# Credit Card Payment Integration with BillingCenter

## Overview

The credit card is a very popular consumer's choice for paying for goods and services. Being able to accept credit cards as a payment method for insurance policy premiums is an important tool in attracting "the right customer" in an increasingly competitive area of the consumer-oriented segments of the P&C insurance market.

Guidewire BillingCenter has been designed to support a variety of electronic payment processing options with the common functionality of recurring payment scheduling available right from the base product. With minimal integration efforts, BillingCenter can deliver a first-class solution incorporating robust and secure credit card payment processing.

BillingCenter supports two major billing arrangements: direct billing and agency billing. Credit card payments are typically used with direct billing, where the carrier is responsible for billing customers directly. The following scenarios describe typical flows of funds through a carrier's electronic channels when the billing type is direct bill:

- Debits (incoming payments)
  - Recurring client payments where the payments are charged to the client's credit card on a pre-determined schedule agreed with the client
  - One-time (ad hoc) electronic payments, without establishing a recurring pattern, initiated via web or an IVR interface or with a live operator accepting the credit card information over the phone
- Credits (outgoing payments)
  - Client disbursements (excess funds on client accounts) may be processed via credit card channels

The flexibility of the BillingCenter architecture supports automated handlers for failed transactions that may occur as part of credit card payment processing. But given the instant availability of the credit card payment authorization and with proper design choices, the need for such handlers could be eliminated.

BillingCenter also supports field-level encryption of sensitive data, such as customers' credit card numbers, ensuring that the stored data is well secured and in compliance with the "Protect Cardholder Data" recommendations of the PCI Data Security Standard ver.1.2 (https://www.pcisecuritystandards.org)

## Integration Implementation

Implementation of a credit card payment processor integration with BillingCenter involves two major steps:

- Initiating a payment execution in an external system (with credit card payment authorization step included in the process), which makes use of Guidewire's proven event messaging subsystem
- Posting a payment in BillingCenter that represents funds received from the customer as a result of payment execution

Credit card payment scheduling and execution should be implemented in concert with other


### SUMMARY

Guidewire BillingCenter offers plenty of options for integration with a wide variety of credit card payment processors and can implement execution of both ad-hoc and recurring credit card payments.

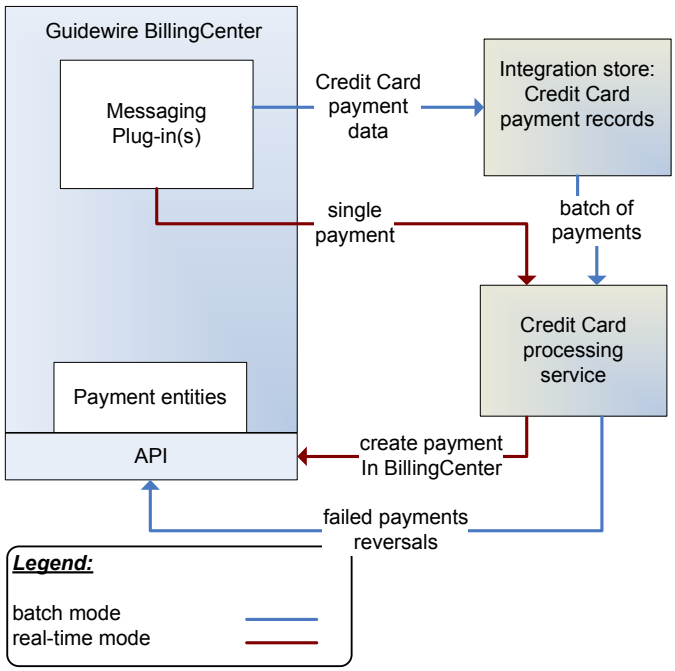
BillingCenter's advanced integration capabilities allow for greater flexibility in how electronic payments, including credit cards payments, are scheduled, executed, and maintained.

types of electronic payments such as the ACH/EFT method. The key difference of credit card payments is that the payment validation (in the form of authorization code) can be available immediately so posting of the payment in BillingCenter may be performed after the authorization is received. Following this design simplifies the process as there is then no need to reverse credit card payments later – they would have already been confirmed and validated.

BillingCenter's integration architecture provides great flexibility in how credit card integrations can be technically implemented. It can support both real-time payment executions, which would be via vendor-provided remote API calls, and batch executions, where payment data is outputted to an intermediate table and later transmitted for execution in batches.

The following table summarizes the major BillingCenter integration features that may be used in a typical credit card integration implementation.

| Mechanism | Application |
|---|---|
| **Internal Batch Processes** | Create payment request and perform payment request status changes |
| **Event Message**<br>▪ PaymentRequestChanged<br>▪ OutgoingPaymentAdded | Deliver payment execution instructions to an external system in real-time or to an integration table for batch submissions at a later time |
| **Pre-Update rules**<br>▪ PaymentRequest status change | Custom code to create a payment in BillingCenter based on an internal event |
| **IBillingCenterAPI, IPaymentAPI - extendable Custom web services** | Custom code to create a payment in BillingCenter based on an external event (credit card payment authorization is received ) |




*Component diagram of a BillingCenter integration with credit card payment processing system.*

## Example Implementations

- **Service Providers:** SolveSE (UK)
- **An in-house credit card payment processing service** with file exchange data delivery

## Integration Complexity

- **Suggested Phase of Implementation:** Any Phase, but may need coordination with other electronic payment integrations
- **Complexity of Integration:** Medium
- **Average Work Effort:** 550-1100 hours

** Average Work Effort is the typical effort seen in implementing this solution on a range of Agile-based, Guidewire-led projects of varying complexities. This includes any requirements analysis, data mapping, configuration, integration, reporting, and infrastructure tasks. It also includes development unit testing and QA. It does not include any legacy work or any formal integration, user acceptance, or performance testing.*