



Manual

Extended Web Service
Reference Guide



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1. EXTENDED WEB SERVICE

1.1 DEBITSUCCESS TECHNOLOGY STACK

Our extended web services enable integration with all aspects of the Debitsuccess Total Billing Solution, including the ability to manage complex client payment variations. Detailed client, call and audit data which is gathered throughout the billing and credit control process is accessible on demand.

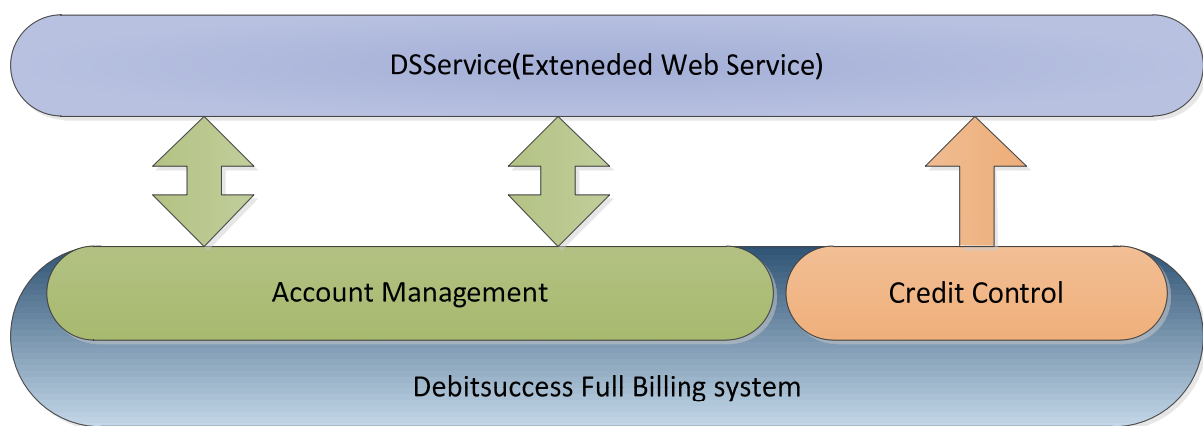


Figure 1: The Stack

CREDIT CONTROL PROCESS:

Figure 2 contains the Debitsuccess's credit control process in detail a distinct process.

- The extended web service allows credit control call notes to be queried.
- Debt collection payment history via the credit control process to be queried.

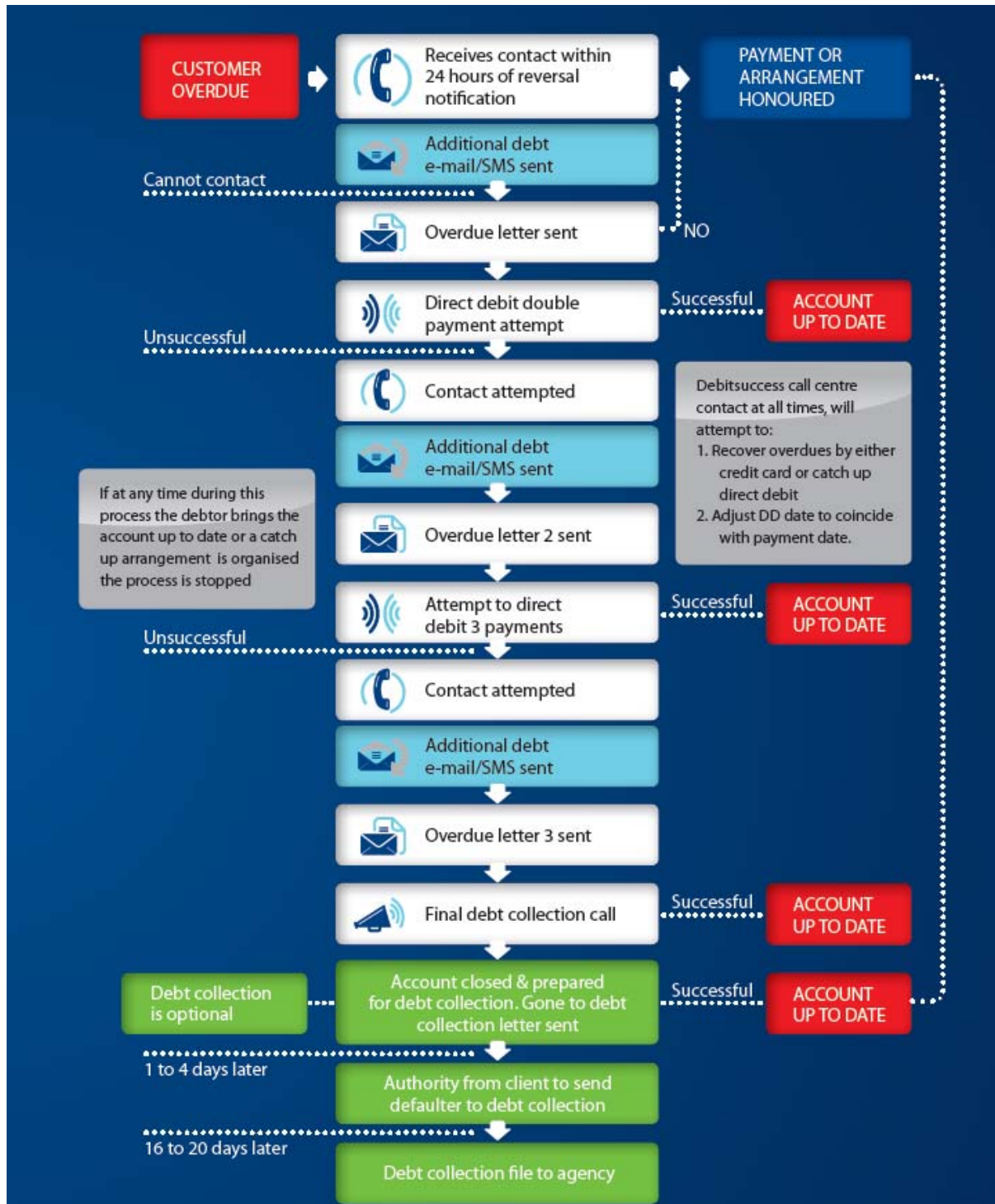


Figure 2: Credit Control

2. PROCESSPROCESS FLOW: MESSAGE ERROR HANDLING

2.1 ERROR HANDLING

This section contains a process flow example of how a web service consumer can handle message error codes. Figure 3 illustrates an example of this error handling use case.

STANDARD ERROR:

In Figure 3, a request has been send to the web service to post a new account by the consumer of the web service. The consumer of the web service will then inspect the response content for error codes. The request can be reposted once the request message content has been corrected based on the error code.

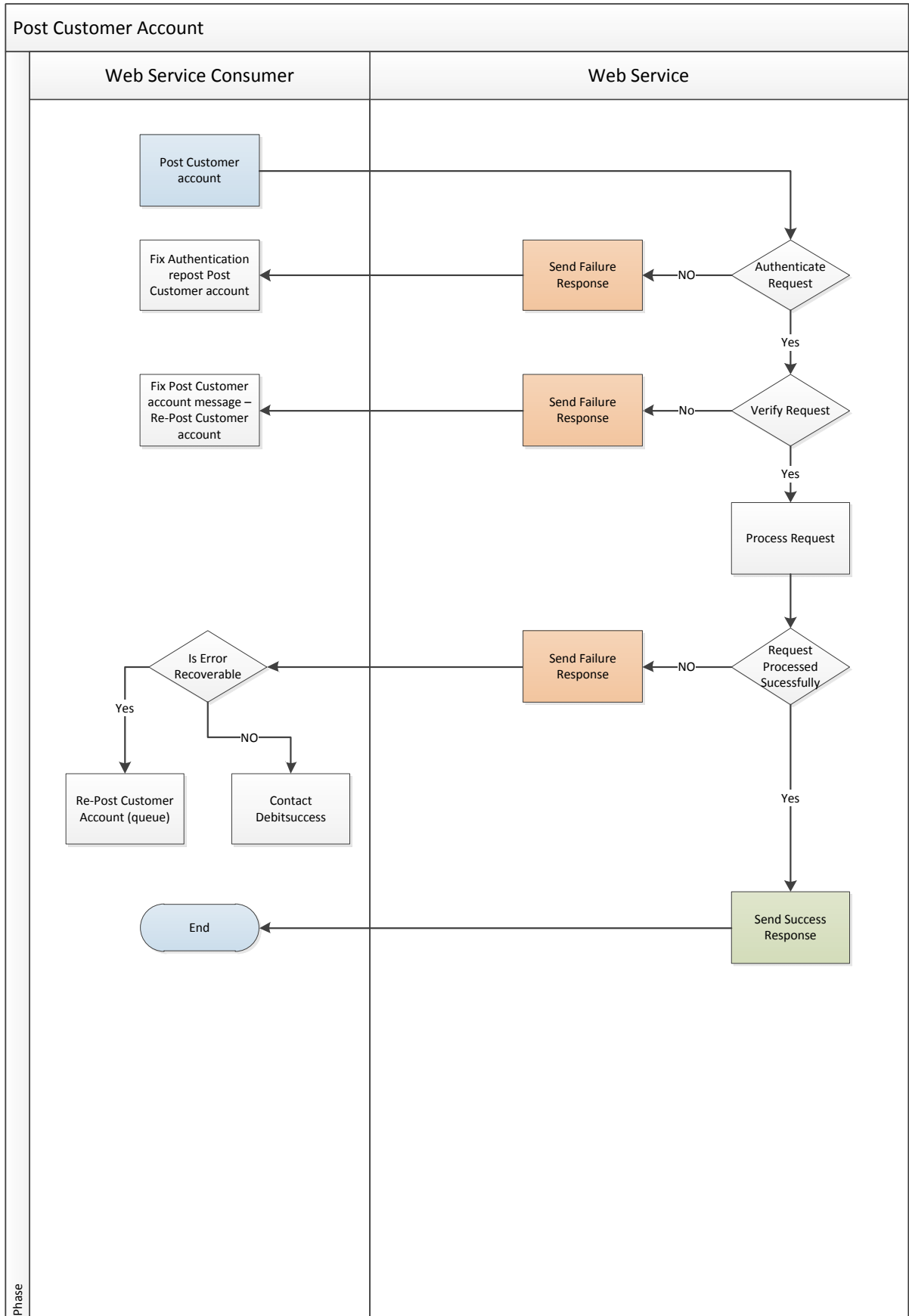
RECOVERABLE ERROR:

The following codes are recoverable; these error codes are return when the request has passed validation but processing of the message has failed to complete. In this case the user of the web service can implemented a failed message queue to repost failed request made to the web service as seen in Figure 3.

Code	Description
01	The server is not available
05	Request Time out
09	Failed to complete the process
11	Timeout/Deadlock Error - Please retry

NON-RECOVERABLE ERROR:

Code	Description
06	Unknown exception occurred during processing of this message



Verify Request

No → Send Failure Response

Yes → Process Request

Process Request

Request Processed Successfully

NO → Send Failure Response

Yes → Send Success Response

Send Success Response

Figure 3: Error Handling Process



3. PROCESS FLOW: RECONCILIATION

3.1 PAYMENT RECONCILIATION

This section provides information on how a consumer of the web service can possibly use the web service to reconcile a pay-out report with a customer's transaction history.

PAYMENT REPORT:

Debitsuccess Pay-out (Finance Department) process will send out weekly payment reports to a consumer of the web service. The weekly reports contain batch numbering for all transactions for the web consumer's customers and a date range (see Sample Pay-out Report Summary Only).

METHOD CALLS

The consumer of the web service can use the following web service methods to retrieve payment history either for an individual or for the all the consumer's customer.

- Get Payment History By Account ID
- Get Payment History By Date Range

Note: The search criteria needs to be inclusive of the batch range numbers (see Sample Pay-out Report Summary and Transaction)

RECONCILIATION:

With these methods and the payment history report the consumer of the web service can then reconcile transactions by using the consumer's own internal process. If any issue of discrepancy arises the consumer of the web service can resolve these directly with the Debitsuccess Finance department, this process is represented in Figure 4.



Tax Invoice

Snap Fitness
 6 Symonds Street
 San Francisco
 CA , 94107



Debitsuccess (USA) Incorporated
 185 Clara Street
 San Francisco
 CA 94107

Ph: 1 (415) 269-0529

Account: Payout Wk 14

Payment Summary Information

Payment Batches: 18/08/2015 (637) to 1/09/2015 (697)

	Amount
Total amount collected	-\$38.00
Less Commission on Credit Card / Other collections	\$265.96
Less Deductions (see attached summary)	-\$343.85
Distribution amount	\$0.00
Paid into Bank Account: 021000089-10330869898	\$0.00

Status Summary Information

Current Clients (at end of period)	38
Added for period	4
Cancelled for period	0
Net for period	4

Printed on: 1/09/2015 1:15:23 p.m.

Sample Pay-out Report Summary Only



Payments Report

Payment Batch Range: 118247 to 118543

Customer payments received

The transactions on this statement may include uncleared funds. Should the banks not honour such payments, they will appear as debits on your next statement.

Name	MTS	Reference	Your Reference	Particulars	Debit	Credit	Date	Balance
Meek, Penny	CC	FM0000000	FMO088893529		-85.0		Mar 30	-\$65.00
Wale, Catherine	DD	FM0000000	FMO0886499			16.95	Apr 10	-\$48.05
Abbas, Fozia	DD	FM0000000	same			86.45	Apr 10	\$38.40
Abbott, Tracey	CC	FM0000000				14.95	Apr 10	\$53.35
Accetta, Andrea	CC	FM0000000	FMO088894284			23.95	Apr 10	\$77.30
Acfield, Jasmine	DD	FM0000000	FMO088894092			16.95	Apr 10	\$94.25
Acquaro, Nathan	DD	FM0000000	FMO08894050			19.95	Apr 10	\$114.20
Adams, Jemima	DD	FM0000000	8 Eileen Ave, K			16.95	Apr 10	\$131.15
Adams, Taury	DD	FM0000000	FMO088896824			33.90	Apr 10	\$165.05
Ahern, Nicki	DD	FM0000000	FMO088893816			17.95	Apr 10	\$183.00
Akesson, Christian	DD	FM0000000				16.95	Apr 10	\$199.95
Akesson, Matthew	DD	FM0000000				16.95	Apr 10	\$216.90
Albiston, Tara	CC	FM0000000	FMO088894875			19.95	Apr 10	\$236.85
Alder, Robert	DD	FM0000000	FMO088894683			19.95	Apr 10	\$256.80
Alderman, Tracey	CC	FM0000000	FMO088895899			39.90	Apr 10	\$296.70
Aleksic, Russell	DD	FM0000000	FMO088895207			16.95	Apr 10	\$313.65
Alexander, Brittany	DD	FM0000000	FMO088895112			33.90	Apr 10	\$347.55
Alexander, Sherryn	DD	FM0000000				16.95	Apr 10	\$364.50
Allen, Bethany	CC	FM0000000	FMO088895614			19.95	Apr 10	\$384.45
Allies, Juanita	CC	FM0000000				16.95	Apr 10	\$401.40
Allison, Tania	CC	FM0000000	FMO0887350			17.95	Apr 10	\$419.35

Sample Pay-Out Transaction Report

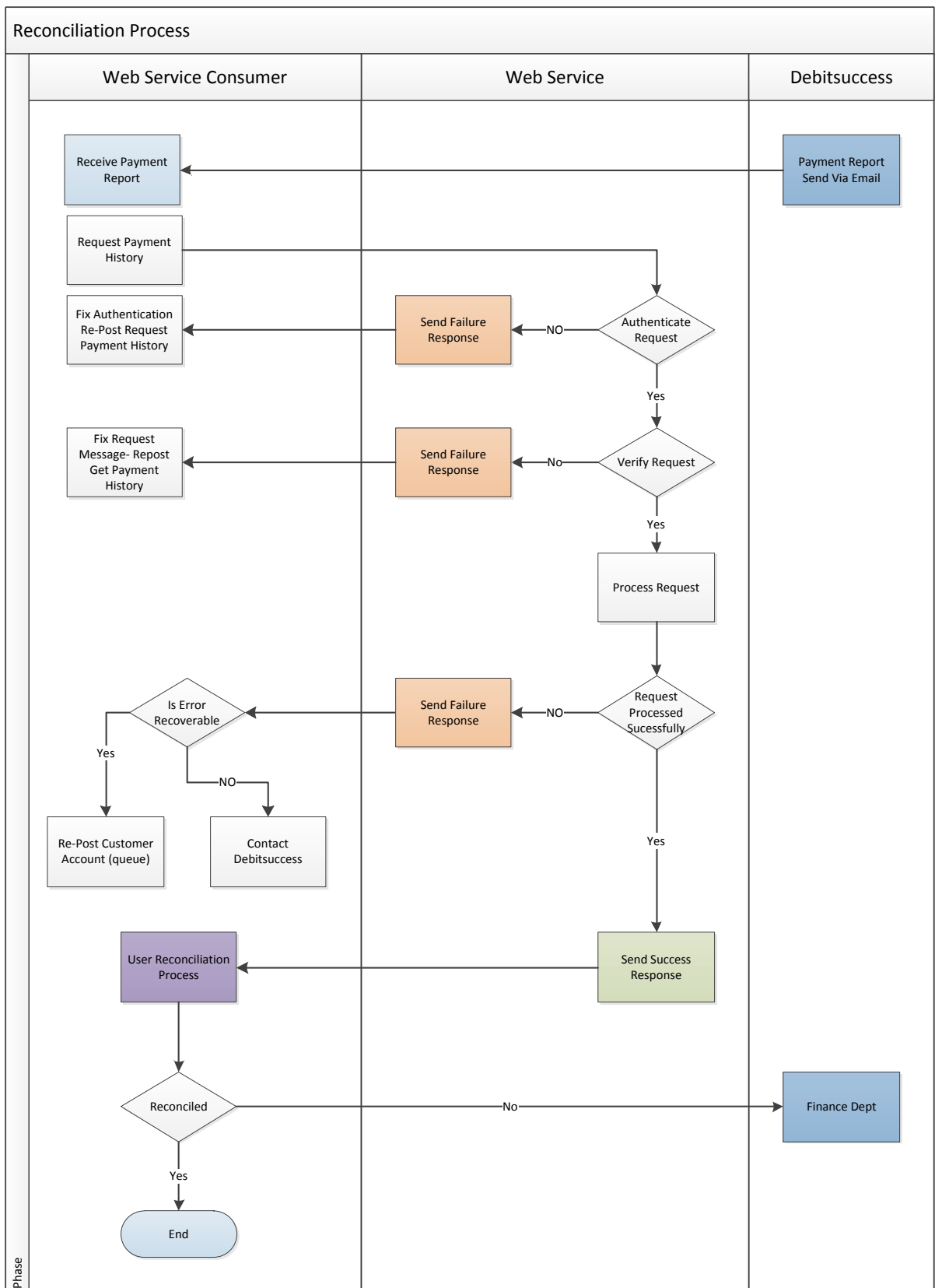


Figure 4: Reconciliation Process

4. PROCESS FLOW: REAL TIME CREDIT CARD PAYMENT

4.1 REAL TIME CREDIT CARD PAYMENT

This section provides guidance on a process flow for requesting real time credit card payment.

METHOD CALLS

The consumer of the web service can use the following web service methods to send real time credit card payment, and check the status of the request.

- Process Card Payment For Customer Account
- Get Card Payment Status For Customer Account

PROCESS DESCRIPTION:

Figure 5 illustrate the process of requesting real time credit card payment.

Initiate a credit card payment by calling `ProcessCardPaymentForCustomerAccount` with the relevant information. A successful response is returned if the request message is process successfully, payment status information is also returned as part of the response. The user waits a recommend period of time of 1-4sec to initiate a `GetCardPaymentStatusForCustomerAccount`.

The status codes returned in the successful response from `GetCardPaymentForStatusCustomerAccount`:

Status	Description
Decline	If this status is returned from <code>GetCardPaymentStatusForCustomerAccount</code> the payment was not processed due to the information in the request being in error in which case the user must correct the request before reissuing the <code>ProcessCardPaymentForCustomerAccount</code> request.
Busy	If this status is returned from <code>GetCardPaymentStatusForCustomerAccount</code> the payment was not processed due to the payment gateway being busy, the user must reissue the <code>ProcessCardPaymentForCustomerAccount</code> request.
Processing	<p>If this status is returned from <code>ProcessCardPaymentForCustomerAccount</code> then it means the payment gateway is currently processing the requested payment; the user should wait the recommended period of time of 1-4sec before issuing a <code>GetCardPaymentStatusForCustomerAccount</code>.</p> <p>If this status is returned from the <code>GetCardPaymentStatusForCustomerAccount</code> the user should wait for a recommended period of time of 1-2sec before reissuing a <code>GetCardPaymentStatusForCustomerAccount</code> request.</p>
Complete	If this status is return from <code>GetCardPaymentStatusForCustomerAccount</code> , the payment was successfully processed no further user action is required.

Note: The flow does not go into the details of the message request structure please refer to the user guide for more information. The process flow also does not illustrate how to handle message errors please refer to Web Message Error Handling process flow for guidance on handling web message errors.

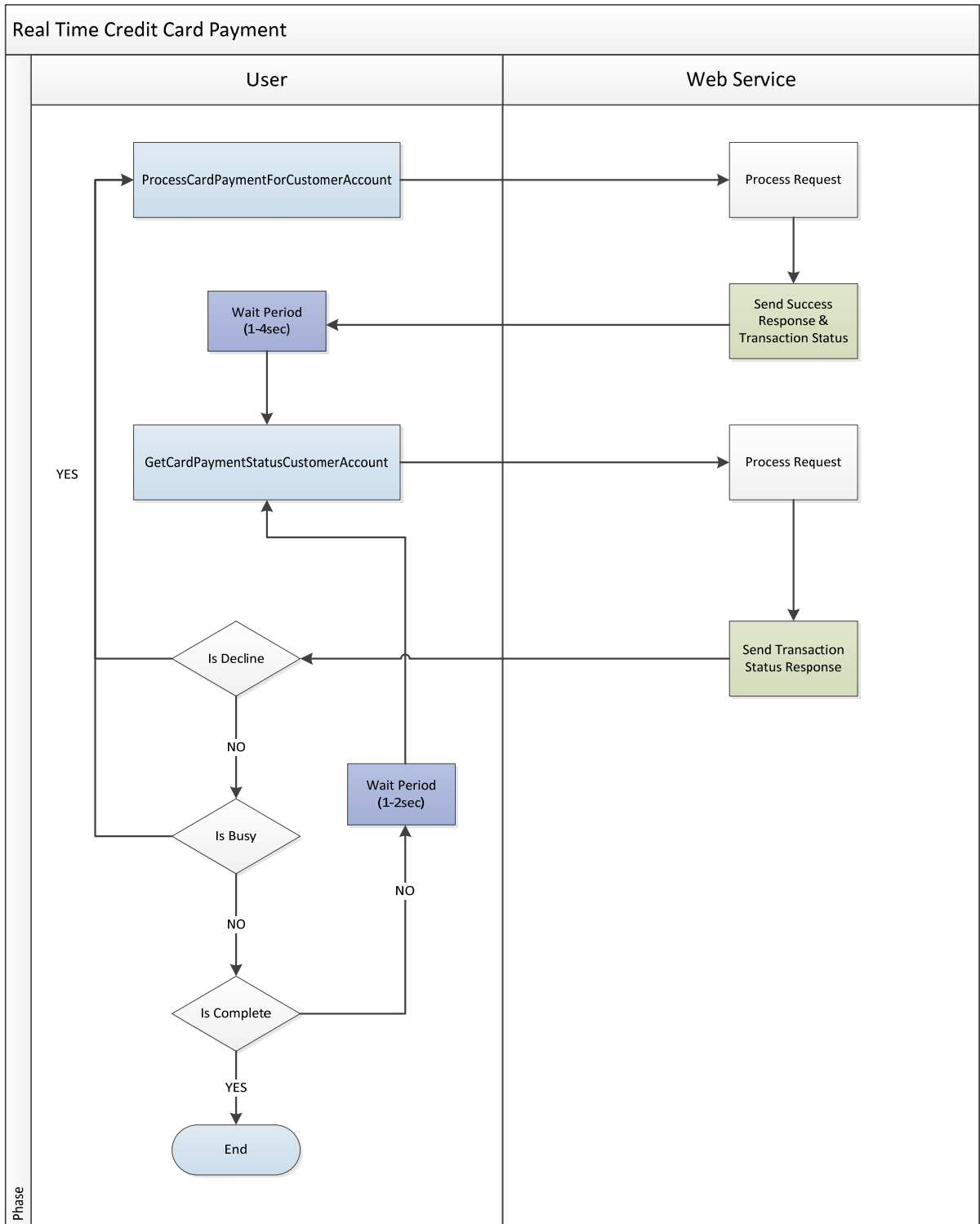


Figure 5: Real Time Credit Card Payment Process Flow

5. CONNECTIVITY

5.1 TROUBLESHOOTING GUIDANCE

The following provides guidance if connectivity issues are encountered with accessing the extended web service.

- Check firewalls settings for port 443(https)
- Use Fiddler to verify request and post are getting to the service URL
- Use Visual Studio's WcfTestClient.exe application to test the internal network is able to reach external web service

5.2 PHP TROUBLESHOOTING

WAMP REQUIRED EXTENSIONS:

The following extensions are required to be enabled if using WAMP, PHP development technologies

ENABLING REQUIRED EXTENSIONS:

Enable the following extensions:

- SOAP
- SSL

WAMP INSTRUCTIONS

Figure 6 and Figure 7 show how to enable these extensions via the WAMP launch bar.

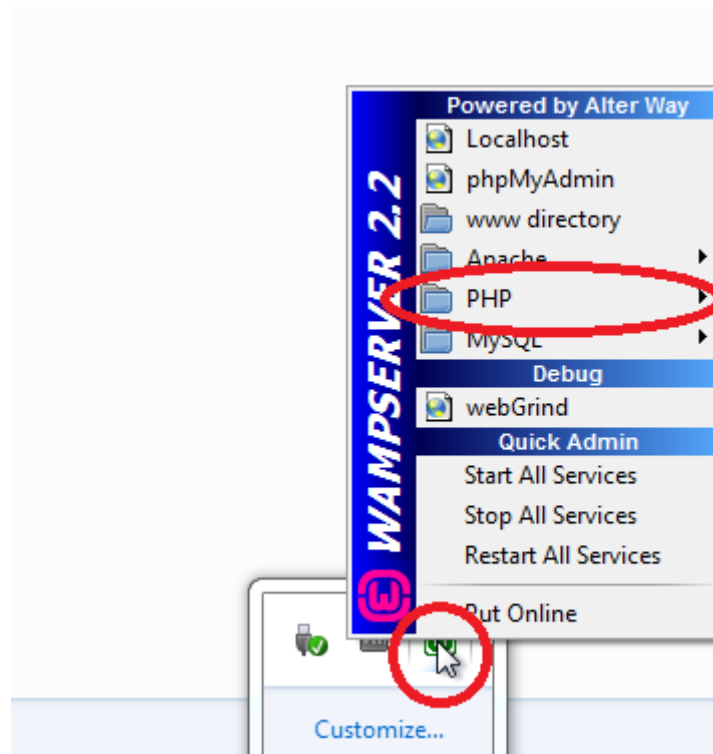


Figure 6: Launch bar

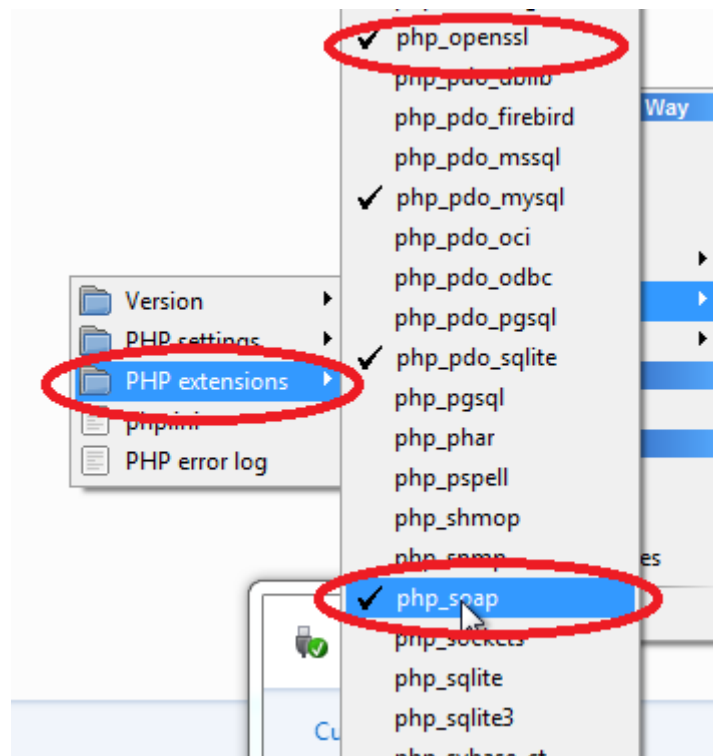


Figure7: PHP Extensions

6. PROCESS FLOWCHART: STANDARD DEBITSCUCCESS RENEWAL MODEL

6.1 OVERVIEW

A Customer signs up a contract for a specified term (say one year) with weekly, fortnightly or monthly payment options with a consumer company (Debitsuccess (DS) client). The Consumer Company sends a copy of the contract to DS. A new account for the customer is setup in the DS system and the billing process is initiated as per terms in the contract. Once this customer account reaches end of term it may require renewal. Renewing the customer account in the DS system requires the existing account to be closed and a new (renewal) account to be setup. However there are multiple scenarios to be considered before the new (renewal) account is setup in the DS system.

6.2 DS-SIDE RENEWAL SCENARIOS

- 1. End of Term Scenario:** The customer account reaches end of term and all payments have cleared.
 - **DS-Side Processing:** The existing account reaches end of term and closes in the DS system. A new account with existing customer details is setup in the DS system with the same conditions as in the existing contract and billing continues for the new term.
- 2. Paid in Full Mid-Term Scenario:** The customer account status is open and is being billed as per the conditions in the contract, it is mid-term (say the fifth month) and the customer calls the DS call centre and pays the remaining contract value in full.
 - **DS-Side Processing:** The existing customer account balance in the DS system becomes zero (customer paid in full) and continues to be open until it reaches end of term and then closes. A new account with existing customer details is setup in the DS system with the same conditions as in the existing contract and billing continues for the new term.

NOTE: In both the Scenarios a new account is loaded only after DS has received a request from the Consumer Company. However, we recommend the Debitsuccess Standard renewal Model for the Customer account to be correctly renewed.

6.3 PROCESS PRE-REQUISITES (CONSUMER COMPANY)

1. The Customer is required to authorise/agree to the renewal of account.
2. The Consumer Company should notify the customer well before end of term (say 30 days before) via email or letter stating that the account will be renewed, for the customer to opt-out. (**Note: depending on the terms and conditions of the contract this communication may be for an opt-in option and the notification period may vary**)
3. The Consumer Company should make the request to renew a customer's account at least 3 days (recommended) prior to the end of term to avoid gaps in the billing cycle.
4. The Consumer Company should store all legal communication with the customer at the time of the renewal, to be produced in case of a dispute.
5. The Consumer Company should maintain a database with updated records of the customer's account details (e.g. account start date, renewal date, payment details etc.) at all times in synch with the DS system via the DS web services to be able to use this information to process renewals and renewal notification.



6.4 STANDARD DEBITSUCCESS RENEWAL MODEL (RECOMMENDED*)

* Please contact the Debitsuccess BDM for custom requirements.

NOTE:

1. The Standard Debitsuccess Renewal Model includes The Renewal process and the Renewal Notification process.
2. Renewal Letter should include a note to the customer that the payment debits will continue as regular post renewal.
3. The 6 day transition period acts as a buffer to check for reversals/ bounced payments.
4. DS Daily status report includes details on all accounts where the customers have paid in full, represented as request to cancel.

