronic Check Processing (ECP) feature, you must use the administrative interface to perform tasks related to managing ECP transactions.

Accepting Electronic Check Processing (ECP) Payments

The administrative interface allows you to manually enter a customer's ECP payment.

To manually enter an ECP payment:

1. On the **Merchant Administration Server** page, click **Input a check directly and do validation/verification or credits**.
The **Merchant Direct Check Input Screen** (Figure 18, page 47) is displayed.

Merchant Direct Check Input Screen

Order ID:

Amount:

Customer Name:

Check MICR:

Checking Account Type:

Type of operation:

FIGURE 18: THE MERCHANT DIRECT CHECK INPUT SCREEN

2. Provide the following information:

- order ID
- amount of transaction
- customer name
- check Magnetic Ink Character Recognition number
- checking account type—checking or savings

3. From the **Type of operation** menu, choose **Validate/Verify**.

4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

NOTE: If your submission results in an error (bad account number or similar), verify that the information is typed correctly. Other errors that you may receive could indicate that the transaction cannot be processed at this time. Try submitting the request again at a later time.

Refunding ECP Payments

The administrative interface allows you to credit a bank account in the event of a return or overcharge on an ECP payment.

To refund an ECP payment:

1. On the **Merchant Administration Server** page, click **Input a check directly and do validation/verification or credits**.

The **Merchant Direct Check Input Screen** (Figure 18, page 47) is displayed.

2. Provide the following information:

- order ID
- amount of refund
- customer name
- check Magnetic Ink Character Recognition number
- checking account type—checking or savings

3. From the **Type of operation** menu, choose **Credit**.

4. Click **Submit this request**.

The resulting page shows the outcome of the transaction.

NOTE: If your submission results in an error (bad account number or similar), verify that the information is typed correctly. Other errors that you may receive could indicate that the transaction cannot be processed at this time. Try submitting the request again at a later time.

Performing Other Administrative Tasks

Regardless of your processor, the administrative interface enables you to perform some additional functions. For example, you can search the credit card transaction database using various kinds of criteria and you can also find a credit card number that is associated with any particular order. The remainder of this section describes these additional functions.

Viewing the Current Status of Orders

You may want to see the last transaction type of all orders for any given day or range of days. To find out the transaction type of multiple orders all at once, without having to look them up individually, use the **Review Order Status** option. The **Order Status Query Results** page shows you the current transaction type for each order within your specified range of dates, and it displays the time at which the order entered that transaction type.

To review the status of orders for a day or range of days:

1. On the **Merchant Administration Server** page, click **Review Order Status**.

The **Order Status Query** page (Figure 19) is displayed.

Order Status Query

This query will allow you to review Order Status. It will show you the last action successfully performed on the Order.

Review all order records within the date range:

You may leave either or both dates blank for open ended searches

First day: (month/day/year)

Last day: (month/day/year)

Maximum number of transactions to display:

You may leave this field blank to get *all* transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

FIGURE 19: THE ORDER STATUS QUERY PAGE

2. Type the date range (start and end dates) of the orders you want to review. If you are querying for a single day, type that date in both the **First day** and **Last day** fields.
3. Type the maximum number of orders you want to display.
4. Click **Query Status**.
The **Order Status Query Results** page (Figure 20) is displayed.

Order Status Query Results						
All orders						
Summary Data						
Number of records displayed: 7						
Order ID	Customer Account Number	Transaction Status	Time of Trans. mm/ dd/yy (hh:mm:ss)	Export State	Last Export Time	Flat File
971110215706944	a1324124a	pending	11/10/97 21:54:58	0	---	---
971110215806947	asdf	pending	11/10/97 21:55:36	0		---
971112163915001	asdf	pending	11/12/97 17:05:02	0		---
971113174717974	asdf	pending	11/13/97 17:44:49	0		---
971113174917986	asdf	pending	11/13/97 17:47:06	0		---
971113175818018	asdf	pending	11/13/97 17:56:07	0		---
971113184019174	asdfasdf	pending	11/13/97 18:37:21	0		---

FIGURE 20: THE ORDER STATUS QUERY RESULTS PAGE

Each order that is displayed as a result of the query is described by the fields shown in Table 7.

TABLE 7: ORDER STATUS QUERY RESULTS FIELD DESCRIPTIONS

FIELD	DESCRIPTION
Order ID	The individual ID number assigned to the order.
Last Transaction Type	The last action performed for that particular order ID. Possible values include the following: <ul style="list-style-type: none"> • auth • postauth • marked • markret • settlement-pending • return • settled • voidmark • settleret • voidcapture • voidreturn
Export State	This field is not used in the current version.
Last Change Time	The last time the status of the order changed.
Last Export Time	This field is not used in the current version.
Flat File	This field is not used in the current version.

To view the transaction history for any order, click its order ID. The resulting **Order Details** page displays the transaction history for that order. For more information about using the **Order Details** page, see *Using the Order Details Page*, page 58.

Performing Database Queries

The administrative interface provides a general querying capability. You can use the **Transaction Query** page to search for orders using several different search criteria. The **Transaction Query** page enables you to search by credit card type so you can see the transactions by card type; transaction type, such as transactions that have been authorized, settled, batched, or voided; a status, such as successful transactions or pending transactions; a certain range of dates to see which transactions were processed during those days; a certain amount range to see how many transactions were received by your store for a particular dollar amount; a specific order ID; or any combination of those search parameters. Instructions for using the query capabilities are best presented by a few sample searches and the data you would enter in the **Transaction Query** page (Figure 21) to return the results you want.

The screenshot shows a web form titled "Transaction Query". Under the heading "Search for:", there are two dropdown menus: "All Cards" and "All Transactions", separated by the word "and". Below this is a field "With a status of:" with a dropdown menu set to "success". Further down is a field "Maximum number of transactions to display:" with a text input containing "200". A note below this field states: "You may leave this field blank to get all transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle." A horizontal line separates this section from the "Date range:" section. Under "Date range:", a note says "You may leave either or both dates blank for open ended searches". There are two date input fields: "First day:" with the value "02/09/98" and "(month/day/year)" next to it, and "Last day:" with the value "02/09/98" and "(month/day/year)" next to it. A final horizontal line is at the bottom of the form.

FIGURE 21: THE TRANSACTION QUERY PAGE

!!! When querying, be sure to consider that Universal Time Convention (UTC) is used by the payment system. You may need to adjust your date queries to reflect UTC. For example, if you are querying for transactions that occurred on 1 December in Pacific Standard Time (PST), the date range you should indicate in your search is 1 December through 2 December to adjust for UTC. Also, remember that query results are listed in UTC.

Finding out Whether to Perform a Void or a Refund on a Particular Transaction in the Terminal-based Processing Model. Whether you need to perform a void or a refund depends on the latest transaction type. If the transaction has been settled, you must perform a refund (or return) transaction. If the transaction is in any other state, you can attempt to void the transaction. If the void fails, perform a refund. This query presumes that you know the order ID for the transaction that you need to find.

To find the latest transaction type for an order:

1. In the **Order ID** field, type the order ID for the transaction you are trying to find.
2. Remove the default values in the date range fields.
3. Click **Begin Search**.

The **Query Results** page provides the dates and times that the transaction entered each transaction type. If the last transaction type is **settled**, refund the customer's money. If the last transaction type is any other type, attempt to void the transaction immediately before it can be settled.

For details on performing the void or refund, see *Voiding Transactions*, page 40, or *Refunding a Customer's Money*, page 41.

Finding out Whether to Perform a Void or a Refund on a Particular Transaction in the Host-based, PostAuthCapture Processing Model. Whether you need to perform a void or a refund depends on the latest transaction type. If the latest transaction type is **authorized**, you must perform a refund. If you try to void the transaction and the void fails, perform a refund. This query presumes that you know the order ID for the transaction that you need to find.

To find the latest transaction type for an order:

1. In the **Order ID** field, type the order ID for the transaction you are trying to find.
2. Remove the default values in the date range fields.
3. Click **Begin Search**.

The **Query Results** page provides the dates and times that the transaction entered each transaction type. If the last transaction type is **authorized**, refund the customer's money.

For details on performing the void or refund, see *Voiding Transactions*, page 31, or *Refunding a Customer's Money*, page 32.

Displaying Visa Transactions that were Successfully Authorized Today. To query the database for these transactions, enter the following search parameters:

1. From the first menu, choose **Visa**.
2. From the second menu, choose **Authorized**.
3. From the **Status** menu, choose **success**.
4. In both the **First day** and **Last day** fields, type today's date. (Remember to adjust for UTC, if necessary.)
5. Click **Begin Search**.
The **Query Results** page displays the Visa transactions that were successfully authorized today.

Displaying the Transactions Between \$100 and \$200 that were Successfully Settled Yesterday (Terminal-based Processing Model). There are two queries involved in this scenario. The first query is to find the settled payments, and the second is to find the settled refunds.

To query the database for yesterday's settled payments, enter the following search parameters:

1. From the second menu, choose **Settled auths**.
2. From the **Status** menu, choose **success**.
3. In both the **First day** and **Last day** fields, type yesterday's date. (Remember to adjust for UTC, if necessary.)
4. In the **Amount** fields, type \$100 and \$200 respectively.
5. Click **Begin Search**.
The **Query Results** page displays the successfully settled payments between \$100 and \$200.

To query the database for yesterday's settled refunds, enter the following search parameters:

1. From the second menu, choose **Settled returns**.
2. From the **Status** menu, choose **success**.
3. In both the **First day** and **Last day** fields, type yesterday's date. (Remember to adjust for UTC, if necessary.)
4. In the **Amount** fields, type \$100 and \$200 respectively.
5. Click **Begin Search**.
The **Query Results** page displays the successfully settled refunds between \$100 and \$200.

Displaying Batched Transactions that Failed during the First Seven Days of December 1997. To query the database for these transactions, enter the following search parameters:

1. From the second menu, choose **Batched**.
2. From the **Status** menu, choose **failed**.
3. In the **First day** and **Last day** fields, type 12/1/97 and 12/7/97 respectively. (Remember to adjust for UTC, if necessary.)
4. Click **Begin Search**.
The **Query Results** page displays the batched transactions that failed during the first seven days of December.

Viewing Query Results. The result of any query is shown in two sections on the **Query Results** page. The first section contains **Summary Data** and the second section displays **Transaction Data**, as shown in Figure 22, page 56.

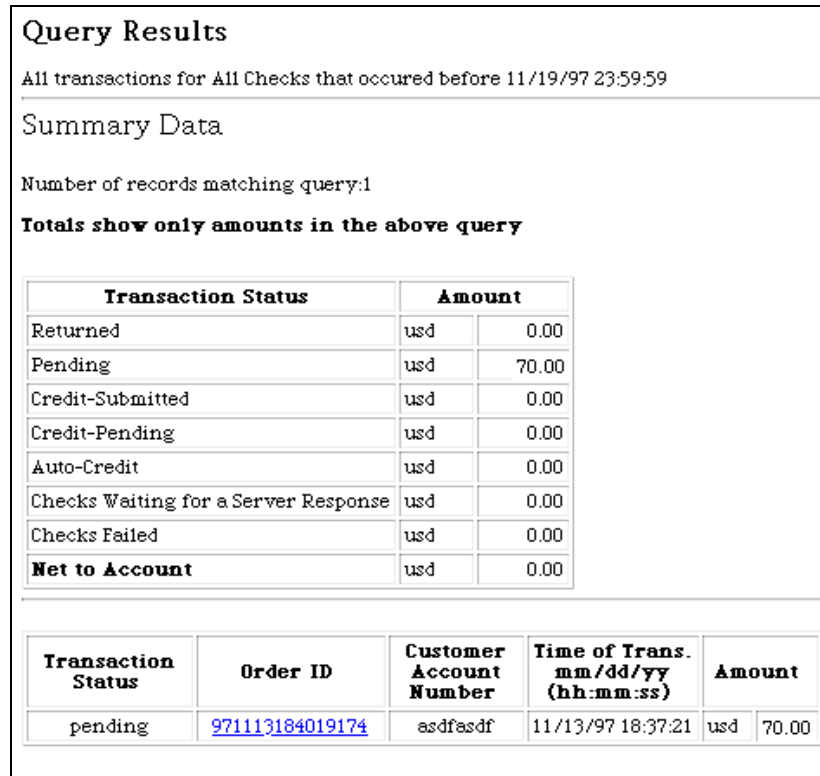


FIGURE 22: THE QUERY RESULTS PAGE

NOTE: An amount can be reflected in multiple transaction states. For example, if you authorize a transaction amount of \$10.00, the summary shows an auth for \$10.00 and a capture for \$10.00. The money has been authorized and the transaction is in the capture state.

Summary Data: This data is shown in a table where each row contains a transaction state and the total amount of money in that state. (If you searched by one transaction type, then only that type is displayed.) The last row contains the **Net to Account** value, which includes settled transactions only (unless you searched by only one transaction type).

Transaction Data: This data is shown in a table where each row contains the transaction type, origin, status, order ID, time of transaction (UTC), partial credit card number, and amount. Table 8 provides a description of each field that is displayed.

TABLE 8: QUERY RESULTS FIELD DESCRIPTIONS

FIELD	DESCRIPTION
Transaction Type	The type of transaction such as authorization, post authorization (or capture), batch, return, and so on.
Origin	The party that initiated the transaction. In this version, all transactions are initiated by the merchant through either the storefront or the direct card input page of the administrative interface. All transactions will display an origin of m for merchant.
Status	The status of the transaction at the time of the query such as successful (s), failed (f), or pending (p).
Order ID	The individual ID number assigned to the order.
Time of Transaction	The date and time of day of the transaction. The time of the transaction is posted as Universal Time Convention (UTC). UTC is the same as GMT (Greenwich Mean Time).
Partial Card Number	The first two and last four digits of the credit card number associated with the transaction. For information on finding the full credit card number, see <i>Finding a Credit Card Number</i> , page 60.
Amount	The amount of the transaction.

To view the transaction history for any order, click its order ID. The resulting **Order Details** page (Figure 23, page 58) displays the transaction history for that order, including each transaction type (such as auth, marked for inclusion in a batch, and settled) that the order has been through and the date and time that the transaction entered each state.

Using the Order Details Page

The **Order Details** page (Figure 23) is displayed when you click an order ID on the **Query Results** page or the **Order Status Query Results** page. Depending on your processing model, you can perform various functions from this page. For example, the option to mark an order to be returned to the customer is available if you are using the terminal-based processing model.

Order Detail

Order: e5

[Click here to see all records for this order](#)

Order-ID: e5

Transaction Origin: merchant
 Authorization Code: 111475
 Address Verification Code: [N](#)
 Card Type: MasterCard
 Card Number: 50*0009
 Card Expiration: 12/99

Transaction Type	Status	Amount	Merchant Trans. ID	Time of Trans. mm/dd/yy (hh:mm:ss)	Log Time (UTC)	Reference Code	Action Code
auth	success	usd 12.00	320164348	11/17/1997 (13:27:22)	19971117182722.000	---	000
marked	success	usd 12.00	320164349	11/17/1997 (13:27:23)	19971117182723.000	---	000
settled	success	usd 12.00	320164361	11/17/1997 (13:38:46)	19971117183846.000	---	000

Mark for Return: Enter the amount:

Execute card query: Enter your password:

Presented options depend on processing model and last transaction state

FIGURE 23: THE ORDER DETAIL PAGE

Table 9 describes each of the fields that is displayed on the **Order Detail** page.

TABLE 9: ORDER DETAIL FIELD DESCRIPTIONS

FIELD	DESCRIPTION
Transaction Type	The type of transaction such as authorization, post authorization (or capture), batch, return, and so on.
Status	The status of the communication between components at CyberCash at the time of the query, such as successful, failed, or pending.
Amount	The amount of the transaction.
Merchant Transaction ID	A unique number assigned to the transaction by CyberCash.
Time of Transaction	The date and time of day of the transaction. The time of the transaction is posted as UTC. UTC is the same as GMT (Greenwich Mean Time).
Log Time	Time of day (UTC) that the transaction was logged.
Reference Code	Not used in this version.
Action Code	Reflects the processor's response to the transaction. For a complete list of codes and their definitions, see <i>Action Codes</i> , page 81.

Finding a Credit Card Number. Throughout the administrative interface where a credit card number is displayed, only the first two and last four digits of the card number are available for the consumer's protection. If you need the full credit card number that is associated with a particular order, you can obtain it from the **Order Details** page.

To get the full credit card number:

1. In the field provided at the bottom of the **Order Detail** page, type your password. This password is set during merchant registration (amps.cybercash.com).
2. Click **Card Query**.
The resulting page shows the details of the specified card, including the full credit card number.

Performing Queries Using Specific Information

The administrative interface allows you to perform queries using specific information. This section describes these types of queries.

Performing a Query Using a Transaction ID

You can query the database for detailed information by using a transaction ID.

To query the database using a transaction ID:

1. From the **Merchant Administration Server** page, click **Query by Transaction**.
The **Query by Transaction ID** page (Figure 24, page 61) is displayed.

Credit Merchant

Query by Transaction ID

Search for Transaction ID :

Begin Search

FIGURE 24: THE QUERY BY TRANSACTION ID PAGE

2. Type the transaction ID you want to search for in the appropriate field, and then click **Begin Search**.
 The completed search yields the **Query Results** page (Figure 25). This page displays a summary of the transactions that matched the ID you specified.

Query Results							
Order: 17693.7270507812							
Order-ID: 17693.7270507812							
Transaction Origin: merchant Authorization Code: 100700 Address Verification Code: N Card Type: Visa Card Number: 44*1111 Card Expiration: 12/99							
Transaction Type	Status	Amount	Merchant Trans. ID	Time of Trans. mm/dd/yy (hh:mm:ss)	Log Time (UTC)	Reference Code	Action Code
auth	success	usd 34.95	21206173	01/27/1998 (16:50:54)	19980127215054.000	---	000
marked	success	usd 34.95	21206174	01/27/1998 (16:50:56)	19980127215056.000	---	000

FIGURE 25: THE QUERY RESULTS PAGE

Performing a Query Using a Credit Card Number

You can query the database for detailed information by using a specific credit card number.

To query the database using a credit card number:

1. From the **Merchant Administration Server** page, click **Query by Credit Card number**.

The **Query by Card number** page (Figure 26) is displayed.

Query by Card number

Search for:

Blinded Card number: -

Enter only the **first two** digits and the **last four** digits of the card number

Look for: With a status of:

Maximum number of transactions to display:

You may leave this field blank to get *all* transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

FIGURE 26: QUERY BY CARD NUMBER PAGE

2. Type the first two and the last four digits of the credit card number you want to search for.
3. Select the type of transaction and the transaction status you want to search for.
4. Type the maximum number of transactions you want to display.
5. Type the first and last dates that include the transactions you want to display.
6. Type the optional search parameter information, if you choose to enter this data.
7. Click **Begin Search**.

The completed search yields the **Query Results** page. This page displays a summary of the transactions that matched the credit card number you specified. You can view more details about an order by clicking on an individual order ID.

Frequently Asked Questions

In performing administrative tasks, you may have questions about the administrative interface and its functions. Some of these frequently asked questions and their answers are listed below. For additional FAQs, access www.cybercash.com/indexroot.

1. *Can I void a return?*

Yes, a return can be voided. For any transaction to be voided, it must not have been submitted for settlement yet. Follow the procedures for voiding transactions within your processing model.

2. *Can I do a second PostAuth against the same authorization?*

No, a second PostAuth cannot be done against the same authorization. In other words, one authorization cannot be captured twice. If the original authorization was already captured, you should initiate a new transaction.

3. *I've done an authorization for one amount, and I need to settle for a larger amount. Can I do this?*

Follow the procedures of your processing model to get the original authorization through settlement. Initiate a new transaction (using the **Direct Card Input** feature) for the balance of the larger amount and follow the procedures of your processing model to get the new transaction from authorization through settlement.

4. *How do I find out about the content (name, address, what was purchased, and so on) of the consumer's order through the administrative interface?*

The administrative interface does not provide a way for you to obtain this information. Typically, your storefront should, store the order information, such as the items that were bought, the shipping address, and any of the other order-related information. In addition, you may want to implement a database of your own to store any additional information about transactions. In doing so, be sure to implement a secure and private system for the protection of your consumers. CyberCash is not responsible for any data or data tracking systems that you implement on your own.

5. *How soon after I submit a batch will I get my money?*

Once you submit a batch, the CyberCash payment system sends it to the processor for settlement the same day. The time it takes to settle transactions depends on your processor. Contact your bank to find out how soon your account will be credited.

6. *How do I query for a range of order IDs?*

The administrative interface does not support queries for a range of order IDs. You can, however, query for a date range, for an amount range, and by other criteria that may result in the same range of order IDs being displayed.

7. *What does the **Retry** function do (batches and orders)?*

When a transaction or batch submission has failed or is pending, (for example because of a network communication problem), you should retry it.

8. *How do I add a new merchant?*

To add a new merchant, you must go to the URL for merchant registration and register each new merchant individually.

Managing PayNow Transactions

This chapter provides details on performing various administrative tasks related to electronic check transactions. An overview of check processing is presented first.

NOTE: If FUSAP is your processor and you accept checks through FUSAP's ECP feature, see *Managing Electronic Check Processing (ECP) Transactions*, page 46.

Understanding Check Processing

In the physical world, a consumer may pay for goods or services by check. The company or merchant who is being paid deposits the check into a bank account. The bank uses a system called ACH (Automated Clearing House) that is responsible for electronically settling its accounts. In other words, the ACH attempts to retrieve the amount of the check from the payor's bank account and deposit the money into the payee's bank account. The merchant is credited and the consumer is debited for the amount of the check payment.

CyberCash's PayNow service works similarly. A customer pays for goods or services by electronic check at your Web site using a secure form to enter his or her checking account information. Your customized Merchant Connection Kit (MCK) securely passes the necessary information to the payment system at CyberCash. During specific times of day, called *ACH windows*, electronic check transactions are sent from CyberCash to the ACH. If the consumer's bank account has the funds available, the money will be transferred from the consumer's bank account to your bank account.

During the processing of a check through the ACH system, the check goes through several transaction states. Table 10 lists each of the possible transaction states and their descriptions. The administrative interface allows you to query by transaction state and also displays the transaction states of transactions in other types of queries.

TABLE 10: CHECK TRANSACTION STATES

TRANSACTION STATE	DESCRIPTION
Server response awaited	The transaction is moving between component parts of the payment system at CyberCash. One component is waiting for a response from another component.
Pending	The transaction has been queued to the ACH system for processing.
Credit-pending	The debit from the consumer's bank account has been submitted to the payor's account. The credit to the merchant's account has not been posted.
Credit-submitted	The credit to the merchant's account has been submitted to the ACH system for processing.
Auto-credit	The debit to the consumer's account has been made through the merchant's bank.

TABLE 10: CHECK TRANSACTION STATES

TRANSACTION STATE	DESCRIPTION
Returned	The check payment was returned by the ACH system (not credited to the merchant's account) because of incorrect information such as bad account number, insufficient funds, or other similar reason.
Failed	The transaction has failed.

Use the administrative interface to perform tasks such as finding out the amount of daily deposits to your account or finding out the state of a particular transaction.

NOTE: There is no mechanism for performing electronic check refunds to the consumer.

Looking up Transaction History by Order ID

If you want to see the history of an order, search the database by order ID. You will be able to see when the check amount was deposited to your bank account.

To search by order ID:

1. On the **Merchant Administration Server** page, click **Search for Order ID**. The **Merchant Order ID Search** page (Figure 27) is displayed.



Merchant Order ID Search

This query will allow you to search for an Order ID.
It will show you all of the actions performed on the Order ID.

Order ID:

FIGURE 27: THE MERCHANT ORDER ID SEARCH PAGE

2. In the field provided, type the order ID for the transaction you want to view, and click **Order ID Search**.
The **Check Details** page (Figure 28, page 69) is displayed with the details of the check transaction whose order ID you specified in the query.

Check Details For Order ID: 971113184019174

Customer Account Number: asdfasdf
Amount: usd 0.07
Last Transaction: pending
Status: success
Time of Last Transaction: 11/13/97 18:37:21
Return Reason: ---

Transaction History:

Transaction Status	Time of Trans. mm/dd/yy (hh:mm:ss)
pending	11/13/97 18:37:21

[Return to test-check \(Check Merchant\) Home Page](#)

FIGURE 28: THE CHECK DETAILS PAGE

Table 11 provides a description of the fields used in displaying the transaction history.

TABLE 11: CHECK DETAILS FIELD DESCRIPTIONS

FIELD	DESCRIPTION
Transaction Status	The status of the transaction at time of query.
Time of Transaction	The date and time of the day of transaction. The time of the transaction is posted as Universal Time Convention (UTC). UTC is the same as GMT (Greenwich Mean Time).

Viewing the Current Day's Activity

On any given day, you may want to see the amount of transactions in each transaction state. **Today's Activity Report** provides a summary and details of the transactions in each state.

To view the current day's activity report:

1. On the **Merchant Administration Server** page, click **Today's Activity**. The **Today's Activity Report** page (Figure 29) is displayed. Remember that the report reflects transactions as of time of the query in Universal Time Convention (UTC).

Today's Activity Report				
as of time 02/09/98				
Summary				
Checks received	0	Total Amount	usd	0.00
Checks Returned	0	Total Amount	usd	0.00
Checks Credit Pending	0	Total Amount	usd	0.00
Checks Pending	0	Total Amount	usd	0.00
Checks Credited	0	Total Amount	usd	0.00
Checks Failed	0	Total Amount	usd	0.00
Checks Waiting for a Server Response	0	Total Amount	usd	0.00
Details				
Checks Received				

FIGURE 29: TODAY'S ACTIVITY REPORT

The page displays a separate table for each transaction state, such as checks received, checks returned, checks pending, and so on. Each table contains the order ID, amount, customer account number, status, and last update fields, enabling you to see a detailed update on all transactions for the day. Table 12 describes the fields.

TABLE 12: TODAY'S ACTIVITY REPORT FIELD DESCRIPTIONS

FIELD	DESCRIPTION
Order ID	The individual ID number assigned to the order.
Amount	The amount of the check paid.
Customer Account Number	The account number, assigned to the customer by the merchant, to which check has been paid.
Status	The status of the transaction at time of query.
Last transaction	The last transaction that was performed on the check.

Querying the Database

The administrative interface provides a general querying capability. You can use the **Transaction Query** page to search for orders using several different search criteria. The **Transaction Query** page enables you to search by transaction state (such as pending, credit-submitted, or returned checks) to find out which checks are in a particular state, a certain range of dates to see which transactions were processed during those days, a certain amount range to see how many transactions were received by your store for a particular dollar amount, a specific customer account to see all the transactions from that particular customer, or any combination of those search parameters.

!!! When querying, be sure to consider that UTC is used by the payment system. You may need to adjust your date queries to reflect UTC. For example, if you are querying for transactions that occurred on 1 December in Pacific Standard Time (PST), the date range you should indicate in your search is 1 December through 2 December to adjust for UTC. Also, remember that query results are listed in UTC.

Sample Searches

This section provides a few sample searches and the data you would enter on the **Transaction Query** page (Figure 30) to return the results you want.

Transaction Query

Search for:

Maximum number of transactions to display:

You may leave this field blank to get all transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

Date range:

You may leave either or both dates blank for open ended searches

First day: mm/dd/yy/yyyy

Last day: mm/dd/yy/yyyy

FIGURE 30: THE TRANSACTION QUERY PAGE

Displaying all Deposits that were Made to my Bank Account During November 1997. To query the database for these transactions, enter the following search parameters:

1. From the first menu, choose **Credit-submitted**.
2. In the **First day** and **Last day** fields, type 11/1/97 and 11/30/97 respectively. (Remember to adjust for UTC, if necessary.)
3. Click **Begin Search**.

The **Query Results** page displays all the deposits made to your bank account during November 1997.

NOTE: This particular query could help you reconcile your PayNow transactions against your monthly bank statement.

Displaying the Last Ten Transactions that were Made by John Doe. To query the database for these transactions, enter the following search parameters:

1. In the **Maximum number of transactions to display field**, type 10.
2. Delete the values in the **First day** and **Last day** fields.
3. In the **Customer Account Number** field, type the account number of John Doe. (The administrative interface does not provide a way for you to find account numbers by searching on a person's name. You should have this information available to you from another source, such as your own customer database.)
4. Click **Begin Search**.
The **Query Results** page displays the last ten transactions for John Doe's account.

Displaying all the Transactions, Regardless of their States, for the First Seven Days of December 1997. To query the database for these transactions, enter the following search parameters:

1. In the **First day** and **Last day** fields, type 12/1/97 and 12/7/97 respectively. (Remember to adjust for UTC, if necessary.)
2. Click **Begin Search**.
The **Query Results** page displays all the transactions for the seven-day period.

Viewing Query Results

The result of any query is shown in two sections on the **Query Results** page. The first section contains **Summary Data** and the second section displays **Detailed Data**, as shown in Figure 31, page 74.

Transaction Status		Amount	
Returned	usd	0.00	
Pending	usd	70.00	
Credit-Submitted	usd	0.00	
Credit-Pending	usd	0.00	
Auto-Credit	usd	0.00	
Checks Waiting for a Server Response	usd	0.00	
Checks Failed	usd	0.00	
Net to Account	usd	0.00	

Transaction Status	Order ID	Customer Account Number	Time of Trans. mm/dd/yy (hh:mm:ss)	Amount	
pending	971113184019174	asdfasdf	11/13/97 18:37:21	usd	70.00

END OF QUERY RESULTS

FIGURE 31: THE QUERY RESULTS PAGE

Summary Data. This data is shown in a table where each row contains a transaction state and the total amount of money in that state. The last row contains the **Net to Account** value, which is defined as shown below.

$$\text{Net to Account} = (\text{Total credit submitted} + \text{Total auto-credit}) - (\text{Total returned})$$

Detailed Data. This data is shown in a table where each row contains the transaction status, order ID, customer account name, time of transaction, and amount. Table 13, page 75, provides a description of each field that is displayed.

TABLE 13: CHECK DETAILS FIELD DESCRIPTIONS

FIELD	DESCRIPTION
Transaction Status	The status of the transaction at time of query.
Order ID	The individual ID number assigned to the order.
Customer Account Number	The account number, assigned to the customer by the merchant, to which check has been paid.
Time of Transaction	The date and time of the day of transaction. The time of the transaction is posted as UTC. UTC is the same as GMT (Greenwich Mean Time).
Amount	The amount of the check paid.

To view the transaction history for any order, click its order ID. The resulting **Check Details** page (Figure 32) displays the transaction history for that order, including each transaction state (such as pending, credit-submitted, and so on) the order has been through and the date and time that the order entered each transaction state.

Check Details For Order ID: 971113184019174

Customer Account Number: asdfasdf
Amount: usd 0.07
Last Transaction: pending
Status: success
Time of Last Transaction: 11/13/97 18:37:21
Return Reason: ---

Transaction History:

Transaction Status	Time of Trans. mm/dd/yy (hh:mm:ss)
pending	11/13/97 18:37:21

[Return to test-check \(Check Merchant\) Home Page](#)

FIGURE 32: THE CHECK DETAILS PAGE

Viewing the Current Status of Orders

You may want to see the transaction status of all orders for any given day or range of days. To find out the status of multiple orders at once, without having to look them up individually, use the **Review Order Status** option. The **Order Status Query Results** page shows you the current transaction state for each order within your specified range of dates, and it displays the time at which the order entered that transaction state.

To review the status of orders for a day or range of days:

1. On the **Merchant Administration Server** page, click **Review Order Status**.

The **Order Status Query** page (Figure 33) is displayed.

Order Status Query

This query will allow you to review Order Status. It will show you the last transaction successfully performed on the Order. Review all order records within the date range:

Review all order records within the date range:

You may leave either or both dates blank for open ended searches

First day: mm/dd/yy/yyyy

Last day: mm/dd/yy/yyyy

Maximum number of transactions to display:

You may leave this field blank to get all transactions. In this case the amount of data returned sometimes may be much more than you or your browser can handle.

FIGURE 33: THE ORDER STATUS QUERY PAGE

2. Type the date range (start and end dates) of the orders you want to review. If you are querying for a single day, type that date in both the **First day** and **Last day** fields.
3. Type the maximum number of orders you want to display.
4. Click **Query Status**.

The **Order Status Query Results** page (Figure 34, page 77) is displayed.

Order Status Query Results						
All orders						
Summary Data						
Number of records displayed: 7						
Order ID	Customer Account Number	Transaction Status	Time of Trans. mm/dd/yy (hh:mm:ss)	Export State	Last Export Time	Flat File
971110215706944	a1324124a	pending	11/10/97 21:54:58	0	---	---
971110215806947	asdf	pending	11/10/97 21:55:36	0	---	---
971112163915001	asdf	pending	11/12/97 17:05:02	0	---	---
971113174717974	asdf	pending	11/13/97 17:44:49	0	---	---
971113174917986	asdf	pending	11/13/97 17:47:06	0	---	---
971113175818018	asdf	pending	11/13/97 17:56:07	0	---	---
971113184019174	asdfsadf	pending	11/13/97 18:37:21	0	---	---

FIGURE 34: THE ORDER STATUS QUERY RESULTS PAGE

To view the transaction history for any order, click its order ID. The resulting **Check Details** page (Figure 32, page 75) displays the transaction history for that order, including each transaction state (such as pending, credit-submitted, and so on) the order has been through and the date and time that the order entered each transaction state.

Each order that is displayed as a result of the query is described by the fields shown in Table 14.

TABLE 14: ORDER STATUS QUERY RESULTS FIELD DESCRIPTIONS

FIELD	DESCRIPTION
Order ID	The individual ID number assigned to the order.
Customer Account Number	The account number, assigned to the customer by the merchant, to which check has been paid.
Transaction Status	The status of the transaction at time of query.
Time of Transaction	The date and time of the day of transaction. The time of the transaction is posted as UTC. UTC is the same as GMT.
Export State	This field is not used in the current version.
Last Export Time	This field is not used in the current version.
Flat File	This field is not used in the current version.

Appendix

Action Codes

Table 15, page 82, lists the action codes that can be displayed on the **Order Detail** page after you perform a query on an order ID. For more information about the **Order Detail** page, see *Using the Order Details Page*, page 58.

TABLE 15: ACTION CODES

ACTION CODE	SPECIFIC PROCESSOR (IF APPLICABLE)	RESPONSE CODE	MESSAGES TO MERCHANT FROM GATEWAY
000	N/A	success	Authorization approved. Capture successful. Void transaction successful. Return/credit successful.
007	N/A	success	Auth approved and captured. Void transaction successful. Return/credit successful.
100	N/A	failure-bad-money	Declined.
101	N/A	failure-bad-money	Expired card.
103	Ckfree	failure-hard	Address verify error.
105	N/A	failure-bad-money	Declined, bad card; call card issuer.
107	N/A	failure-bad-money	Declined, bad card; call card issuer.
108	N/A	failure-q-or-discard	Bank/processor data source down.
109	N/A	failure-hard	Bank reports merchant configuration error. Please contact CyberCash to resolve this problem.

TABLE 15: ACTION CODES (CONT.)

ACTION CODE	SPECIFIC PROCESSOR (IF APPLICABLE)	RESPONSE CODE	MESSAGES TO MERCHANT FROM GATEWAY
110	N/A	failure-hard	Invalid amount. Please contact CyberCash to resolve this problem.
111	Wells NOVA Nabanco	failure-hard	Bank/processor error.
114	N/A	failure-hard	Transaction not in batch.
115	AMEX	failure-hard	Service not permitted. Please contact CyberCash to resolve this problem.
115	N/A	failure-hard	Format error. Please contact CyberCash to resolve this problem.
120	N/A	failure-hard	Bank reports merchant configuration error. Please contact CyberCash to resolve this problem.
122	AMEX	failure-hard	Declined. Invalid security code (CID).
125	GPS-StL (formerly MAPP)	failure-hard	Missing authorization code.

TABLE 15: ACTION CODES (CONT.)

ACTION CODE	SPECIFIC PROCESSOR (IF APPLICABLE)	RESPONSE CODE	MESSAGES TO MERCHANT FROM GATEWAY
125	AMEX	failure-hard	Declined; invalid effective date.
181	N/A	failure-hard	Format error. Please contact CyberCash to resolve this problem.
182	AMEX	failure-q-or-discard	Host system unavailable or busy.
200	N/A	failure-bad-money	Declined, bad card; call card issuer.
203	N/A	failure-hard	Bank reports invalid bank ID. Please contact CyberCash to resolve this problem.
902	N/A	failure-hard	Bank reports invalid transaction. Please contact CyberCash to resolve this problem.
904	N/A	failure-hard	Format error. Please contact CyberCash to resolve this problem.
909	N/A	failure-hard	Bank reports application problem. Please contact CyberCash to resolve this problem.

TABLE 15: ACTION CODES (CONT.)

ACTION CODE	SPECIFIC PROCESSOR (IF APPLICABLE)	RESPONSE CODE	MESSAGES TO MERCHANT FROM GATEWAY
912	AMEX	failure-q-or-discard	Host system unavailable or busy.
other	N/A	failure-hard	Unknown bank response.

Glossary

A

ACH (Automated Clearing House)

The process by which member financial institutions clear electronic debits and credits. *See also* banking network.

ACH transaction

An electronic debit or credit to or from a merchant's bank account as authorized by the Merchant Agreement; or an electronic debit or credit to a consumer's bank account as authorized by an agreement between the merchant and the consumer. A debit transaction represents a sale of goods or services to the consumer.

agreement

A contract set forth to explain terms of agreement between a company and its customers.

Automated Clearing House

See ACH.

B

banking network

The banking network is the Automated Clearing House (ACH). *See also* ACH.

browser

A client to a Web server that allows the user to read hypertext documents on the World Wide Web. Internet Explorer and Netscape Navigator are examples of popular Web browsers.

C

CashRegister

CyberCash's virtual cash register, which allows you to perform the same tasks over the Internet that you would with a physical cash register in a physical store.

cash register

A machine used in business to record the amount of money received in a sale. It also performs many other business functions, such as totalling receipts, counting specific operations, and keeping track of records for later use.

CCID (CyberCash Merchant ID)

See merchant ID.

consumer

One who purchases goods and services.

E

electronic check transaction

An online event between two bank accounts that changes the financial position of one or both parties.

G

Gateway

The CyberCash Gateway provides an interface to the banking systems and stores information.

H

hard goods

Tangible products that are distributed through the postal or other delivery service. *Contrast* soft goods.

home page

The first page displayed when a Web site is accessed. Usually contains introductory text and a site directory.

I

Internet merchant

A business owner who sells products or services over the Internet.

M

merchant

The store owner. The person responsible for all storefront and business tasks.

merchant ID

A unique set of numbers or letters and numbers that is associated with a specific merchant. The merchant ID is typically tied to a system database record that contains all merchant specific information regarding that particular merchant.

Merchant Service Agreement

A contract that outlines the terms between CyberCash and the merchants who use CyberCash services.

message

Information sent and received that communicates various parts of a transaction.

N

network

The setup of hardware and software that allows multiple computers to connect and communicate with each other electronically or through the use of fiber optics.

P

password

A sequence of characters paired with a user name that assures only the user with that password can log on with the particular user name associated with it. Passwords should be difficult to guess and kept secret by the user.

payment

Giving compensation or paying for a product or service.

payment service

Services that allow merchants to accept different types of payment. For example, the CyberCash credit card payment system and the check service allow merchants to accept credit card and check payments respectively.

payment transaction

An exchange of funds for products or services.

purchase

To provide payment to receive a product or service.

Q**query**

An inquiry to a database about a transaction or a group of transactions.

queue

To line up or arrange in order to wait for something. For example, a transaction is queued to the banking network for processing.

S**server**

A computer or software program that provides services such as email and World Wide Web access to clients on a network.

shopping

Looking for or inspecting goods and services, usually within a store.

soft goods

Products that can be distributed electronically, such as a text file or a graphic. *Contrast* hard goods.

status

A transaction's position, condition, or state at the CashRegister or the Gateway. A transaction's status might be pending, failed, or successful.

store database

A database that contains necessary tables for managing all store elements.

T**transaction**

An event between two parties that changes the financial position of or the quantity of data for one or both parties.

transaction flow

The process of completing a transaction.

U

Universal Time Convention (UTC)

A time zone similar to GMT (Greenwich Mean Time), but is not adjusted for Daylight Savings Time.

URL (Uniform Resource Locator)

A method or address that identifies a document or resource on the Internet, for example, a Web page address.

W

Web server

A computer or software program that provides services to clients over a network upon request.

Web site

A group of Web pages that are linked to a home page and are controlled by an individual or an organization.

Index

A

about

- check processing 65–68
- credit card processing 11–20
- host-based AuthCapture processing
 - flow 14–15
- host-based, PostAuthCapture processing
 - flow 16–18
- terminal-based processing flow 18–20
- transaction management 5–10

accepting ECP payments 46–47

accessing the administrative interface 10

action codes 81–85

activity, viewing 70–71

administrative interface, accessing 10

assembling a batch 39, 46

assembling and submitting a batch file for settlement (terminal-based) 39–40

audience, document 1

AuthCapture

- processing flow (host-based),
 - about 14–15

authorization, capturing

- host-based, PostAuthCapture 29–30

terminal-based 37–39

authorizing a payment

- host-based, AuthCapture 22–23
- host-based, PostAuthCapture 28–29
- terminal-based 36–37

B

batch file, assembling and submitting (terminal-based) 39–40

batch terminology, understanding 34–35

batches

- assembly 39, 46
- pending 39
- reviewing (terminal-based) 44–46
- submitting 39, 46

before you begin 2

C

capturing authorization

- host-based, PostAuthCapture 29–30
- terminal-based 37–39

check processing. *See* PayNow transactions

- check transactions. *See* PayNow transactions 65
- codes, action 81–85
- contents
 - document 3
 - documentation set 3
- copyright information for document ii
- credit card numbers, queries 62
- credit card processing. *See* credit card transactions
- credit card transactions
 - about processing models 11–20
 - accepting ECP payments 46–47
 - assembling and submitting a batch file for settlement (terminal-based) 39–40
 - authorizing a payment (host-based, AuthCapture) 22–23
 - authorizing a payment (host-based, PostAuthCapture) 28–29
 - authorizing a payment (terminal-based) 36–37
 - capturing the authorization (host-based, PostAuthCapture) 29–30
 - capturing the authorization (terminal-based) 37–39
 - card number, finding 60
 - current order status, viewing 49–51
 - database, querying. *See* querying the database, credit
 - ECP payments
 - accepting 46–47
 - managing 46–47
 - refunding 48
 - electronic check processing (ECP), managing 46–47
 - FAQs 63–64
 - finding card number 60
 - frequently asked questions (FAQs) 63–64
 - getting payments from authorization through settlement (host-based, AuthCapture) 21–23
 - getting payments from authorization through settlement (host-based, PostAuthCapture) 27–30
- credit card transactions, cont.*
 - getting payments from authorization through settlement (terminal-based) 35–40
 - host-based, AuthCapture processing flow 14–15
 - host-based, PostAuthCapture processing flow 16–18
 - managing in the host-based, AuthCapture processing environment 21–27
 - managing in the host-based, PostAuthCapture processing environment 27–34
 - managing in the terminal-based processing environment 34–46
 - Order Details page, using 58–60
 - overview of processing models 12
 - processing models, understanding 11–20
 - processor models 13
 - querying the database. *See* querying the database, credit
 - refunding ECP payments 48
 - refunding money (host-based, AuthCapture) 25–27
 - refunding money (host-based, PostAuthCapture) 32–34
 - refunding money (terminal-based) 41–44
 - reviewing batches (terminal-based) 44–46
 - specific information queries 60–62
 - terminal-based processing flow 18–20
 - understanding processing models 11–20
 - viewing current status of orders 49–51
 - voiding (host-based, AuthCapture) 23–24
 - voiding (host-based, PostAuthCapture) 31
 - voiding (terminal-based) 40
- current status of orders
 - viewing PayNow 76–78
- current status of orders, viewing (credit) 49–51

D

date of publication, document ii
document
 audience 1
 copyright information ii
 date of publication ii
 Glossary 87–91
 Introduction 1–3
 List of Tables v
 purpose 1
 style conventions 2
 Table of Contents iii
 what’s in 3
documentation set, contents 3

E

ECP transactions. *See* electronic check transactions
electronic check processing
 accepting payments 46–47
 refunding ECP payments 48
electronic check transactions
 managing 46–47

F

FAQs, credit 63–64
finding credit card number 60
frequently asked questions. *See* FAQs, credit

G

getting
 payments from authorization through settlement (host-based, AuthCapture) 21–27
 payments from authorization through settlement (host-based, PostAuthCapture) 27–30
 payments from authorization through settlement (terminal-based) 35–40
Glossary 87–91

H

host-based 16–18
host-based, AuthCapture
 authorizing a payment 22–23
 getting payments from authorization through settlement 21–27
 managing transactions in 21–27
 processing flow, about 14–15
 refunding money 25–27
 voiding a transaction 23–24
host-based, PostAuthCapture
 authorizing a payment 28–29
 capturing authorization 29–30
 getting payments from authorization through settlement 27–30
 managing transactions in 27–34
 refunding money 32–34
 voiding a transaction 31

I

interface, administrative. *See* administrative interface, accessing
Introduction, document 1–3

L

List of Tables v
looking up transaction history by order ID, PayNow 68–69

M

managing
 credit transactions in the host-based, AuthCapture processing environment 21–27
 credit transactions in the host-based, PostAuthCapture processing environment 27–34
 credit transactions in the terminal-based processing environment 34–46
ECP payments 48
ECP transactions 46–47
electronic check transactions 46–47

managing, cont.

PayNow transactions 65–78

models, processor 13

money, refunding

host-based, AuthCapture 25–27

host-based, PostAuthCapture 32–34

terminal-based 41–44

O

Order details page, using 58–60

P

payment, authorizing

host-based, AuthCapture 22–23

host-based, PostAuthCapture 28–29

terminal-based 36–37

PayNow transactions

about check processing 65–68

check processing, understanding 65–68

check transaction states 66

current day's activity, viewing 70–71

current status of orders, viewing 76–78

database, querying. *See* querying the database, PayNow

looking up transaction history by order ID 68–69

managing 65–78

order ID, looking up transaction history by 68–69

querying the database. *See* querying the database, PayNow

states 66

understanding check processing 65–68

viewing current days activity 70–71

viewing current status of orders 76–78

pending batches 39

pending transactions 39

PostAuthCapture

processing flow, about 16–18

prerequisites 2

processor models 13

publication date of document ii

purpose, document 1

Q

queries

by credit card number 62

by transaction ID 60–61

credit, specific information 60–62

querying the database, credit

sample searches 52–60

querying the database, PayNow

sample searches 71–73

viewing results 73–75

R

refunding money

ECP payments 48

host-based, AuthCapture 25–27

host-based, PostAuthCapture 32–34

terminal-based 41–44

retry option

batches 39

transactions 39

reviewing batches, terminal-based 44–46

S

specific information queries 60–62

style conventions used in document 2

submitting a batch 39–46

T

Table of Contents iii

terminal-based

assembling and submitting a batch file for settlement 39–40

authorizing a payment 36–37

capturing authorization 37–39

getting payments from authorization through settlement 35–40

processing environment, managing transactions in 34–46

processing flow, about 18–20

refunding money 41–44

reviewing batches 44–46

voiding a transaction 40–41

- terminology
 - batch 34–35
 - transaction management 5–8
- transaction IDs, queries 60–61
- transaction management
 - about 5–10
 - accessing the administrative interface 10
 - getting started 5–10
 - terminology 5–8
- transactions
 - PayNow. *See* PayNow transactions 65
- transactions, pending 39
- transactions, voiding
 - host-based, AuthCapture 23–24
 - host-based, PostAuthCapture 31
 - terminal-based 40–41

U

- understanding
 - batch terminology 34–35
 - check processing 65–68
 - credit card processing 11–20
 - host-based, AuthCapture processing
 - flow 14–15
 - host-based, PostAuthCapture processing
 - flow 16–18
 - terminal-based processing flow 18–20
 - transaction management 5–8
- using the Order Details page, credit 58–60

V

- viewing
 - current day's activity, PayNow 70–71
 - current status of orders, credit 49–51
 - current status of orders, PayNow 76–78
 - query results, PayNow 73–75
 - today's activity 70–71
- voiding a transaction
 - host-based, AuthCapture 23–24
 - host-based, PostAuthCapture 31
 - terminal-based 40–41

W

- what's in the document 3
- what's in this documentation set 3

