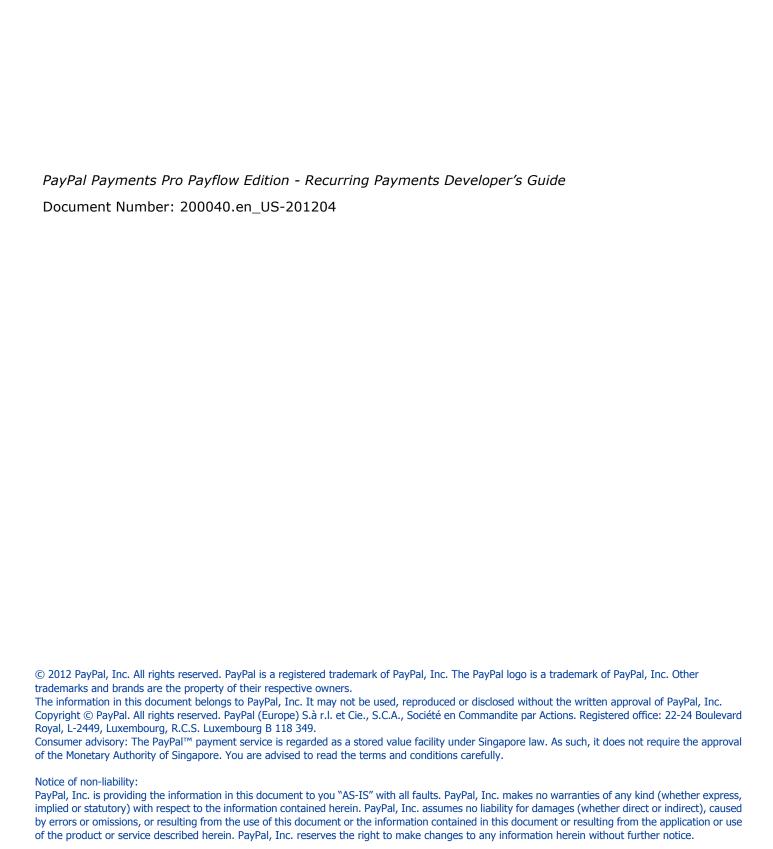
PayPal^m

PayPal Payments Pro Payflow Edition -Recurring Payments Developer's Guide

Last updated: April 2012



Contents

Preface	
	Audience
	Where To Go For More Information
	Revision History
Chapter	1 Recurring Payments Overview
	About the Payflow Recurring Payment Services
	Managing Recurring Payments Profiles Through PayPal
	Limitations
	Recurring Payments Terms
Chapter	2 Creating Recurring Payments Profiles
	Preparing to Create Recurring Payments Profiles
	Creating Profiles Through Your PayPal Account
	Creating Recurring Payments Profiles Programmatically
	Options for Creating a Recurring Payments Profile Programmatically
	Specifying the Regular Payment Period
	Including an Optional Trial Payment Period
	Specifying an Initial Payment
	Setting the Number of Failed Payments
	Billing the Outstanding Amount
	Example: Creating a Recurring Payments Profile For Billing a Credit Card
	Example: Creating a Recurring Payments Profile For Billing a PayPal Account 18
Chapter	3 Deactivating and Reactivating Recurring Payments Profiles . 21
	Deactivating a Profile Through Your PayPal Account
	Reactivating a Profile Through Your PayPal Account
	Deactivating a Profile Programmatically
	Reactivating a Profile Programmatically
	Example of Deactivating a Profile

	Example of Reactivating a Profile
Chapter	4 Canceling Recurring Payments Profiles
	Canceling Recurring Payments Profiles Through Your PayPal Account
Chapter	5 Getting Recurring Payments Profile Details
	Profile Status
	Obtaining Profile Details Through Your PayPal Account
	Obtaining Profile Details Programmatically
	Example of Getting Recurring Payments Profile Details
Chapter	6 Billing the Outstanding Amount
	Billing the Outstanding Amount
Chapter	7 Updating Recurring Payments Profiles
	Updating Addresses
	Updating a Profile Through Your PayPal Account
	Updating Profiles Programmatically
	Example of Updating Profiles
Chapter	8 Recurring Payments Reference
	Creating Recurring Payments Profiles (ACTION=A)
	Updating Recurring Payments Profiles (ACTION=M)
	Deactivating Recurring Payments Profiles (ACTION=C)
	Reactivating Recurring Payments Profiles (ACTION=R)
	Viewing Recurring Payments Profile Details (ACTION=I)
	Billing Outstanding Amount Request (ACTION=P)
Index	

Preface

This guide describes how to perform recurring payments transactions using the Payflow SDK. It also describes how to manage recurring payments profiles through the merchant's PayPal account. Recurring Payments is a scheduled payment solution that enables you to automatically bill the buyer at regular intervals – for example, a monthly fee of \$42 for 36 months with an initial fee of \$129.

Audience

This guide assumes that its users:

- Have PayPal accounts that have the ability to use Payflow credentials.
- Are experienced web or application developers or merchants offering recurring payment solutions to their buyers on their websites
- Have a background in payments services
- Have experience with Express Checkout if billing the buyer's PayPal account on a recurring basis

Where To Go For More Information

For more information, see the following documentation, which is available on <u>Developer Central</u>:

- Gateway Developer's Guide
- Express Checkout for Payflow Pro

Revision History

TABLE 1.1 Revision history

Date	Changes
April 2012	Updated references to Website Payments Pro to PayPal Payments Pro.
January 2010	Updated Preface description of Recurring Payments users.

TABLE 1.1 Revision history

Date	Changes
August 2009	Added an example of obtaining a TOKEN from the Set Express Checkout response to create a Recurring Payments profile for billing a PayPal account.
March 2009	First publication of Payflow Recurring Payments for credit cards and PayPal accounts on a recurring basis

Recurring Payments Overview

PayPal Payments Pro (Payflow Edition) Recurring Payments allows you to bill a buyer's credit card or PayPal account for a fixed amount of money on a fixed schedule. Consider the following examples:

- A buyer purchases a subscription to a magazine or newsletter from your site and agrees to pay a monthly fee.
- A buyer agrees to pay an Internet Service Provider a one-time setup fee and a flat fee on a semi-annual basis to host a website.
- A buyer agrees to an installment plan to purchase a high-ticket item.

These examples represent payment transactions that reoccur periodically and are for a fixed amount. PayPal offers Payflow recurring payments with the Direct Payments (credit card processing) and Express Checkout payment solutions.

NOTE: To use recurring payments to bill a buyer's PayPal account, you must first establish a billing agreement with the buyer through the Express Checkout flow. For details, see the document entitled *Express Checkout for Payflow Pro*, which is available on Developer Central.

About the Payflow Recurring Payment Services

When you create recurring payments for a buyer, you create a *recurring payments profile*. The recurring payments profile contains information about the recurring payments, including details for an optional trial payment period and a regular payment period. If the profile is for billing the buyer's credit card, it specifies the credit card account to bill and the expiration date. A recurring payments profile also includes the associated contact information, the amount to charge each time, the billing period (monthly, weekly, and so on), and the number of payment periods over the life of the recurring billing agreement.

After a recurring payments profile is created, PayPal automatically queues payments based on the billing start date, billing frequency, and billing amount, until the profile expires or is canceled by the merchant.

After the recurring payments profile is created, you can view recurring payments details and perform other recurring payments profile management tasks:

- Manually, by accessing your PayPal Business account
- Programmatically, by making calls to Payflow recurring payments requests

The following sections describe how to perform recurring payments profile tasks:

- "Creating Recurring Payments Profiles" on page 11
- "Deactivating and Reactivating Recurring Payments Profiles" on page 21

- "Canceling Recurring Payments Profiles" on page 25
- "Getting Recurring Payments Profile Details" on page 29
- "Billing the Outstanding Amount" on page 33
- "Updating Recurring Payments Profiles" on page 35

Managing Recurring Payments Profiles Through PayPal

After you have created recurring payments profiles, you can manage them through your PayPal Business account:

- 1. Log in to your business account.
- 2. Click the Recurring Payments link either in the Tools section of the Account Overview page or on your Profile page.

The Recurring payments overview page appears, as shown below.

FIGURE 1.1 Recurring payments overview page



Limitations

The current release of Payflow recurring payments has the following limitations:

- A recurring payments profile can have at most one optional trial payment period and a single regular payment period.
- The recurring payments profile start date may not be earlier than the profile creation date.

Recurring Payments Terms

Table 1.1 lists commonly used terms related to Payflow Recurring Payments.

TABLE 1.1 Payflow Recurring Payments Terms

Term	Meaning	
Payment	The amount that is transacted during each regular payment period, not including shipping and tax. It is represented by the Payflow AMT parameter. Payments differ from transactions. Several transactions may be required to successfully perform a payment for a payment period, for example, because of a lack of funds during the first transaction attempts.	
Regular payment period	The period during which a single regular (non-trial) payment is made. It is represented by the PAYPERIOD parameter. If, for example, a \$42 payment is due on a monthly basis, the regular payment period is monthly.	
Trial payment period	An optional subscription period before the regular payment period begins. It is represented by the TRIALPAYPERIOD parameter. A trial payment period and trial payment may differ from the regular payment period and regular payment.	
Term	The total number of regular or trial payment periods. It is represented by the TERM and TRIALTERM parameters. If there are 36 monthly payments, for example, the term is 36. On the PayPal website, term is called <i>payment cycle</i> .	
Recurring payments profile	Your definition of a recurring transaction for a single buyer. The profile includes all information required to automatically bill the right person the right amount per payment period over the billing frequency.	
Profile ID	A 19-character string PayPal generates to uniquely identify a recurring profile.	
Outstanding balance	If a payment fails for any reason, that amount is added to the profile's outstanding balance.	

Recurring Payments Overview

Recurring Payments Terms

2

Creating Recurring Payments Profiles

Note: The Payflow SDK recurring payments operations are available only to merchants who have signed up for Payflow Recurring Payments.

Preparing to Create Recurring Payments Profiles

To set up recurring payments, you must collect all necessary information from the buyer including the billing amount of the payment.

For recurring payments that you bill through the buyer's credit card, this includes the buyer's credit card information.

For recurring payments that you bill through the buyer's PayPal account, you must first call the Set Express Checkout request, specifying the RecurringPayments billing type and providing the billing description for one or more profiles that you want to create. For details, see *Express Checkout for Payflow Pro*.

After you have collected the information, you can create the recurring payments profile either through the PayPal website or programmatically using the PayPal SDK recurring payments SDK operations.

Creating Profiles Through Your PayPal Account

To create a recurring payments profile through your PayPal Business account:

- 1. Log in to your business account.
- 2. Click the Recurring Payments link either in the Tools section of the Account Overview page or on your Profile page.

The Recurring payments overview page appears, as shown in Figure 2.1.

FIGURE 2.1 Recurring payments overview page

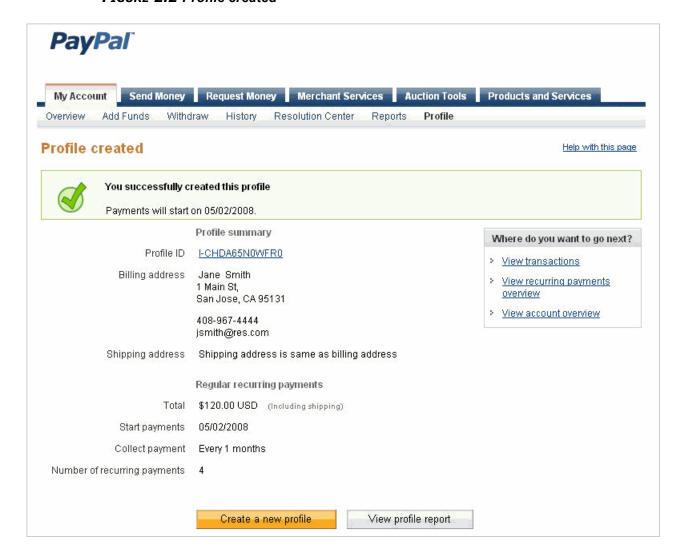


- **3.** Click the Create a new profile link.
- **4.** On the Create a Recurring Payment profile page, fill in all required information about the buyer, and click continue.
 - If successful, the Review a Recurring Payment profile page appears.
- **5.** Review the profile description. Click Update to edit, if necessary, or Cancel to cancel the profile. Click Submit to create the profile.

Upon successful profile creation, you will receive a status message along with a summary of the profile information, such as shown in Figure 2.2 . You can use the profile ID to locate and obtain information about this profile in the future.

Click the Recurring Payments link either in the Tools section of the Account Overview page or on your Profile page to view the Recurring payments overview page. From this page, you can manage the profiles you create. For more information, see "Managing Recurring Payments Profiles Through PayPal" on page 8.

FIGURE 2.2 Profile created



Creating Recurring Payments Profiles Programmatically

You can create recurring payments profiles programmatically using the Payflow SDK. Table 2.1 lists the Payflow parameters required in the request string to create a new profile. The ACTION value for creating a profile is always A.

TABLE 2.1 Required Parameters to Create a New Profile

Parameter	Notes
TRXTYPE	The value R for recurring payments.
TENDER	The value C for credit card or P for PayPal

TABLE 2.1 Required Parameters to Create a New Profile

Parameter	Notes
ACTION	The value A for creating a new recurring payments profile.
PROFILENAME	Unique profile name.
ACCT	Credit card account number. Required for credit card billing only.
EXPDATE	Credit card expiration date. Required for credit card billing only.
AMT	The amount to bill.
START	Start date for the recurring payment. The date is tomorrow or a date in the future.
TERM	Life of the payment.
PAYPERIOD	How often the payment occurs, such as weekly or twice a month.
TOKEN	A TOKEN returned in the Set Express Checkout response. Required for PayPal account billing only.
L_BILLINGAGREEMENTDESCR IPTION <i>n</i>	One or more billing agreement descriptions up to a maximum of 10. Required for PayPal account billing only.
BA_DESC	A single billing agreement description only; if L_BILLINGAGREEMENTDESCRIPTIONn is specified, it overrides this value. Required for PayPal account billing if L_BILLINGAGREEMENTDESCRIPTIONn is not specified.

Upon successful creation of a profile, PayPal activates the profile, initiates the billing cycle, and returns a profile ID. Upon failure, PayPal does not generate the profile and, instead, returns a status message.

As with all direct payments, PayPal is completely invisible to the buyer. The buyer's credit card statement will not indicate that PayPal processed the payment.

Options for Creating a Recurring Payments Profile Programmatically

You have the following options when creating a recurring payments profile:

- Specifying the Regular Payment Period
- Including an Optional Trial Payment Period
- Specifying an Initial Payment
- Setting the Number of Failed Payments

Specifying the Regular Payment Period

Each recurring payments profile has a regular payment period that defines the amount and frequency of the payment. Table 2.2 lists the required fields associated with creating the regular payment period.

TABLE 2.2 Regular Payment Period Parameters

AMT	_
START	
TERM	
PAYPERIOD	

Including an Optional Trial Payment Period

You can optionally include a trial payment period in the profile by specifying the following fields in the request to create a profile. Table 2.3 lists the required fields if you are also creating an optional trial payment period.

NOTE: If you include any of the trial payment period parameters, you must include all them in the request to create a recurring payments profile.

TABLE 2.3 Trial Payment Period Parameters

TRIALSTART
TRIALTERM
TRIALPAYPERIOD
TRIALAMT
TRIALFREIGHTAMT
TRIALTAXAMT

Specifying an Initial Payment

You can optionally specify an initial non-recurring payment when the recurring payments profile is created by including the fields listed in Table 2.4 in the request to create a profile.

TABLE 2.4 Optional Initial Payment Parameters

OPTIONALTRXAMT	_
FAILEDINITAMTACTION	

When you specify an amount for OPTIONALTRXAMT, the profile is billed for that amount initially upon recurring payments profile creation. If you don't supply a value for this

Creating Recurring Payments Profiles

Example: Creating a Recurring Payments Profile For Billing a Credit Card

parameter, PayPal performs a \$1.00 authorization using the merchant-supplied credentials to create a recurring payments profile.

By default, PayPal will not activate the profile if the initial payment amount fails. You can override this default behavior by setting FAILEDINITAMTACTION to ContinueOnFailure, which indicates that if the initial payment amount fails, PayPal should add the failed payment amount to the outstanding balance due on this recurring payment profile.

If FAILEDINITAMTACTION is not set or is set to CancelOnFailure, PayPal creates the recurring payments profile but places it in a pending status until the initial payment is completed. If the initial payment clears, this means PayPal activated the pending profile. If the payment fails, PayPal did not activate it. To check the profile status, see "Obtaining Profile Details Through Your PayPal Account" on page 30.

Setting the Number of Failed Payments

By including the optional MAXFAILEDPAYMENTS parameter in the request to create a profile, you can set the number of failed scheduled payments allowed before PayPal deactivates (suspends) the profile. By default, the value is 0, which means no limit.

Billing the Outstanding Amount

If a payment fails for any reason, the amount that was to be billed (including shipping and tax, if applicable) is added to the profile's outstanding balance. Use the AUTOBILLOUTSTANDINGAMT parameter field in the request to create a profile to specify whether or not the outstanding amount should be added to the payment amount for the next billing cycle.

Example: Creating a Recurring Payments Profile For Billing a Credit Card

The following Payflow parameter string creates a profile for credit card recurring payments billing. Parameter fields required for creating the credit card recurring payments profile are in boldface. The example includes the following:

- An initial non-recurring payment of \$10.00
- Profile activation even if the initial payment amount fails
- A trial payment period starting August 2, 2009, for 2 months at a trial rate of \$56.00 per month plus \$20.00 shipping and \$2.50 tax
- A regular payment starting October 27, 2009, for 10 months at a rate of \$60.00 per month excluding shipping and tax
- The outstanding amount is added to the payment amount for the next billing cycle (PAYPERIOD)

Create Credit Card Recurring Payments Profile Request

"USER=SuperMerchant

&PWD=SuperUserPassword

&PARTNER=PayPal

&TRXTYPE=R

&TENDER=C

&ACTION=A

&PROFILENAME=J Smith

&ACCT=510510511105105100

EXPDATE=1209

&CVV2=657

&AMT=60.00

&START=10272009

&TERM=10

&PAYPERIOD=MONT

&CURRENCY=USD

&MAXFAILPAYMENTS=4

&EMAIL=jsmith01@example.com

&COMPANYNAME=PayPal

&DESC=To See Cricket Matches

&OPTIONALTRXAMT=10.00

&FIRSTNAME=John

&MIDDLENAME=J

&LASTNAME=Smith

&STREET=1 Main St

&ZIP=95131&CITY=San Jose

&STATE=CA

&COUNTRY=US

&PHONENUM=294-9555

&CARDSTART=1008

&CARDISSUE=Solo

&FREIGHTAMT=20.00

&TAXAMT=2.50

&TRIALSTART=08022009

&TRIALTERM=2

&TRIALPAYPERIOD=MONT

&TRIALAMT=56.00

&TRIALFREIGHTAMT=20.00

&TRIALTAXAMT=2.50

&FAILEDOPTIONALTRXACTION=ContinueOnFailure

& AUTOBILLOUTSTANDING AMT = Add To Next Billing"

Create Credit Card Recurring Payments Profile Response

RESULT=0

&RESPMSG=Approved

&RPREF=RRRF0A08BD40

&PROFILEID=I-98E07417J1765691F

&CORRELATIONID=63ba4af1de909

Example: Creating a Recurring Payments Profile For Billing a PayPal Account

To create a Recurring Payments profile for a PayPal account, you must call Set Express Checkout and pass the following parameter information:

- The billing type value RecurringPayments (required)
- A description of the goods or services associated with the agreement (required)

The example below passes the billing type and descriptions for two billing agreements. The parameters required to create the Recuring Payments profile are in boldface.

Set Express Checkout Request

```
"TRXTYPE=A
&USER=User
&TENDER=P
&PARTNER=PayPal
&VENDOR=Vendor
&PWD=Pwd
&ACTION=S
&AMT=10.00
&RETURNURL=http://...
&CANCELURL=http://...
&CURRENCY=USD
&L BILLINGTYPE0=RecurringPayments
&L BILLINGAGREEMENTDESCRIPTION0=Time magazine
&L BILLINGTYPE1=RecurringPayments
&L BILLINGAGREEMENTDESCRIPTION1=Newsweek magazine
&SHIPTOCITY=San Jose
&SHIPTOCOUNTRY=USA US
&SHIPTOSTATE=CA
&SHIPTOSTREET=1 Main St
&SHIPTOZIP=95131
&PAYMENTTYPE=any"
```

Set Express Checkout Response

```
RESULT=0
&RESPMSG=Approved
&TOKEN=EC-5FA74536B1724550T
&CORRELATIONID=e8f1f97944872
```

When creating the recurring payments profile with ACTION=A, you pass the TOKEN returned in the Set Express Checkout response, along with the following parameters:

- The L_BILLINGAGREEMENTDESCRIPTIONn string (exactly as it was passed in the call to Set Express Checkout) for the profile you want to create
- TENDER type P to identify the recurring payments as billing a PayPal account
- The TOKEN returned in the Set Express Checkout response

The following example creates a recurring payments profile that bills a PayPal account. Parameters required for creating the PayPal account recurring payments profile are in boldface. The example allows four failed scheduled payments before PayPal deactivates the profile.

Create Express Checkout Recurring Payments Profile Request

"TRXTYPE=R

&TENDER=P

&ACTION=A

&USER=ser

&VENDOR=Vendor

&PWD=Pwd

&PARTNER=PayPal

&TOKEN=EC-5FA74536B1724550T

&PROFILENAME=J Smith Profile

&AMT=30.00

&START=10272010

&TERM=5

&PAYPERIOD=WEEK

&CURRENCY=USD

&MAXFAILPAYMENTS=4

&COMPANYNAME=PavPal

&FIRSTNAME=J

&LASTNAME=Smith

&STREET=1 Main St

&ZIP=95131

&CITY=San Jose

&STATE=CA

&COUNTRY=USA

&EMAIL=jsmith01@example.com

&PHONENUM=4082354545

&FREIGHTAMT=30.00

&TAXAMT=34.00

&AUTOBILLOUTSTANDINGAMT=NoAutoBill

&L BILLINGAGREEMENTDESCRIPTION1=Newsweek magazine"

Create Express Checkout Recurring Payments Profile Response

RESULT=0

&RESPMSG=Approved

&RPREF=RTTF0D917B7D

&PROFILEID=I-EANRHMUGWESK

&CORRELATIONID=350f1e135ab53

Creating Recurring Payments Profiles

Example: Creating a Recurring Payments Profile For Billing a PayPal Account

Deactivating and Reactivating Recurring Payments Profiles

You can deactivate (suspend) and reactivate recurring payments profiles as a service to buyers who would like to have their billing suspended while away on vacation, for example.

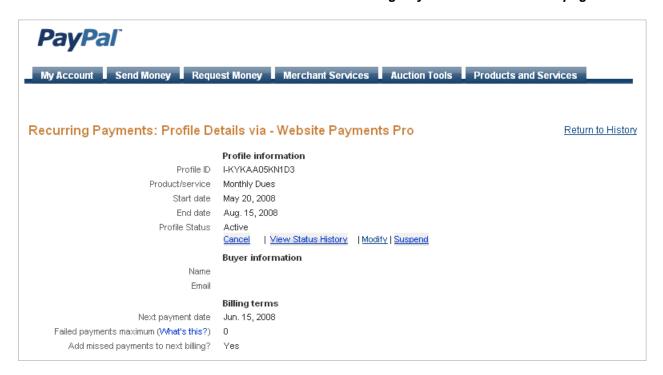
NOTE: The Payflow SDK does not support canceling (terminating) recurring payments profiles programmatically. You must cancel a profile on the PayPal website. For details, see Chapter 4, "Canceling Recurring Payments Profiles."

Deactivating a Profile Through Your PayPal Account

To deactivate a profile through your PayPal account:

- 1. Log in to your PayPal account.
- **2.** Click the Recurring Payments link either in the Tools section in the Account Overview page or on the Profile page.
- **3.** On the Recurring payments overview page that appears, browse for the profile.
- In the search results, click the profile Details.
 The Recurring Payments Profile Details page appears.
- **5.** In the Profile Status section (shown in Figure 3.1), click Suspend to deactivate the recurring payments profile.

FIGURE 3.1 Profile Status section of Recurring Payments Profile Details page



- **6.** The Suspend a recurring payment profile page appears.
- 7. Click Suspend to deactivate the profile or Cancel to cancel the action.

Reactivating a Profile Through Your PayPal Account

To reactivate a deactivated (suspended) profile through your PayPal account:

- 1. Log in to your PayPal account.
- 2. Click the Recurring Payments link either in the Tools section of the Account Overview page or on the Profile page.
- **3.** On the Recurring payments overview page that appears, browse for the profile.
- 4. In the search results, click the profile Details.

The Recurring Payments Profile Details page appears.

5. In the Profile Status section, click Reactivate to reactivate the recurring payments profile. The Review a recurring payment profile page appears.

6. Click Submit to reactivate the profile or Cancel to cancel the action.

Upon successful reactivation, the Reactivate a profile page displays the message confirming profile reactivation.

Deactivating a Profile Programmatically

You can deactivate a recurring payments profile programmatically using the Payflow SDK. Table 3.1 lists the parameters required in a request to deactivate a profile. Provide values for the following parameters. The ACTION value is always C.

TABLE 3.1 Parameters Required to Deactivate a Profile

Parameter	Notes
TRXTYPE	The value R for recurring payments.
TENDER	The value C for credit card or P for PayPal.
ACTION=C	The value C for deactivating a recurring payments profile.
ORIGPROFILEID	Profile ID of the profile to deactivate.

Reactivating a Profile Programmatically

You can reactivate a recurring payments profile programmatically using the Payflow SDK. Table 3.2 lists the parameters required in a request to reactivate a profile. Provide values for the following parameters. The ACTION value is always R.

TABLE 3.2 Parameters Required to Reactivate a Profile

Parameter	Notes
TRXTYPE	The value R for recurring payments.
TENDER	The value C for credit card or P for PayPal.
ACTION	The value R for reactivating a recurring payments profile.
ORIGPROFILEID	Profile ID of the profile to reactivate.

Example of Deactivating a Profile

The following example request deactivates (suspends) a profile.

Deactivating and Reactivating Recurring Payments Profiles

Example of Reactivating a Profile

```
"USER=SuperMerchant
&PWD=SuperUserPassword
&PARTNER=PayPal
&TRXTYPE=R
&TENDER=C
&ACTION=C
&ORIGPROFILEID=I-26F60651P9935932P"
```

This is the example response.

RESULT=0 &RESPMSG=Approved &RPREF=RRRF0A08BD4D &PROFILEID=I-26F60651P9935932P &CORRELATIONID=f87c07be9f95

Example of Reactivating a Profile

The following example request reactivates a profile.

"USER=SuperMerchant &PWD=SuperUserPassword &PARTNER=PayPal &TRXTYPE=R &TENDER=C &ACTION=R &ORIGPROFILEID=I-26F60651P9935932P"

This is the example response.

RESULT=0 &RESPMSG=Approved &RPREF=RRRF0A08BD4F &PROFILEID=I-26F60651P9935932P &CORRELATIONID=c582c009acceb

Canceling Recurring Payments Profiles

You cancel (terminate) a profile by browsing for it from the Recurring Payments Overview page on the PayPal website and manually canceling it, as described below.

Note: You cannot cancel recurring payments profiles programmatically.

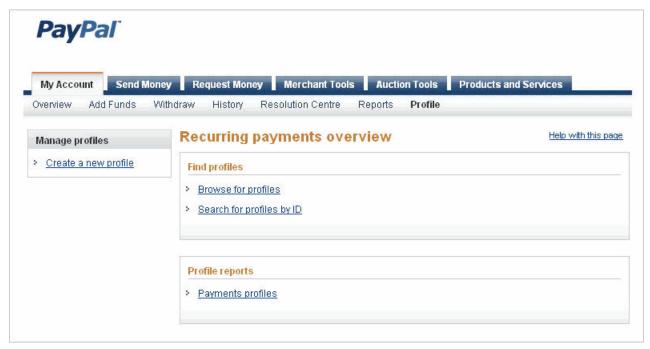
Canceling Recurring Payments Profiles Through Your PayPal Account

To cancel a recurring payments profile:

- 1. Log in to your PayPal business account.
- 2. Click the Recurring Payments link either in the Tools section of the Account Overview page or on your Profile page.

The Recurring Payments Overview page appears, as shown in Figure 4.1.

FIGURE 4.1 Recurring payments overview page



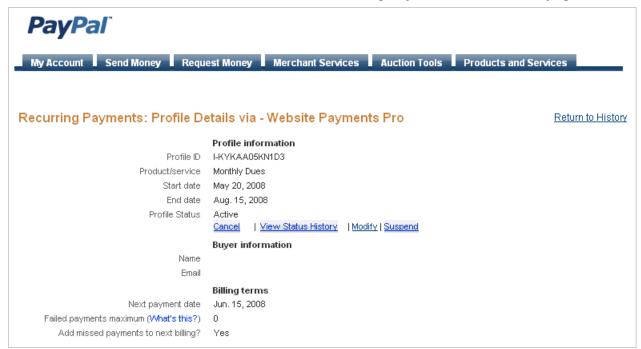
3. Click the Browse for profiles link. Alternately, if you know the profile ID of the profile you want to cancel, click the Search for profiles by ID link.

Canceling Recurring Payments Profiles

Canceling Recurring Payments Profiles Through Your PayPal Account

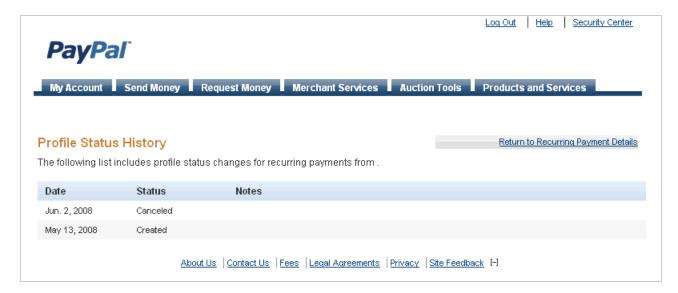
- **4.** In the search results, click the profile Details.
- The Recurring Payments Profile Details page appears.
- **5.** In the Profile Status section of the page (shown in Figure 4.2), click Cancel to cancel the profile.

FIGURE 4.2 Profile Status section of Recurring Payments Pofile Details page



You are prompted to confirm canceling the profile. Upon confirmation, the Profile Status History page appears (see Figure 4.3) showing the status history of the profile.

FIGURE 4.3 Profile Status History page



Canceling Recurring Payments Profiles

Canceling Recurring Payments Profiles Through Your PayPal Account

5

Getting Recurring Payments Profile Details

You can request to get details of a profile. Along with the information that you specified in the request, a successful response returns the following summary information:

- Subscriber's name
- Profile status
- Number of billing cycles as defined by PAYPERIOD completed during the current active billing period
- Number of payments left to be billed
- Current outstanding balance
- Total number of failed payments
- Amount of the last successful payment received
- Last four digits of the buyer's credit card number for credit card recurring billing

Note: Only the last 4 digits of the credit card account number are returned and CVV2 is never returned.

Profile Status

A recurring payments profile can have one of the following status values:

- ACTIVE
- PENDING
- DEACTIVATED BY MERCHANT (profile is suspended)
- PROFILE TERMINATED (profile is canceled)
- EXPIRED

To view the status of a profile, see "Obtaining Profile Details Through Your PayPal Account." If the profile is successfully created, its status is ACTIVE. If, however, a non-recurring initial payment fails and the FAILEDINITAMTACTION parameter is set to CancelOnFailure in the request to create the profile, the profile is created with a status of PENDING until the initial payment either completes successfully or fails.

You can reactivate a deactivated (suspended) profile. See Chapter 3, "Deactivating and Reactivating Recurring Payments Profiles," for details.

You can cancel (terminate) a profile through your PayPal account. See Chapter 4, "Canceling Recurring Payments Profiles," for details.

Getting Recurring Payments Profile Details

Obtaining Profile Details Through Your PayPal Account

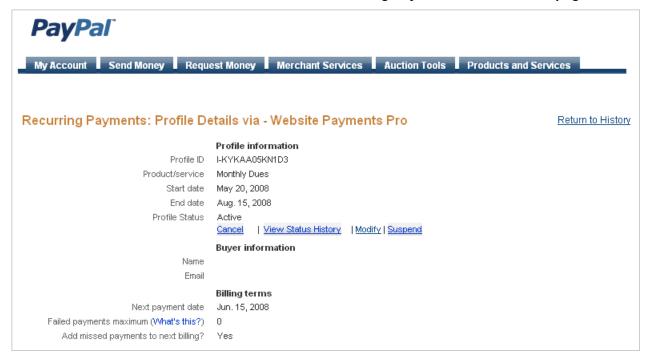
A profile has a status of EXPIRED when the total billing cycles for the optional trial payment period and the regular payment period have been completed.

Obtaining Profile Details Through Your PayPal Account

To obtain details of a profile through your PayPal account:

- 1. Log in to your PayPal Business account.
- 2. Click the Recurring Payments link either in the Tools section of the Account Overview page or on your Profile page.
- **3.** On the Recurring payments overview page, browse for the profile.
- **4.** In the search results, click the profile Details.
 - The Recurring Payments Profile Details page appears.
- **5.** In the Profile Status section (shown in Figure 5.1), click the View Status History link to view the status history of a profile.

FIGURE 5.1 Profile Status section of Recurring Payments Profile Details page



Obtaining Profile Details Programmatically

You can obtain profile details programmatically using the Payflow SDK. Table 5.1 lists the Payflow parameters required in the request string to obtain the details of a recurring payments profile. The ACTION value is always I.

TABLE 5.1 Required Parameters in a Profile Status Inquiry Request

Parameter	Notes
TRXTYPE	The value R for recurring payments.
TENDER	The value C for credit card or P for PayPal.
ACTION	The value I for inquiring about recurring payments profile details.
ORIGPROFILEID	Profile ID of the profile to deactivate.

Example of Getting Recurring Payments Profile Details

The following example Payflow parameter string requests the details of a credit card recurring payments profile.

Getting Recurring Payments Profile Details

Example of Getting Recurring Payments Profile Details

"USER=SuperMerchant &PWD=SuperUserPassword &PARTNER=PayPal &TRXTYPE=R &TENDER=C &ACTION=I &ORIGPROFILEID=I-26F60651P9935932P"

This is the response to the request for profile details.

RESULT=0

&RESPMSG=Approved

&PROFILEID=I-26F60651P9935932P

&CORRELATIONID=d73839395ccee

&PROFILENAME=JSmith

&ACCT=510510511105105100

&START=10272008

&TERM=2

&PAYPERIOD=DAY

&STATUS=DEACTIVATED BY MERCHANT

&PAYMENTSLEFT=2&END=

&NUMFAILPAYMENTS=0

&CURRENCY=USD

&MAXFAILPAYMENTS=4

&EMAIL=jsmith01@example.com

&DESC=TO SEE CRICKET MATCHES

&FIRSTNAME=John

&LASTNAME=Smith

&STREET=1 Main St&ZIP=95131

&CITY=San Jose

&STATE=CA

&COUNTRY=US

&FREIGHTAMT=56.00

&TAXAMT=34.00

&AUTOBILLOUTAMT=NoAutoBill

Billing the Outstanding Amount

You can request to bill the outstanding amount of a profile to immediately bill the buyer for the current past due or outstanding amount for a recurring payments profile. To bill the outstanding amount:

• The profile status must be active or deactivated (suspended).

Note: You cannot activate a suspended profile in the request for billing the outstanding amount. You must reactivate with the reactivate recurring payments profile request. See "Deactivating and Reactivating Recurring Payments Profiles" on page 21.

- The profile must have a non-zero outstanding balance.
- The amount of the payment cannot exceed the outstanding amount for the profile.
- The request to bill the outstanding amount cannot be within 24 hours of a regularly scheduled payment for this profile.

Log in to PayPal to determine the success or failure of the outstanding payment. See Chapter 5, "Getting Recurring Payments Profile Details," for information on how to obtain profile details.

Billing the Outstanding Amount

You can bill the outstanding amount of a profile through the Payflow SDK. Table 6.1 lists the parameters required in a request to bill the outstanding amount. The ACTION value is always P.

TABLE 6.1 Parameters Required to Retry a Transaction

Parameter	Notes
TRXTYPE	The value R for recurring payments.
ACTION	The value P for billing the outstanding amount.
ORIGPROFILEID	Profile ID of the profile for which the outstanding amount will be billed.

Billing the Outstanding Amount

Billing the Outstanding Amount

7

Updating Recurring Payments Profiles

You can update a recurring payments profile by sending a subset of the profile parameters in a request to modify the profile.

Note: You can only update active or deactivated (suspended) profiles.

You can only update specific information about the profile, including the following:

- Subscriber name or address (see Updating Addresses)
- Additional billing cycles
- Billing amount, tax amount, or shipping amount (see Updating Addresses)
- Past due or outstanding amount
- Whether to bill the outstanding amount with the next billing cycle
- Maximum number of failed payments allowed
- Buyer's credit card information (see Updating Addresses for a restriction)
- Profile description and reference

Note: You cannot modify the payment period (PAYPERIOD) of a profile.

NOTE: For recurring payments with Express Checkout, certain updates, such as billing amount, are not allowed within 3 days of the scheduled billing date, and an error is returned.

Updating Addresses

When you update the following addresses, you must enter all of address fields, not just those that are changing:

- Subscriber shipping address
- Credit card billing address

If, for example, you want to update the street address for shipping, you must specify all of the shipping address fields listed in Table 8.1 in Chapter 8, "Recurring Payments Reference," not just the SHIPTOSTREET parameter.

Updating a Profile Through Your PayPal Account

To update a profile through your PayPal account:

1. Log in to your PayPal account.

Updating Recurring Payments Profiles

Updating a Profile Through Your PayPal Account

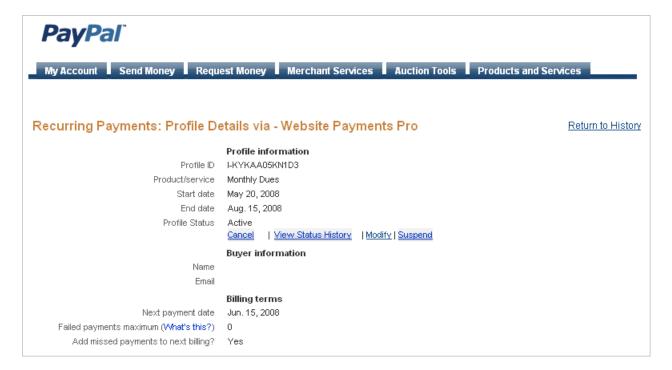
- **2.** Click the Recurring Payments link either in the Tools section of the Account Overview page or on your Profile page.
- 3. On the Recurring payments overview page that appears, browse for the profile.
- **4.** In the search results, click the profile Details.

The Recurring Payments Profile Details page appears.

5. In the Profile Status section (shown in Figure 7.1), click Modify to update the recurring payments profile.

The Update a recurring payments profile page appears.

FIGURE 7.1 Profile Status section of Recurring Payments Profile Details page



- **6.** Edit the page as necessary, and click Continue or Cancel to cancel the action.
- 7. Review your changes on the Review a Recurring Payment profile page. Then click Submit to update the profile or Cancel to cancel the profile changes.
- **8.** Follow the links on the Recurring payments profile updated page to review the profile details or to perform other profile tasks listed.

Updating Profiles Programmatically

You can update profiles using the Payflow SDK. Table 7.1 lists the parameters you are required to send in a request to update a profile. The ACTION value is always M.

TABLE 7.1 Parameters Required to Update Profiles

TRXTYPE	The value R for recurring payments.
TENDER	The value C for credit card or P for PayPal.
ACTION	The value M for updating the profile.
ORIGPROFILEID	Profile ID of the profile to update.

Example of Updating Profiles

The following example Payflow parameter string is a request to update the shipping address for profile ID number I-26F60651P9935932P. Updating the shipping address requires providing values for each of the SHIPTO* parameters.

```
"USER=SuperMerchant
&PWD=SuperUserPassword
&PARTNER=PayPal
&TRXTYPE=R
&TENDER=C
&ACTION=M
&SHIPTOFIRSTNAME=John
&SHIPTOMIDDLENAME=J
&SHIPTOLASTNAME=SMITH
&SHIPTOSTREET=1 Main St
&SHIPTOCITY=San Jose
&SHIPTOSTATE=CA
&SHIPTOCOUNTRY=US
&SHIPTOZIP=95155
&ORIGPROFILEID=I-26F60651P9935932P
&PROFILENAME=JSmith
&EMAIL=jsmith01@example.com&
COMPANYNAME=PayPal"
```

The following is an example response to the request to update the profile.

```
RESULT=0

&RESPMSG=Approved

&RPREF=RRRF0A08BD4B

&PROFILEID=I-26F60651P9935932P

&CORRELATIONID=95d7b814512bb
```

Updating Recurring Payments Profiles

Example of Updating Profiles

Recurring Payments Reference

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
TRXTYPE	(Required) The transaction type R for recurring payments profile request.
	Character length and limitations: One alpha character.
ACTION	(Required) The value A for creating a new recurring payments profile.
	Character length and limitations: One alpha character.
TENDER	 (Required) The tender type. Is one of the following values: C = credit card P = PayPal
	Character length and limitations: One alpha character.
	Character length and minitations. One alpha character.
TOKEN	(Required when Tender is P) The TOKEN returned in the Set Express Checkout response when the Set Express Checkout request passes the billing type as RecurringPayments. To create a PayPal recurring payments profile, you must pass the following:
	 One L_BILLINGAGREEMENTDESCRIPTIONn string (see below) exactly as passed in the Set Express Checkout request OR
	 The BA_DESC string (see below) exactly as passed in the Set Express Checkout request TENDER=P
	 TOKEN returned in the Set Express Checkout response
PROFILENAME	(Required) A unique name for referencing the recurring payments profile.
	Character length and limitations: 127 alphanumeric characters.
L_BILLINGAGREEMENTD ESCRIPTION <i>n</i>	(Optional) See TOKEN Describes the recurring payment product or service the buyer is purchasing with a PayPal account. The string value is exactly as it was passed in the Set Express Checkout request.
	Example: 'One-year subscription to Time magazine' Character length and limitations: 127 alphanumeric characters.

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
BA_DESC	(Optional) See TOKEN. Describes the recurring payment product or service the buyer is purchasing with a PayPal account. The string value is exactly as it was passed in the Set Express Checkout request. Example: 'One-year subscription to Time magazine' Character length and limitations: 127 alphanumeric characters.
ACCT	(Required for credit card recurring billing) Credit card number. Character length and limitations: 19 alphanumeric characters.
EXPDATE	(Required for credit card recurring billing) Credit card expiration date. Character length and limitations: Four numeric characters in the format MMYY.
AMT	(Required) Amount to be billed per regular payment period, not including shipping and tax.
	NOTE: All amounts in the profile creation request must be in the same currency.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
START	(Required) Beginning date for the recurring payments cycle used to calculate when payments should be made. Use tomorrow's date or a date in the future.
	Character length and limitations: Eight numeric characters in the format MMDDYYYY.
TERM	(Required) The total number of regular payment periods over the life of the agreement. If there are 36 monthly payments, for example, TERM is 36.
	Character length and limitations: Numeric. A value of 0 means that payments should continue until the profile is deactivated (suspended).

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
PAYPERIOD	 (Required) How often the regular payment occurs. On the PayPal website, PAYPERIOD is called payment cycle. Values are: DAY: Every Day. WEEK: Weekly - Every week on the same day of the week as the first payment. BIWK: Every Two Weeks - Every other week on the same day of the week as the first payment. SMMO: Twice Every Month - The 1st and 15th of the month. Results in 24 payments per year. SMMO can start on 1st to 15th of the month, second payment 15 days later or on the last day of the month. FRWK: Every Four Weeks - Every 28 days from the previous payment date beginning with the first payment date. Results in 13 payments per year. MONT: Monthly - Every month on the same date as the first payment. QTER: Quarterly - Every three months on the same date as the first payment. SMYR: Twice Every Year - Every six months on the same date as the first payment.
	 YEAR: Yearly - Every 12 months on the same date as the first payment.
CVV2	(Optional) Card security code. Character length and limitations: Three to four alphanumeric character
CURRENCY	 (Required) One of the following three-character currency codes: USD EUR GBP CAD JPY AUD
MAXFAILEDPAYMENTS	(Optional) The number of scheduled payments for which the transaction is allowed to fail before PayPal deactivates (suspends) a profile. The default is 0. For example, if you specify 3, then PayPal allows a maximum of three failed payment periods (possibly with multiple retries during each payment period, and possibly nonconsecutive periods). If the transaction is not approved for any three periods (months in the example), then PayPal deactivates the profile.
	IMPORTANT: If you do not specify a value, the default value of 0 (zero) specifies no limit. Retry attempts occur until the TERM is met.
	Character length and limitations: Numeric characters.

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
EMAIL	(Optional) Buyer's email address. This value is used when sending email receipts to buyers. Character length and limitations: 127 alphanumeric characters.
DESC	(Optional) Description of the goods or services being purchased. Character length and limitations: 80 alphanumeric characters.
COMPANYNAME	(Optional) Company name associated with this profile. Character length and limitations: 64 alphanumeric characters.
OPTIONALTRXAMT	(Optional) Initial non-recurring payment amount due immediately upon profile creation. Use an initial amount for enrollment or setup fees.
	NOTE: All amounts in the profile creation request must be in the same currency.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
FIRSTNAME	(Optional) Bill-to first name. See NAME. Character length and limitations: 30 alphanumeric characters.
MIDDLENAME	(Optional) Bill-to middle name. Character length and limitations: 30 alphanumeric characters.
LASTNAME	(Optional) Bill-to last name. Character length and limitations: 30 alphanumeric characters.
NAME	(Optional) The subscriber's name. When NAME is passed, do not pass FIRSTNAME. If both NAME and FIRSTNAME are passed, either one of the values is considered as the subscriber's name. If FIRSTNAME only is passed, it alone is considered the subscriber's name. Character length and limitations: 30 alphanumeric characters.
STREET	(Optional) Bill-to street. Character length and limitations: 150 characters.
ZIP	(Optional) Bill-to postal code. Character length and limitations: 10 characters.
CITY	(Optional) Bill-to city. Character length and limitations: 45 characters.
STATE	(Optional) Bill-to state. Character length and limitations: 45 characters.
COUNTRY	(Optional) Bill-to country. Character length and limitations: Two characters.

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
PHONENUM	(Optional) Telephone number. Character length and limitations: 20 alphanumeric characters.
SHIPTOFIRSTNAME	(Optional) Ship-to first name. Character length and limitations: 30 alphanumeric characters.
SHIPTOMIDDLENAME	(Optional) Ship-to middle name. Character length and limitations: 30 alphanumeric characters.
SHIPTOLASTNAME	(Optional) Ship-to last name. Character length and limitations: 30 alphanumeric characters.
SHIPTOSTREET	(Optional) Ship-to street. Character length and limitations: 150 characters.
SHIPTOCITY	(Optional) Ship-to city. Character length and limitations: 45 characters.
SHIPTOSTATE	(Optional) Ship-to state. Character length and limitations: 45 characters.
SHIPTOCOUNTRY	(Optional) Ship-to country. Character length and limitations: Two characters.
SHIPTOZIP	(Optional) Ship-to postal code. Character length and limitations: 10 characters.
CARDSTART	(Optional) Date that Switch or Solo card was issued.
	NOTE: For a Switch or Solo transaction to be approved, either CARDSTART or CARDISSUE must be present.
	Character length and limitations: MMYY format. For example, 0308 represents March 2008.
CARDISSUE	(Optional) Issue number of Switch or Solo card.
	NOTE: For a Switch or Solo transaction to be approved, either CARDSTART or CARDISSUE must be present.
	Character length and limitations: Eight alphanumeric characters.
FREIGHTAMT	(Optional) Total shipping amount for this order.
	NOTE: You must set CURRENCY to one of the supported three-characte currency codes.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
TAXAMT	(Optional) Total tax amount for this order.
	NOTE: You must set CURRENCY to one of the supported three-character currency codes.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
TRIALSTART	(Optional) The billing start date of the trial payment period.
	Note: If you set any of the trial payment period parameters, you must set all of them in the request to create a recurring payments profile.
	Character length and limitations: 8 numeric characters in the format MMDDYYYY.
TRIALTERM	(Optional) The total number of trial payment periods over the life of the agreement. If there are 36 monthly trial payments, for example, TRIALTERM is 36.
	Character length and limitations: Numeric. A value of 0 means that payments should continue until the profile is deactivated (suspended).
TRIALPAYPERIOD	 (Optional) How often the trial payment occurs. On the PayPal website, TRIALPAYPERIOD is called <i>payment cycle</i>. Values are: DAY: Every day. WEEK: Weekly - Every week on the same day of the week as the first payment. BIWK: Every Two Weeks - Every other week on the same day of the week as the first payment. SMMO: Twice Every Month - The 1st and 15th of the month. Results in 24 payments per year. SMMO can start on 1st to 15th of the month, second payment 15 days later or on the last day of the month. FRWK: Every Four Weeks - Every 28 days from the previous payment date beginning with the first payment date. Results in 13 payments per year. MONT: Monthly - Every month on the same date as the first payment. Results in 12 payments per year.
	 QTER: Quarterly - Every three months on the same date as the first payment. SMYR: Twice Every Year - Every six months on the same date as the first payment. YEAR: Yearly - Every 12 months on the same date as the first payment.

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
TRIALAMT	(Optional) Amount of the trial payment, not including shipping and tax
	NOTE: All amounts in the profile creation request must be in the same currency.
	If you create a trial payment period, TRIALAMT is required. Otherwise i is optional.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
TRIALFREIGHTAMT	(Optional) Shipping amount for each trial payment. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
TRIALTAXAMT	(Optional) Tax amount for each trial payment. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
FAILEDINITAMTACTION	(Optional) By default, PayPal deactivates (suspends) the pending profile in the event that the initial payment amount fails. You can override this default behavior by setting this parameter to ContinueOnFailure, which indicates that if the initial payment amount fails, PayPal should add the failed payment amount to the outstanding balance for this recurring payment profile.
	When this parameter is set to ContinueOnFailure, PayPal returns a successful recurring payments profile response and activates the recurring payments profile for scheduled billing immediately. You should check your PayPal account for updates to the profile's payment status.
	If this parameter is not set or is set to CancelOnFailure, PayPal creates the recurring payments profile but does not place it in pending status until the initial payment is completed. If the initial payment clears, PayPal deactivates the profile's pending status. You should check your account in PayPal to verify the profile status.
	One of the following values: • ContinueOnFailure
	• CancelOnFailure

Updating Recurring Payments Profiles (ACTION=M)

TABLE 8.1 Create Recurring Payments Profile Request Parameters

Parameter	Description
AUTOBILLOUTSTANDING AMT	(Optional) This parameter indicates whether or not you would like PayPal to automatically roll over the outstanding balance amount in the next payment. One of the following values: • NoAutoBill • AddToNextBilling

TABLE 8.2 Create Recurring Payments Profile Response

Parameter	Description
PROFILEID	A unique identifier for future reference to the details of this recurring payment. Character length and limitations: 19 alphanumeric characters.
STATUS	The status of the profile. Is one of the following values: • ACTIVE
	DEACTIVATED BY MERCHANTEXPIRED
	PENDINGPROFILE TERMINATED

TABLE 8.3 Update Recurring Payments Profile Request Parameters

Parameter	Description
TRXTYPE	(Required) The transaction type R for recurring payments profile request. Character length and limitations: One alpha character.
TENDER	 (Required) The tender type. Is one of the following values: C = credit card P = PayPal Character length and limitations: One alpha character.
ACTION	(Required) The Action value M for modifying the recurring profile. Character length and limitations: One alpha character.
ORIGPROFILEID	(Required) Profile ID of the profile to reactivate. Character length and limitations: 19 alphanumeric characters.

TABLE 8.3 Update Recurring Payments Profile Request Parameters

Parameter	Description
NOTE	(Optional) If not provided, the default string is "Modify Profile" Character length and limitations: 256 characters.
PROFILENAME	(Optional) A unique name for referencing the profile. Character length and limitations: 128 alphanumeric characters.
ACCT	(Required for credit card recurring billing) Credit card number. Character length and limitations: 19 alphanumeric characters.
EXPDATE	(Required for credit card recurring billing) Credit card expiration date. Character length and limitations: Four numeric characters in the format MMYY.
AMT	(Required) Amount to be billed per regular payment period, not including shipping and tax.
	NOTE: All amounts in the profile creation request must be in the same currency.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
START	(Required) Beginning date for the recurring payments cycle used to calculate when payments should be made. Use tomorrow's date or a date in the future.
	Character length and limitations: 8 numeric characters in the format MMDDYYYY.
TERM	(Required) The total number of regular payment periods over the life of the agreement. If there are 36 monthly payments, TERM is 36. Character length and limitations: Numeric. A value of 0 means that payments should continue until the profile is deactivated (suspended).

TABLE 8.3 Update Recurring Payments Profile Request Parameters

Parameter	Description
PAYPERIOD	 (Required) How often the regular payment occurs. Values are: DAY: Every day. WEEK: Weekly - Every week on the same day of the week as the first payment. BIWK: Every Two Weeks - Every other week on the same day of the week as the first payment. SMMO: Twice Every Month - The 1st and 15th of the month. Results in 24 payments per year. SMMO can start on 1st to 15th of the month, second payment 15 days later or on the last day of the month. FRWK: Every Four Weeks - Every 28 days from the previous payment date beginning with the first payment date. Results in 13 payments per year. MONT: Monthly - Every month on the same date as the first payment. Results in 12 payments per year. QTER: Quarterly - Every three months on the same date as the first payment. SMYR: Twice Every Year - Every six months on the same date as the first payment. YEAR: Yearly - Every 12 months on the same date as the first payment.
ADDITIONALBILLINGCY CLES	(Optional) Additional billing cycles as defined by PAYPERIOD to add to this profile. If, for example, the number of billing cycles in the current TERM is 36, setting ADDITIONALBILLINGCYCLES to 2 increases TERM to 38.
CVV2	(Optional) Card security code.
	Character length and limitations: Three to four numeric characters.
CURRENCY	(Required) One of the following three-character currency codes: USD EUR GBP CAD JPY AUD

TABLE 8.3 Update Recurring Payments Profile Request Parameters

Parameter	Description
MAXFAILPAYMENTS	(Optional) The number of scheduled payments for which the transaction is allowed to fail before PayPal deactivates (suspends) a profile. The default is 0.
	For example, if you specify 3, then PayPal allows a maximum of three failed payment periods (possibly with multiple retries during each payment period, and possibly nonconsecutive periods). If the transaction is not approved for any three periods (months in the example), then PayPal deactivates the profile.
	IMPORTANT: If you do not specify a value, the default value of 0 (zero) specifies no limit. Retry attempts occur until the TERM is met.
	Character length and limitations: Numeric characters.
EMAIL	(Optional) Buyer's email address. This value is used when sending email receipts to buyers. Character length and limitations: 127 characters.
DESC	(Optional) Description of the goods or services being purchased. Character length and limitations: 80 alphanumeric characters.
COMPANYNAME	(Optional) Company name associated with this profile. Character length and limitations: 64 alphanumeric characters.
OPTIONALTRXAMT	(Optional) Amount to be billed per regular payment period, not including shipping and tax.
	NOTE: All amounts in the profile creation request must be in the same currency.
	Limitations: Nine numeric characters plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
FIRSTNAME	(Optional) Bill-to first name. See NAME. Character length and limitations: 30 alphanumeric characters.
MIDDLENAME	(Optional) Bill-to middle name. Character length and limitations: 30 alphanumeric characters.
LASTNAME	(Optional) Bill-to last name. Character length and limitations: 30 alphanumeric characters.
NAME	(Optional) The subscriber's name. When NAME is passed, do not pass FIRSTNAME. If both NAME and FIRSTNAME are passed, either one of the values is considered as the subscriber's name. If FIRSTNAME only is passed, it alone is considered the subscriber's name. Character length and limitations: 30 alphanumeric characters.

TABLE 8.3 Update Recurring Payments Profile Request Parameters

Parameter	Description
STREET	(Optional) Bill-to street. Character length and limitations: 150 characters.
ZIP	(Optional) Bill-to postal code. Character length and limitations: 10 characters.
CITY	(Optional) Bill-to city. Character length and limitations: 45 characters.
STATE	(Optional) Bill-to state. Character length and limitations: 45 characters.
COUNTRY	(Optional) Bill-to country. Character length and limitations: Two characters.
PHONENUM	(Optional) Telephone number. Character length and limitations: 20 alphanumeric characters.
SHIPTOFIRSTNAME	(Optional) Ship-to first name. Character length and limitations: 30 alphanumeric characters.
SHIPTOMIDDLENAME	(Optional) Ship-to middle name. Character length and limitations: 30 alphanumeric characters.
SHIPTOLASTNAME	(Optional) Ship-to last name. Character length and limitations: 30 alphanumeric characters.
SHIPTOSTREET	(Optional) Ship-to street. Character length and limitations: 150 characters.
SHIPTOCITY	(Optional) Ship-to city. Character length and limitations: 45 characters.
SHIPTOSTATE	(Optional) Ship-to state. Character length and limitations: 45 alphanumeric characters.
SHIPTOCOUNTRY	(Optional) Ship-to country. Character length and limitations: Two characters.
SHIPTOZIP	(Optional) Ship-to postal code. Character length and limitations: 10 characters.
CARDSTART	(Optional) Date that Switch or Solo card was issued.
	NOTE: For a Switch or Solo transaction to be approved, either CARDSTART or CARDISSUE must be present.
	Character length and limitations: MMYY format. For example, 0308 represents March 2008.

TABLE 8.3 Update Recurring Payments Profile Request Parameters

Parameter	Description
CARDISSUE	(Optional) Issue number of Switch or Solo card.
	NOTE: For a Switch or Solo transaction to be approved, either CARDSTART or CARDISSUE must be present.
	Character length and limitations: Two alphanumeric characters.
TAXAMT	(Optional) Total tax amount for this order.
	NOTE: You must set CURRENCY to one of the supported three-character currency codes.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
FAILEDINITAMTACTION	(Optional) By default, PayPal deactivates (suspends) the pending profile in the event that the initial payment amount fails. You can override this default behavior by setting this parameter to ContinueOnFailure, which indicates that if the initial payment amount fails, PayPal should add the failed payment amount to the outstanding balance for this recurring payment profile.
	When this parameter is set to ContinueOnFailure, PayPal returns a successful recurring payments profile response and activates the recurring payments profile for scheduled billing immediately. You should check your PayPal account for updates to the profile's payment status.
	If this parameter is not set or is set to CancelOnFailure, PayPal creates the recurring payments profile but does not place it in pending status until the initial payment is completed. If the initial payment clears, PayPal deactivates the profile's pending status. You should check your PayPal account to verify the profile's status.
	One of the following values: ContinueOnFailure CancelOnFailure
OUTSTANDINGAMT	(Optional) The current past due amount for this profile. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
AUTOBILLOUTAMT	(Optional) This parameter indicates whether or not you would like PayPal to automatically bill the outstanding balance amount in the next payment.
	One of the following values:
	• NoAutoBill
	AddToNextBilling

Deactivating Recurring Payments Profiles (ACTION=C)

TABLE 8.4 Update Recurring Payments Profile Response

Parameter	Description
PROFILEID	A unique identifier for future reference to the details of this recurring payment. Character length and limitations: 19 alphanumeric characters.

Deactivating Recurring Payments Profiles (ACTION=C)

TABLE 8.5 Deactivate Recurring Payments Profile Request Parameters

Parameter	Description
TRXTYPE	(Required) The transaction type R for recurring payments profile request.
	Character length and limitations: One alpha character.
TENDER	(Required) The tender type. Is one of the following values: • C = credit card
	 P = PayPal Character length and limitations: One alpha character.
ACTION	(Required) The Action value C for deactivating (suspending) the recurring profile.
	Character length and limitations: One alpha character.
ORIGPROFILEID	(Required) Profile ID of the profile to deactivate (suspend). Character length and limitations: 19 alphanumeric characters.
NOTE	(Optional) Notes about the action. If not provided, the default string is "Cancel Profile" Character length and limitations: 256 characters.

 TABLE 8.6
 Deactivate Recurring Payments Profile Response

Parameter	Description
PROFILEID	A unique identifier for future reference to the details of this recurring payment. Character length and limitations: 19 alphanumeric characters.

Reactivating Recurring Payments Profiles (ACTION=R)

TABLE 8.7 Reactivate Recurring Payments Profile Request Parameters

Parameter	Description
TRXTYPE	(Required) The transaction type R for recurring payments profile request. Character length and limitations: One alpha character.
TENDER	 (Required) The tender type. Is one of the following values: C = credit card P = PayPal Character length and limitations: One alpha character.
ACTION	(Required) The Action value R for reactivating the recurring profile. Character length and limitations: One alpha character.
ORIGPROFILEID	(Required) Profile ID of the profile to reactivate. Character length and limitations: 19 alphanumeric characters.
NOTE	(Optional) Notes about the action. If not provided in the request string, the default string is "Reactivate Profile". Character length and limitations: 256 characters.

TABLE 8.8 Reactivate Recurring Payments Profile Response

Parameter	Description
payment.	A unique identifier for future reference to the details of this recurring payment.
	Character length and limitations: 19 alphanumeric characters.

TABLE 8.9 View Recurring Payments Profile Details Request Parameters

Parameter	Description
TRXTYPE	(Required) The transaction type R for recurring payments profile request. Character length and limitations: One alpha character.

TABLE 8.9 View Recurring Payments Profile Details Request Parameters

Parameter	Description
TENDER	 (Required) The tender type. Is one of the following values: C = credit card P = PayPal Character length and limitations: One alpha character.
ACTION	(Required) The Action value I for viewing recurring payments profile. Character length and limitations: One alpha character.
ORIGPROFILEID	(Required) The profile ID of the profile to cancel or reactivate. Character length and limitations: 19 alphanumeric characters.

 TABLE 8.10
 View Recurring Payments Profile Details Response

Parameter	Description
TRXTYPE	The transaction type R for recurring payments profile request. Character length and limitations: One alpha character.
TENDER	The tender type. Is one of the following values: • C = credit card • P = PayPal Character length and limitations: One alpha character.
PROFILEID	A unique identifier for future reference to the details of this recurring payments profile. Character length and limitations: 19 alphanumeric characters.
PROFILENAME	A unique name for referencing the profile. Character length and limitations: 127 alphanumeric characters.
ACCT	Credit card number for the credit card recurring payment. Character length and limitations: 19 alphanumeric characters.
EXPDATE	Credit card expiration date for the credit card recurring payment. Character length and limitations: 30 alphanumeric characters.
AMT	Amount to be billed per regular payment period, not including shipping and tax. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
START	Beginning date for the recurring payments cycle used to calculate when payments should be made. Use tomorrow's date or a date in the future. Character length and limitations: Eight numeric characters in the format MMDDYYYY.

 TABLE 8.10
 View Recurring Payments Profile Details Response

Parameter	Description
TERM	The total number of regular payment periods over the life of the agreement. If there are 36 monthly payments, TERM is 36. Character length and limitations: Numeric. A value of 0 means that payments should continue until the profile is deactivated (suspended).
PAYPERIOD	 How often the payment occurs. On the PayPal website, PAYPERIOD is called <i>payment cycle</i>. Values are: DAY: Every day. WEEK: Weekly - Every week on the same day of the week as the first payment. BIWK: Every Two Weeks - Every other week on the same day of the week as the first payment. SMMO: Twice Every Month - The 1st and 15th of the month. Result in 24 payments per year. SMMO can start on 1st to 15th of the month, second payment 15 days later or on the last day of the month. FRWK: Every Four Weeks - Every 28 days from the previous payment date beginning with the first payment date. Results in 13 payments per year. MONT: Monthly - Every month on the same date as the first payment. QTER: Quarterly - Every three months on the same date as the first payment. YEAR: Yearly - Every 12 months on the same date as the first payment. SMYR: Twice Every Year - Every six months on the same date as the first payment.
NUMCYCLESCOMPLETED	The number of billing cycles, as defined by PAYPERIOD, completed in the current active TERM. A billing cycle is considered complete only after retry attempts to collect payment for the current billing cycle have failed. Character length and limitations: Numeric.
STATUS	One of the following values describing the current status of the profile • ACTIVE • PROFILE TERMINATED • DEACTIVATED BY MERCHANT • EXPIRED • PENDING
PAYMENTSLEFT	Number of payments left to be billed. Character length and limitations: Numeric characters.
NEXTPAYMENT	Date that the next payment is due. Character length and limitations: MMDDYYYY format.

 TABLE 8.10
 View Recurring Payments Profile Details Response

Parameter	Description
CVV2MATCH	One of the following card security code match responses: • Y = Match • N = No match • X = Unknown
NUMFAILPAYMENTS	Number of payments that failed. Character length and limitations: Numeric characters.
CURRENCY	One of the following three-character currency codes: USD EUR GBP CAD JPY AUD
MAXFAILPAYMENTS	The number of scheduled payments for which the transaction is allowed to fail before PayPal deactivates (suspends) a profile. The default is 0. IMPORTANT: If you do not specify a value, the default value of 0 (zero) specifies no limit. Retry attempts occur until the TERM is met. Character length and limitations: Numeric characters.
EMAIL	Buyer's email address. Character length and limitations: 127 characters.
DESC	Description of the goods or services being purchased. Character length and limitations: 80 alphanumeric characters.
COMPANYNAME	Company name associated with this profile. Character length and limitations: 64 alphanumeric characters.
OPTIONALTRXAMT	 Initial non-recurring payment amount due immediately upon profile creation. Use an initial amount for enrollment or setup fees. NOTE: All amounts in the profile creation request must be in the same currency. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
FIRSTNAME	Bill-to first name. Character length and limitations: 30 alphanumeric characters.
MIDDLENAME	Bill-to middle name. Character length and limitations: 30 alphanumeric characters.

 TABLE 8.10
 View Recurring Payments Profile Details Response

Parameter	Description
LASTNAME	Bill-to last name. Character length and limitations: 30 alphanumeric characters.
NAME	Subscriber's name. Character length and limitations: 30 alphanumeric characters.
STREET	Bill-to street. Character length and limitations: 150 characters.
ZIP	Bill-to postal code. Character length and limitations: 10 characters.
CITY	Bill-to city. Character length and limitations: 45 characters.
STATE	Bill-to state. Character length and limitations: 45 characters.
COUNTRY	Bill-to country. Character length and limitations: Two characters.
PHONENUM	Telephone number. Character length and limitations: 20 alphanumeric characters.
SHIPTOFIRSTNAME	Ship-to first name. Character length and limitations: 30 alphanumeric characters.
SHIPTOMIDDLENAME	Ship-to middle name. Character length and limitations: 30 alphanumeric characters.
SHIPTOLASTNAME	Ship-to last name. Character length and limitations: 30 alphanumeric characters.
SHIPTOSTREET	Ship-to street. Character length and limitations: 150 characters.
SHIPTOZIP	Ship-to postal code. Character length and limitations: 10 characters.
SHIPTOCITY	Ship-to city. Character length and limitations: 45 characters.
SHIPTOSTATE	Ship-to state. Character length and limitations: 45 characters.
SHIPTOCOUNTRY	Ship-to country. Character length and limitations: Two characters.

 TABLE 8.10
 View Recurring Payments Profile Details Response

Parameter	Description
CARDSTART	Date that Switch or Solo card was issued.
	NOTE: For a Switch or Solo transaction to be approved, either CARDSTART or CARDISSUE must be present.
	Character length and limitations: MMYY format. For example, 0308 represents March 2008.
CARDISSUE	Issue number of Switch or Solo card.
	NOTE: For a Switch or Solo transaction to be approved, either CARDSTART or CARDISSUE must be present.
	Character length and limitations: Eight alphanumeric characters.
FREIGHTAMT	Total shipping amount for this order. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
TAXAMT	Total tax amount for this order. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
TRIALSTART	The billing start date of the trial payment period.
	NOTE: If you set any of the trial payment period parameters, you must set all of them in the request to create a recurring payments profile.
	Character length and limitations: 8 numeric characters in the format MMDDYYYY.
TRIALTERM	The total number of trial payment periods over the life of the agreement. If there are 36 monthly trial payments, for example, TRIALTERM is 36.
	Character length and limitations: Numeric. A value of 0 means that payments should continue until the profile is deactivated (suspended).

 TABLE 8.10
 View Recurring Payments Profile Details Response

Parameter	Description
TRIALPAYPERIOD	 How often the trial payment occurs. On the PayPal website, TRIALPAYPERIOD is called payment cycle. Values are: DAY: Every day. WEEK: Weekly - Every week on the same day of the week as the first payment. BIWK: Every Two Weeks - Every other week on the same day of the week as the first payment. SMMO: Twice Every Month - The 1st and 15th of the month. Results in 24 payments per year. SMMO can start on 1st to 15th of the month, second payment 15 days later or on the last day of the month. FRWK: Every Four Weeks - Every 28 days from the previous payment date beginning with the first payment date. Results in 13 payments per year. MONT: Monthly - Every month on the same date as the first payment. QTER: Quarterly - Every three months on the same date as the first payment. YEAR: Yearly - Every 12 months on the same date as the first payment. SMYR: Twice Every Year - Every six months on the same date as the
TRIALAMT	first payment. Amount of the trial payment, not including shipping and tax. Note: All amounts in the profile creation request must be in the same
	currency. If you create a trial payment period, TRIALAMT is required. Otherwise i is optional. Limitations: Nine numeric characters plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
TRIALFREIGHTAMT	Shipping amount for each trial payment. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
TRIALTAXAMT	Tax amount for each trial payment. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.

 TABLE 8.10
 View Recurring Payments Profile Details Response

Parameter	Description
FAILEDINITAMTACTION	By default, PayPal deactivates (suspends) the pending profile in the event that the initial payment amount fails. You can override this default behavior by setting this parameter to ContinueOnFailure, which indicates that if the initial payment amount fails, PayPal should add the failed payment amount to the outstanding balance for this recurring payment profile. When this parameter is set to ContinueOnFailure, PayPal returns a successful recurring payments profile response and activates the recurring payments profile for scheduled billing immediately. You should check your PayPal account for updates to the profile's payment status. If this parameter is not set or is set to CancelOnFailure, PayPal creates the recurring payments profile but does not place it in pending status until the initial payment is completed. If the initial payment clears, PayPal cancels the profile's pending status. You should check your PayPal account to verify the profile's status.
	One of the following values:
	• ContinueOnFailure
	• CancelOnFailure
OUTSTANDINGAMT	The current past due amount for this profile. Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
LASTPAYMENTAMT	Amount of the last successful payment received for this profile.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
AUTOBILLOUTAMT	This parameter indicates whether or not you would like PayPal to automatically roll over the outstanding balance amount in the next payment.
	One of the following values:
	• NoAutoBill
	AddToNextBilling

Billing Outstanding Amount Request (ACTION=P)

TABLE 8.11 Bill Outstanding Amount Request Parameters

Parameter	Description
TRXTYPE	(Required) The transaction type R for recurring payments profile request.
	Character length and limitations: One alpha character.
ACTION	(Required) The Action value P for billing outstanding amount.
	Character length and limitations: One alpha character.
ORIGPROFILEID	(Required) Profile ID of the profile to bill outstanding amount.
	Character length and limitations: 19 alphanumeric characters.
AMT	(Optional) Amount to be billed per regular payment period, not including shipping and tax.
	NOTE: All amounts in the profile creation request must be in the same currency.
	Limitations: Nine numeric characers plus decimal (.) character. No currency symbol. Specify the exact amount to the cent using a decimal point—use 34.00, not 34. Do not include comma separators—use 1199.95 not 1,199.95.
CURRENCY	(Optional) One of the following three-character currency codes:
	• USD
	• EUR
	• GBP
	• CAD
	• JPY
	AUD
NOTE	(Optional) Notes about the action. If not provided, the following default string is sent:
	"This is a recurring payment"
	Character length and limitations: 256 characters.

TABLE 8.12 Bill Outstanding Amount Response

Parameter	Description
PROFILEID	A unique identifier for future reference to the details of this recurring payment. Character length and limitations: 19 alphanumeric characters.

Billing Outstanding Amount Request (ACTION=P)

Index

Α	D
ACCT 14, 40, 47, 54	DEACTIVATED BY MERCHANT 29
ACTION 39, 46, 52, 53, 54, 61	deactivating profiles
ACTION=A 14	parameters required 23
ACTION=C 23, 31, 33, 37	deactivating recurring payments profiles 21
ACTIVE 29	DESC 42, 49, 56
ADDITIONALBILLINGCYCLES 48	
AMT 14, 15, 40, 47, 54, 61	E
AUTOBILLOUTAMT 51, 60	-
AUTOBILLOUTSTANDINGAMT 46	EMAIL 42, 49, 56
	EXPDATE 14, 40, 47, 54
В	EXPIRED 29
DA DECC 14 40	EXPIRED status 30
BA_DESC 14, 40	
billing credit cards 16 billing outstanding amount 16	F
required parameters 33	failed normant pariods 41
requirements 33	failed payment periods 41 FAILEDINITAMTACTION 16, 29, 45, 51, 60
billing PayPal accounts 19	FIRSTNAME 42, 49, 56
billing the outstanding amount 16	FREIGHTAMT 43, 58
billing types	1 KEIGITIAWI1 45, 56
RecurringPayments 18	
5	G
C	getting recurring payments profile details 29
	parameters required 31
canceling recurring payments profiles 25	
CancelOnFailure 16	1
card security code 41, 48 CARDISSUE 43, 51, 58	
CARDISSUE 43, 51, 38 CARDSTART 43, 50, 58	including a trial payment period 15
CITY 42, 50, 57	initial non-recurring payment parameters 15
COMPANYNAME 42, 49, 56	
ContinueOnFailure 16	L
COUNTRY 42, 50, 57	I DILLING A CREEMENT DESCRIPTION 14
creating recurring payments profiles 39	L_BILLINGAGREEMENTDESCRIPTION 14 L BILLINGAGREEMENTDESCRIPTIONn 39
options for creating 14	LASTNAME 42, 49, 57
required parameters 11	LASTPAYMENTAMT 60
CURRENCY 41, 43, 48, 56, 61	limitations 9
CVV2 41, 48	
CVV2MATCH 56	
	М

MAXFAILEDPAYMENTS 16, 41

MAXFAILPAYMENTS 49, 56 regular payment period 9 defined 9 MIDDLENAME 42, 49, 56 N S NAME 42, 49, 57 setting number of failed scheduled payments 16 **NEXTPAYMENT 55** SHIPTOCITY 43, 50, 57 NOTE 47, 52, 53, 61 SHIPTOCOUNTRY 43, 50, 57 NUMCYCLESCOMPLETED 55 SHIPTOFIRSTNAME 43, 50, 57 **NUMFAILPAYMENTS 56** SHIPTOLASTNAME 43, 50, 57 SHIPTOMIDDLENAME 43, 50, 57 **SHIPTOSTATE 43, 50, 57** 0 SHIPTOSTREET 43, 50, 57 SHIPTOZIP 43, 50, 57 OPTIONALTRXAMT 15, 42, 49, 56 specifying a regular payment period 15 ORIGPROFILEID 46, 52, 53, 54, 61 specifying an initial payment 15 outstanding balance 9 specifying initial non-recurring payment 15 OUTSTANDINGAMT 51, 60 specifying regular pPayment period 15 START 14, 15, 40, 47, 54 P STATE 42, 50, 57 STATUS 46, 55 Payment 9 STREET 42, 50, 57 payment 9 suspending pending profiles 45, 51, 60 payment cycle 41 suspending profiles 41, 52 PAYMENTSLEFT 55 Switch or Solo cards 43, 50 PAYPERIOD 14, 15, 41, 48, 55 Switch or Solo transactions 58 PENDING 29 PENDING status 29 pending status 45 Т PHONENUM 43, 50, 57 TAXAMT 44, 51, 58 postal code 43, 57 telephone number 43 profile creation date 9 TENDER 39, 46, 52, 53, 54 profile ID 9 TERM 14, 15, 40, 47, 55 profile start date 9 Term 9 PROFILE TERMINATED 29 PROFILEID 46, 52, 53, 54, 61 TOKEN 14, 39 trial payment period 9 PROFILENAME 14, 39, 47, 54 parameters 15 trial period R defined 9 TRIALAMT 15, 45, 59 reactivating profiles TRIALFREIGHTAMT 15, 45, 59 parameters required 23 TRIALPAYPERIOD 15, 44, 59 reactivating recurring payments profiles 21, 53 TRIALSTART 15, 44, 58 recurring payments profile 9 TRIALTAXAMT 15, 45, 59 recurring payments profiles 7 TRIALTERM 15, 44, 58 limitations 9

status values 29 RecurringPayments 18 TRXTYPE 39, 46, 52, 53, 54, 61

U

updating recurring payments profiles 46 information that can be updated 35 required parameters 35 updating addresses 35 updating shipping address in profiles 37

V

viewing recurring payments profiles 53

Z

ZIP 42, 50, 57