



# BillPlex<sup>TM</sup>

CLEC Package Reference Guide  
for System and Billing  
Administrators

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# Chapter 1

## About the CLEC Package

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## Introduction to the CLEC Package

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### **About this Manual**

The CLEC Package Reference Manual for System and Billing Administrators provides a listing of the pre-configured components of the CLEC Package, describes the Package's features, and contains some setup procedures. It serves as a reference source designed to assist System and Billing Administrators in performing the tasks necessary to operate the CLEC Package.

This manual provides instructions and detailed descriptions for modifying the pre-configured CLEC Package according to your company's needs.

### **Assumptions and Conditions**

This manual assumes that you installed and configured the CLEC Package as described in the *BillPlex Installation and Configuration* guide. It also assumes that you are the system or billing administrator and are familiar with billing and customer care.

### **The CLEC Package**

The CLEC Package is a valuable library of pre-configured software specifically designed to enable the CLEC functionality with the BillPlex Billing and Customer Care system. The package enables CLECs to quickly launch basic local and long distance service offerings minimizing time to market and cost of implementation and support.

The package includes:

- local market modules
- long distance market modules
- interfaces to third-party taxing
- address validation software

The BillPlex CLEC package offers service providers a complete service-ready rating and billing model for a faster and easier launch, while maintaining flexibility to customize the package to meet specific business requirements.

## CLEC Package Functionality

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<b>Rating and Billing</b>	The CLEC Package supports rating and billing of both local and long distance switched and dedicated services. It also supports monthly recurring charges.
<b>Pre-configured Rate Plans</b>	<p>The CLEC Package contains pre-configured rate plans that support:</p> <ul style="list-style-type: none"><li>• recurring charges</li><li>• non-recurring charges</li><li>• recurring introductory charges</li><li>• pro-rated charges</li><li>• non-tax related surcharges</li><li>• subscriber specific waivers of charges</li><li>• local and long distance calling areas plans that include local, intrastate, interstate, and international jurisdictions</li></ul>
<b>Import and Rate local and long distance usage</b>	<p>The CLEC Package has the ability to import and rate local and long distance usage for:</p> <ul style="list-style-type: none"><li>• inbound calls</li><li>• outbound calls</li><li>• calling card</li><li>• directory assistance</li><li>• operator assistance</li><li>• toll-free calls</li></ul>
<b>Billing and Customer Care Support</b>	<p>The CLEC Package contains billing and customer care support functions that include:</p> <ul style="list-style-type: none"><li>• late payment application</li><li>• standard invoice template</li><li>• treatment and collections</li><li>• basic security</li><li>• general ledger reporting</li></ul>

## CLEC Package Components

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### **Overview**

The CLEC Package includes:

- local and long distance market modules
- interface plug-ins to taxing and address validation third-party software
- set-up and acceptance testing.

### **Local and Long Distance Template Data Load**

The CLEC Package offers a configurable data model that contains basic service offering, late payment application, security, sample subscribers to test the system, residential and business market types, and a treatment and collection process.

### **Configurable Rate Plans**

The CLEC Package contains predefined rating procedures to support various rates and discount percentages including calculation of:

- recurring charges
- non-recurring charges
- local usage charges
- long distance usage charges
- non-tax related surcharges
- subscriber specific overrides or waivers of charges

### **Late Payment Application**

The late payment application enables the system to implement a late payment fee for subscriber late payments. This feature allows you to configure the balance threshold that will trigger late payment fee and waive late payment fee on a per subscriber basis.

### **Standard Paper Invoice Format**

The CLEC Package offers a standard paper invoice template which you can customize to fit your business requirements.

## External Interface Plug-ins

An external interface plug-in is a software interface between a third-party application and BillPlex that utilizes Daleen's published Application Programming Interface (API). This interface provides faster implementation, less customization, and a planned upgrade path to support third-party application integration.

Some examples of third-party applications available to integrate within the CLEC Package are:

Interface	Description
Vertex	Leading taxing package that supplies an accurate taxing solution for all domestic tax jurisdictions including federal, state, and local
Qualitative Marketing Software (QMS)	Leading address validation package that verifies subscriber addresses against a US Postal Service certified database

## Setup and Acceptance Testing

When you allow certified professionals employed by Daleen to install, configure, and test BillPlex and the CLEC Package for you, you receive proper installation and optimal performance within predefined parameters.

## CLEC Package Services

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### Overview

There are eleven services available in the CLEC Package.

<b>Service</b>	<b>Description</b>
Business Dedicated 800 Long Distance	inbound toll free service via a dedicated link from the origination point
Business Dedicated Long Distance	outbound service via a dedicated link to the termination point
Business Fixed Rate Line	business subscriber line that receives a monthly charge for service
Business Switched Long Distance	business 1 + interLATA service
Calling Card	calls are billed back to subscriber's line number
Late Payment	interest rate, usually applied on a monthly basis, for outstanding balances
Primary Rate Interface (PRI) Local Service	multiple channel interface allowing for data, voice, and other services on one channel and control and signaling information on the other channel
Residential Fixed Rate Line	residential subscriber line that receives a monthly charge for service
Residential Service Long Distance	residential 1 + interLATA service
T-1 Local Service	dedicated trunk hooked up directly to the subscriber's end office, allowing subscribers to bypass some access charges associated with the traffic



Service	Description
T-1 Service	point-to-point circuit that allows for calls to be placed or received from an originating or terminating predefined location, allowing subscribers to bypass all access charges associated with the traffic

## Local and Long Distance Features

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### Overview

The CLEC Package offers residential and business services, calling card, and wholesale support.

### Residential Feature

The following table describes the residential services that the CLEC Package offers.

Feature	Description
Basic Residential Line	Supports both local and long distance service
Custom Calling Features	Enables non-recurring and monthly recurring billing of ancillary services including voice mail, call forwarding, three way calling, and more than 30 additional features

### Business Features

The following table describes the business services that the CLEC Package offers.

Feature	Description
Basic Business Line	Supports local and long distance service on a single line (central office line)

Feature	Description
Basic Business Line Custom Calling Features	Enables non-recurring and monthly recurring billing of ancillary services including voice mail, local measured service, call forwarding, and more than 30 additional features
Central Office Trunk	Provides ground start trunk which terminates on PBX equipment and supports local and long distance dialing with custom calling features including call forwarding, operator assistance, and more than 10 additional features
DS1 Circuit	Supports DS1 circuit level and channelized billing with local and long distance service including local loop, DS1 facility access charges, and more than 10 additional features
ISDN PRI Circuit	Supports ISDN PRI circuit level billing with local and long distance service including DS1 facility access, call forwarding, and more than 10 additional features
Channel Banks/ CSU/ Cards	Includes customer premise equipment required to terminate dedicated circuits, channel banks, channel bank circuit charges, and CSU charges
DID	Provides Direct Inbound Dialing including number blocks of up to 20, 50, and 100 numbers
DOD	Provides Direct Outbound Dialing in both PRI and T-1 configurations

**Calling Cards**

The CLEC Package offers Intrastate, Interstate, and International calling card dialing for both residential and business.

**Wholesale Support**

The CLEC Package offers Intrastate, Interstate, and International dialing for both residential and business services.

## Business Support Features

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### Late Payment

Using the CLEC Package, you can assign optional late payment fees for late subscriber payments.

### Treatment & Collections

The BillPlex CLEC Package is set up with one treatment and collection plan that contains five steps:

Stage	Process
1	Send the first bill message.
2	Send a collection letter.
3	Make a collection call to the customer.
4	Send a second bill message.
5	Suspend the service.

### Security Setup

The CLEC Package contains three security groups:

For the . . .	You can assign . . .
CSR	access to all functions in the Operations pull down menu.
System Administrator	access to all system and administrative functions.
Finance Personnel	access to payment, the treatment work queue, and customer detail records for account balance information and reports.

## CLEC Package Service Bundle

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<b>Overview</b>	The service bundle is designed to provide basic setup of the CLEC Package. It is required to provide a complete billing solution for a service provider.
<b>Service Usage Record Import</b>	The CLEC Package provides three Service Usage Record (SUR) masks that are configured for the customer's usable usage imports by Daleen's Professional Service Team.
<b>Standard Invoice with Customer Logo</b>	The service bundle includes a standard paper invoice with your company's logo.
<b>General Ledger Report</b>	The General Ledger report enables service providers to map transaction types to defined general ledger accounts and produce reports that are defined by begin and end dates. This information enables the CLEC Package to present summed billed, unbilled, earned, and unearned transactions to general ledger accounts.

# Chapter 2

## System Conventions

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## Getting Started

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### Accessing the System

The CLEC Package is easy to startup and use. You can start the system using the following instructions.

Step	Action
1	Double-click the BillPlex icon located on your desktop. Result: The BillPlex System Login screen appears.
2	Select a Database name or alias from the drop-down list.
3	Enter an assigned User Name.
4	Type your Password.
5	Click Login. Result: The BillPlex Desktop window appear.

### Modifying the CLEC Package

Daleen delivers a fully configured CLEC Package with every component set up and ready. To fully benefit from the package, we suggest that you keep the pre-configurations. Only change what the manual says that you can change. Modifying the CLEC Package can disturb the data model.

### Package Pre-configured Items

The following table provides a broad listing of the pre-configured elements existing in the CLEC Package. These items are discussed in detail in later chapters of this manual.

Feature	Function
Security	specifies users, user accounts, and user privileges and to grant or restrict user access to the software
System Tables	specifies how your company bills and how the system operates for your company
Subscriber Data	provides information about your customers

<b>Feature</b>	<b>Function</b>
Transactions	specifies what you bill or charge
Taxation Worksheets	ensures proper taxation for the appropriate countries and states
Agents	ensures that agents receive the proper commission types
Abstract Functions	provides instructions on what type of functions the system to runs for provisioning. Provisioning can be designed through a mediation platform, by Daleen trained professionals
Services	outlines the services that you offer to subscribers
Connections	links your subscribers to services, subscriber records, Service Usage Records (SUR), and associated rate plans
Rating	specifies the amount charged per fixed unit for a particular feature
SUR Tables	stores SUR Table definitions and their attached service and feature types
SUR Masks	filters either batch or manual input into the system and to restrict the characters your users enter by requiring valid characters and formats
Invoicing	specifies the format and delivery method for your invoices.
Treatment	provides a plan for late paying subscribers
Reports	displays various revenue items

## BillPlex Buttons and Menus









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### Application Shortcut Buttons


The following application shortcut buttons appear at the top of the BillPlex Desktop window. They provide easy and quick access to major application windows.



The following table displays each shortcut button and provides a description.









Application Shortcut Button	Description
	Runs the Subscriber Provisioning Wizard that starts the provisioning process.
	Displays the Search Subscribers window to begin searching for subscribers.
	Runs the Invoice View window where you view or change invoiced/uninvoiced transaction information.
	Displays the Invoice Batch Monitor window, that monitors the progress of a subscriber batch invoice run.
	Displays the Select SUR Table window to repair a Service Usage Record imported into BillPlex.
	Displays the Payment Entry Search window, which searches for a subscriber account where you want to apply payment.
	Displays the SUR Manual Entry Selection window that creates a new SUR Manual Entry Form.
	Displays the SUR File Import window to import a Service Usage Record file into BillPlex.



	Displays the SUR Batch Error window to review or update a SUR batch error file.
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### The BillPlex Tool bar

The BillPlex tool bar appears at the bottom of most Billplex windows. It provides you with the following functionality:

If you want to . . .	Then click . . .
add a new record	
delete a record	
advance to the next record	
return to the previous record	
clear data	
post information	
advance to the first record	
advance to the last record	

**NOTE:** The availability of these functions vary depending upon your database conditions, and on whether or not the open window allows users to perform certain operations. If the tool bar button is dimmed, the function is disabled. If the tool bar button for a selected option appears black, the function is active.

## Pop-up Menus

When inside of a field, column, or window, you can right-click and a pop-up menu appears with actions that you can initiate through selecting the appropriate choice. The pop-up menu is essentially a short cut to move to related functions in the system without having to access menus or navigational aids.

## User Prompting in Data Entry Windows






BillPlex assumes that each user, at a given permission level, is qualified to make changes to the system. Thus, BillPlex does not always prompt the user to confirm additions, modifications, or deletions. This is an *important* distinction. Once the user commits an action, the action *will occur*—there are no further warnings.

## Keyboard Entries

You can make keyboard entries by pressing the **Alt** key + the underlined letter in any button or menu. All menus, windows, and dialog boxes allow movement by tabbing or arrow-keying. For example, instead of clicking the **D**one button with the mouse, you can select **Alt + D**.

## Global Window Buttons

The following group of command buttons appear on most BillPlex windows.

Button	Description
	refreshes the window to reflect the current status or changes
	closes the active window and saves any modifications
	enables you to perform a global search for the information you need
	closes the active window without saving modifications
	enters or confirms new record information.

## BillPlex Windows

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### Overview

BillPlex windows are easy to access. They provide standard Microsoft Windows conventions and display after you double-click an icon or select an item from a drop-down list, menu, or pop-up menu.



### Minimizing BillPlex Windows

You can minimize BillPlex windows by selecting the minimize button in the top right corner of the window's title bar.



**NOTE:** After minimizing, the window's title bar appears at the lower edge of the desktop. The first nine letters of the title are displayed.

### Maximizing BillPlex Windows

When you maximize a window, you are resizing the window to totally fit into the screen space. To maximize the window, select the maximize button in the top right corner of the title bar.



## Getting Help

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### **Related Publications**

This manual serves as a resource for the pre-configured CLEC Package. To obtain more detailed instructions or information not found in this guide, refer to:

- BillPlex™ Online Help
- BillPlex™ System Administration manual
- BillPlex™ Installation and Configuration manual
- BillPlex™ Operations manual

### **Additional Support Services**

Following are some of the services offered in support of the BillPlex CLEC Package by the Daleen Technologies Professional Services Group:

- System Integration and Setup
- Training
- Project Management
- System Support
- Software Maintenance and Upgrades
- Informix Database Setup

### **Maintenance Support**

Daleen Technologies, Inc. is committed to providing the best service and support available in the industry. Our support programs offer cost-effective preventative and corrective maintenance plans that ensure smoother operation of your BillPlex CLEC Package. For more information on standard or preferred customer support options, contact your Daleen account representative.





# Chapter 3

## Security

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## Security for the CLEC Package

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### **Introduction**

System security is one of the most important aspects of your job. As the System Administrator, you are responsible for maintaining security for yourself, the customer service representatives (CSRs), Operations, and for the Finance personnel.

### **About the Pre-configured CLEC Security**

The aspects of security are maintaining the Privilege and Security Groups and the Users. The pre-configured CLEC package contains Privilege and Security Groups and a System Administrator User that are already set up. Each Privilege Group has assigned database objects, client objects, and reports. These assignments are based on job functions and responsibilities. The Security Groups have Privilege Groups assigned to them. We recommend that these configurations remain unchanged.

Daleen delivers the BillPlex CLEC Package to you with security already set up. Other than possible minor manipulations, you should not have to perform any security modifications.



## CLEC Security Layout

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### **Security Components**

The CLEC Package pre-configured security consists of:

- Privileges
- Security Groups
- Users
- Assignable CLEC Objects

### **Privileges**

The pre-configured Privilege assignments are determined by the type of access that the Privilege group needs to complete their jobs using the BillPlex CLEC Package. These decisions are based on each Privilege Group's responsibilities. For example, a CSR does not need to manipulate Tables, Views, or Stored Procedures; therefore, the CSR does not have access privileges to Tables, Views, or Stored Procedures.

Alternately, the System Administrator does need access to Tables, Views, and Stored Procedures to implement features, add new Tables, and any other processes to support the CLEC functionality.

### **Pre-configured Privileges Groups**

The pre-configured Privileges Groups are:

- Administrator Access Privilege
- Operator Access Privilege
- Finance
- CSR

### **Security Groups**

The pre-configured Security groups are based on the assigned Privileges. The Security groups include:

- CSR
- Finance
- Administrator

## Users

The System Administrator is the only pre-configured user. You must add the other users, then assign Security groups to them.

The users' legal name or login name should appear in the Users column of the Security screen.

## Pre-configuration Table for Security

The following table lists the pre-configured Security Groups, Privilege Groups, and Users. It indicates whether or not a particular group is pre-configured or created and if assignments were made for the group. Use this table as a guide to the configuration tasks that you must perform.

Yes indicates that the task is pre-configured and No indicates that you must configure the task.

Security Tasks	Created	Assigned
Administrator Access Privileges	Yes	Yes
Operator Access Privileges	Yes	Yes
Finance Privileges	Yes	Yes
CSR Privileges	Yes	Yes
CSR Security Group	Yes	Yes
Finance Security Group	Yes	Yes
Administrator Security Grp.	Yes	Yes
Administrator User	Yes	Yes
System Users	No	No

## Tasks involved in Modifying the Pre-configured Security

The following table provides an overview of modifications that you can make to the pre-configured security. See the *Setting Up Security* section in this chapter for steps on how to perform the tasks below.

If you need to . . .	Then you must . . .
Create a new Privilege	assign database, client, and report objects to the new privilege.
Create a new Security group	assign Privileges to the new Security group.
Add Users	assign a Security group to the new Users.

## Assignments

Start with the Database Objects in the far left column of the Security screen to make assignments.

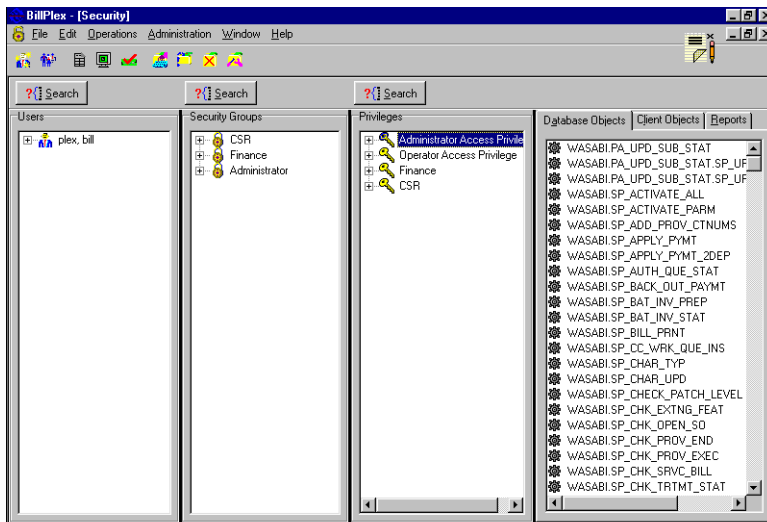
- First, assign the Database Objects, Client Objects, and Reports to the Privileges Groups. Pre-configured Privilege Groups exist; however, you can create your own Privilege Groups.
- Next, assign the Privilege Groups to Security Groups. Pre-configured Security Groups exist; however, you can create your own Security Groups.
- Then, add users and assign Security Groups to Users.

## The BillPlex Security Window

### Accessing the Security Window

To access the Security window, Select Administration, System, Configure, Security.

Result: The BillPlex Security Screen appears.










### About the Security Window

The BillPlex Security screen contains four columns. The first three columns (from left to right) are the three different security groups: Users, Security Groups, and Privileges Groups. The last column contains the assignable objects: Reports, Database Objects, and Client Objects.

### Security Window Icons

The following table provides a listing of the icons on the BillPlex Security window.

This Icon . . .	Represents . . .
	Privileges
	Security Groups

This Icon . . .	Represents . . .
	Users
	Tables & Views
	Stored Procedures
	Client Objects
	Report Objects

### Assignable CLEC Objects

If you need to modify the existing configured Privileges, it entails assigning Tables and Views, Stored Procedures, Client Objects, and Report Objects to each Privilege Group. The table below lists and describes the CLEC assignable objects.

Objects	Description
Tables and Views	Tables comprise the Oracle database that the CLEC Package uses. Views are subsets of a dataset and are based on key information in SQL.
Stored Procedures	Stored Procedures are small program segments stored in the tables that are triggered by events. Stored Procedures induce actions in one or more tables.
Client Objects	Client Objects are forms and values that are visible in the user interface.
Report Objects	Report Objects are fields or values that comprise reports.

<b>Objects</b>	<b>Description</b>
Database Objects	Database Objects include stored procedures, tables, and views. They are actions running in the background.

## Privileges

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### Pre-configured Privilege Groups

Privileges in the CLEC Package are pre-configured. Within the pre-configured package, the Privileges Groups are: CSRs, System Administrator, Finance, and Operations. The following table delineates the type of access that each Privilege group has.

<b>This Privilege Group. . .</b>	<b>has . . .</b>
Administrator Access Privilege	access to all system and administrative functions.
Operator Access Privilege	access to billing functions.
Finance	access to payment, the treatment work queue, and customer detail records for account balance information and reports.
CSR	access to all functions in the Operations pull down menu.

### Administrator Access Privileges

The Administrator Access Privilege enables the System Administrator to set up, maintain, and manipulate database and client objects for the CLEC Package.

### Operator Access Privileges

The Operator Access Privilege enables the Billing Administrator to run the billing system and load jobs for processing.

### Finance Privilege Group

The Finance Privilege enables the Finance or Billing Administrator to access Tables and Views relating to Treatment, Collection, Bill inquiry, and payment posting.

### CSR Privilege Group

The CSR Privileges enable customer service representatives to access the windows and tables for the Operations menu.

## Security Groups

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### Security Groups

The CLEC Package contains three security groups:

- CSR Security Group
- Finance Security Group
- Administrator Security Group

The Administrator Security Group is pre-configured with Privileges already assigned to it and access to all facets of the system. The CSR and Finance Groups are also pre-configured.

You can add new security groups, delete existing security groups, and rename security groups. When you add a new security group, you must configure the new group by assigning Privileges to the new group. Assigning Privileges to the security groups is a simple drag and drop procedure.

### Adding a New Security Group

Use the following instructions to add a New Security Group to the pre-configured Security that exist in the CLEC Package.

Step	Action
1	Locate the Administration menu and select System, Configure, then Security. Result: The Security window appears.
2	Click anywhere inside the Security Groups column and right-click. Result: A pop-up menu appears.
3	Select New Group. Result: A new security group appears titled New Group 1.
4	Click the security group called New Group 1 and right-click. Result: A pop-up menu appears.
5	Select Rename Group.



Step	Action
6	Type the name of the new Security Group and press Enter. Result: Your new Security Group is added.

Now you must assign Privileges to your newly created Security Group.

### Assigning Privileges to Security Groups

Use the following instructions to assign Privileges to Security Groups. You must first create the Security Group if it is not a pre-configured CLEC Security Group.

Step	Action
1	Locate the Administration menu and select System, Configuration, then Security. Result: The Security window appears.
2	Go to the Privileges column and select the Privilege that you want to assign.
3	Drag the selected Privilege to the Security Group to which you are assigning the Privilege.
4	Drop the Privilege on the Security Group to which you are assigning it. Result: BillPlex assigns the Privilege to the Security Group.

### Rules for Deleting a Security Group

If the Security Group that you want to delete has Privileges assigned to it, you must delete the assigned Privileges before you can delete the actual Security Group. Security Groups that have Privileges assigned to them appear in the Security Group column with a plus sign next to them.

Once you delete the Privileges assigned to the Security Group, you can delete the Security Group.

### Deleting Privileges that are Assigned to Security Groups

Use the following instructions to delete Privileges from their assigned Security Group. This process only removes the Privileges from the assigned Security Group. The Privilege will remain present in the Privilege column.

Step	Action
1	Locate the Administration menu and select System, Configuration, then Security. Result: The Security window appears.
2	Go to the Security Group column.
3	Select the Security Group that you want to delete then right-click. Result: A pop-up menu appears.
4	Select Delete Security Group. Result: BillPlex deletes the selected Security Group.

### Renaming Security Groups

The pre-configured Security Groups in the CLEC Package are: CSR, Finance, and Administration.

Use the following instructions to change the name of existing Security Groups; for example, you may want to change the CSR group's name to Operations.

Step	Action
1	Locate the Administration menu and select System, Configuration, then Security. Result: The Security window appears.
2	Go to the Security Group column.
3	Select the Security Group that you want to rename and right-click. Result: A pop-up menu appears.
4	Select Rename Group. Result: You are able to type a different name.
5	Type the new name of the Group and press Enter. Result: The group is renamed.

# Users

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## Overview


The Users column of the BillPlex Security window holds the names of the users within your company that will use the CLEC Package.

The System Administrator user is the only pre-configured user in the CLEC Package; Therefore, you must

- add any other users that will access the system, then
- assign a security group to each user.

## Adding New Users

Use the following instructions to add new users to the CLEC Package.

Step	Action
1	Locate the Administration menu and select System, Configuration, then Security. Result: The Security window appears.
2	Right-click anywhere in the Users column. Result: A pop-up menu appears.
3	Select New User. Result: The User Information screen appears.
4	Complete the fields on the User Information screen.
5	Click  . Result: A message appears prompting you to save your updates.
6	Click Yes. Result: BillPlex adds the new User.
7	Repeat steps 2 through 6 until you add all of the anticipated users.
8	Assign a Security Group to each User that you added.

## Assigning a Security Group to New Users

Use the following instructions to assign Security Groups to new Users that you added to the CLEC Package.

Step	Action
1	Locate the Administration menu and select System, Configuration, then Security. Result: The Security window appears.
2	Go to the Security Group column and select the Security Group that you want to assign.
3	Drag the selected Security Group to the User to whom you are assigning the Security Group.
4	Drop the Security Group on the User to whom you are assigning it. Result: BillPlex assigns the Security Group to that User.
5	Repeat steps 2, 3, and 4 until all Users have Security Groups assigned to them.


## Viewing User Information

You can view the following information for each user:

- First Name
- Last Name
- User ID
- Language
- Department
- Work Phone
- Extension
- Location
- E-mail Address


Use the following instructions to view the User Information screen for the desired User.

Step	Action
1	Locate the Administration menu and select System, Configuration, then Security. Result: The Security window appears.

Step	Action
2	Go to the Users column and select the User for whom you want to view information.
3	Right-click on the selected user. Result: A pop-up menu appears.
4	Select View User. Result: The User Information screen for the selected User appears.
5	Click  to close the User Information screen.

## Modifying User Information

Use the following instructions to make modifications to existing Users.

Step	Action
1	Locate the Administration menu and select System, Configuration, then Security. Result: The Security window appears.
2	Go to the Users column and select the User for whom you want to view information.
3	Right-click on the selected user. Result: A pop-up menu appears.
4	Select View User. Result: The User Information screen for the selected User appears.
5	Modify the desired information then click  . Result: A message appears prompting you to save your updates.
6	Click Yes. Result: The User Information window closes and your modifications are saved.



# Chapter 4

## System Tables

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## System Tables

---

### Overview

The System Tables define specific information that details how the system operates for your company. The System Tables include:

- Countries and States
- Period Types
- Term Types
- Holiday Codes
- Interest Plans
- Default Values
- Comments

Some of the items listed above are pre-configured, but you can make modifications.

### Recommended Order for Performing Modifications

**Please perform any modifications in the order listed below:**

Task	Action
1	Add Countries.
2	Add Currencies for the Countries.
3	Add or delete Period Types.
4	Add or delete Term Types.
5	Add or delete Holiday Codes.
6	Configure Default Values.
7	Create Comment Classes.
8	Create Comment Types.



## Countries, States, and Currency



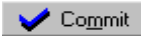

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### Overview

Country and State configurations attach the appropriate currency to a country or state. The Country Code, Country Name, Currency Code, and Currency are pre-configured for the United States. If needed, you may add other countries. If you do add other countries, you must add that country's currency as well.

### Adding a Country

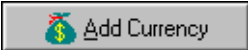


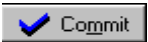
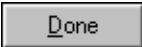
Use the following instructions to add Countries and States:

Step	Action
1	Go to the Administration menu, select System, select Create, then choose Countries and States. Result: The Country and States Window appears.
2	Click the  button on the BillPlex tool bar. Result: BillPlex automatically creates a new row to hold the information you want to add.
3	Enter the new Country information.
4	Click the  button.
5	Click  to save your changes.
6	Click  to exit the Countries and States window.

Remember that since you added a country, you must also add the currency for that country.

## Adding Currency

Use the following instructions to add currency in the CLEC Package.

Step	Action
1	Select the Country to which you want to assign currency.
2	Click  . Result: The Currency window appears.
3	Click the  button on the BillPlex tool bar.
4	Enter the new currency information.
5	Click the  button.
6	Click  to save the added currency.
7	Click  to exit the Currency window.

# Period Types

---

## Overview

Period Types define time frames for rating and billing. The CLEC Package contains 19 pre-configured Period Types. Each pre-configured Period Type has a corresponding Period Class, which is either Atomic or Aggregate. There are eight Aggregate Period Types and 11 Atomic Period Types.

## The Pre-configured Period Types for the Atomic Period

The following table lists the Pre-configured Period Types for the Atomic Period Class.

Atomic Period Type Name	Prorate Basis Days	Days in Period
Anyday	0	0
Friday	0	0
Holiday	0	0
Monday	0	0
Saturday	0	0
Sunday	0	0
Thursday	0	0
Wednesday	0	0
Weekday	0	0
Weekendday	0	0

### Pre-configured Period Types for the Aggregate Period

The following table lists the Pre-configured Period Types for the Aggregate Period Class.


Aggregate Period Type Name	Prorate Basis Days	Days in Period
Annually	365	365
Bi-monthly	60	59
Bi-weekly	14	14
Daily	1	1
Monthly	30	28
Quarterly	90	90
Semi-annually	181	181
Weekly	7	7




### Modifying the Period Types

If you need a Period Type that does not exist in the pre-configured CLEC Package, you can add the desired Period Type. Alternately, if a Period Type exists in the CLEC Package that you do not want, you can delete it.

### Adding Period Types

Use the following instructions to add Period Types

Step	Action
1	Select Administration, System, Create, then Period Types from the BillPlex pull down menus. Result: The Period Type Window appears.
2	Click the  button. Result: BillPlex automatically creates a new row to hold the information you want to add.
3	Enter the Period Type Name, Period Class, Prorate Basis Days, and the Days in Period in the appropriate fields.

Step	Action
4	Click the  button.
5	Click  to save the added information.
6	Click  to close the Period Type Window.

## Term Types

---

### Overview

Term Types are time frames for payment calculations. They indicate the type of payments that BillPlex generates, which includes the length of time before a payment is due or a period of time applied to the payment term. The CLEC Package contains three pre-configured Term Types:

Term Type	Description
Monthly payments	Your subscribers have 30 days before their payments are due.
Semi-monthly payments	Your subscribers payments are due every 15 days.
1 week payments	Your subscribers payments are due every week.




## Modifying the Pre-configured Term Types

If necessary, you can delete any of the pre-configured Term Types and add your own.

**WARNING:** Add or delete Term Types before you add Subscribers.

## Adding Term Types




Use the following instructions to add a Term Type.

Step	Action
1	Locate the Administration menu and select System, Create, then Term Types. Result: The Terms Type window appears.
2	Click the  button located at the bottom of the window. Result: BillPlex automatically inserts a new row to hold the information you want to add.
3	Type the new Term Type information.
4	Click  to save your changes.
5	Click  to exit the Terms Type window.

## Deleting Term Types

Use the following information to delete a Term Type.

Step	Action
1	Locate the Administration menu and select System, Create, then Term Types. Result: The Terms Type window appears.
2	Highlight the Term Type that you want to delete.

Step	Action
3	Click the  button located at the bottom of the window. Result: BillPlex displays a message confirming that you want to delete the selected Term Type.
4	Click OK. Result: BillPlex removes the Term Type from the system
5	Click  to save your changes.
6	Click  to exit the Terms Type window.

## Holiday Codes

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### Overview

Holiday codes are codes that define the dates for holidays. This is important for billing reasons.

The CLEC Package contains pre-configured holiday codes for the 1999 year. Maintain this list of codes on an ongoing basis.





### Maintaining Holiday Codes

Each city, state, and country may have different holidays. For this reason, BillPlex allows you to enter additional holiday codes or delete existing holiday codes.

### Adding Holiday Codes



Before you add Holiday Codes, view the Holiday Codes that exist in the default table. Use the following instructions to add Holiday Codes:

Step	Action
1	Locate the Administration menu and select System, Create, then Holiday Codes. Result: The Holiday Codes window appears.

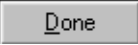
Step	Action
2	Click the  button. Result: BillPlex automatically inserts a new row to hold the information you want to add.
3	Type the date associated with the Holiday into the Date field.
4	Type the name of the Holiday associated with the date into the Holiday field.
5	Click the  button.
6	Click  to save your changes.
7	Click  to exit the Terms Type window.

### Deleting Holiday Codes

Use the following instructions to delete Holiday Codes:

Step	Action
1	Locate the Administration menu and select System, Create, then Holiday Codes. Result: The Holiday Codes window appears.
2	Highlight the Holiday Code that you want to delete.
3	Click the  button. Result: BillPlex displays a message confirming that you want to delete the selected Holiday Code.
4	Click OK to complete the process. Result: BillPlex removes the selected Holiday Code.
5	Click  to save your changes.



<b>Step</b>	<b>Action</b>
<b>6</b>	Click  to exit the Holiday Codes window.

## Default Values

---

### Overview

Default Values are data in a table that are mirrored in the database. It is a way of configuring the system through keys and values. The system looks for the key (data in the Default Name field), identifies what the value is (data in the Default Value field), and reacts accordingly.

Most of the Default Values are pre-configured; however, there are some values that you must set which are privy to your company.

### Table listing the Pre-configured Default Values

The following table lists the pre-configured Default Names in the CLEC Package and provides a description for each field.

Default Name	Description
ADDRESS_CAPS_ONLY	This value is pre-configured to False. It defines whether customer service representatives can enter subscriber addresses in capital case letters only.
ADDRESS_VALIDATOR_NAME	Defines the name of the executable program running the address validation.
AddressListLength	Represents the maximum number of address possibilities returned from the Address Validation process.
AddressValidationEnabled	This value is pre-configured to On to activate the BillPlex address validation functionality.
AppendZipAreaToTransactionDescription	This value is pre-configured to Off, preventing BillPlex from appending a zip link area description to a transaction description.
AtomicRating_byBatchID.rpt	This value is pre-configured and should not be modified. It is a report that provides Atomic rating summary by Batch ID.
AtomicRating_byDate.rpt	This value is pre-configured and should not be modified. It is a report that provides Atomic rating summary by Date.

Default Name	Description
AtomicRating_by_DateBatch.rpt	This value is pre-configured and should not be modified. It is a report that provides Atomic rating summary by date for a Batch ID.
AutoCompletion	This value is pre-configured to NO preventing BillPlex from automatically completing addresses according to information the CSR enters.
BULK_REVAL_ALTER	This value is pre-configured to True enabling alterations of the address data with the data from the address validation database, if there is an exact match.
BULK_REVAL_SLEEP	This value is pre-configured to 5. It identifies the number of seconds that the system will sleep between transactions.
BULK_REVAL_TRANS_SZ	This value is pre-configured to 200. It designates the number of records that BillPlex inserts into the event queue before committing.
BULK_VALIDATION_STATUS	This value is pre-configured to ALL. It designates the statuses of address to include for Bulk Revalidation.
BULK_VALIDATION_TABLE	This value is pre-configured to ALL defining the name of the table to pull data from for Bulk Revalidation.
BatchImportSummary.rpt	This value is pre-configured and should not be modified. It is a report that provides a summary of imported batches.
BatchImportSummary_BatchID.rpt	This value is pre-configured and should not be modified. It is a report that provides a Batch import summary for date through date for Batch IDs.
BatchImportSummary_Dates.rpt	This value is pre-configured and should not be modified. It is a report that provides a Batch import summary for date through date.
BatchImportSummary_Prov_Dates.rpt	This value is pre-configured and should not be modified. It is a report that provides a Batch import summary for date through date for Provider ID _.
BillPlexTaxVendorID	This value is pre-configured to 1. It designates that vendor ID for BillPlex is stored in v_tax_vndr.
CCConnectRetries	This value is pre-configured to 3 defining the number of times a CSR can retry a Credit Card connection.

Default Name	Description
CCDefaultStatus	This value is pre-configured to False. It represents the credit card default status.
CCTransmitRetries	This value is pre-configured to 3 representing the number of times a person can retry a transmission.
CCValidRetries	This value is pre-configured to 3 representing the number of times a CSR can try to validate a credit card.
CCVerAutoAmt	This value is pre-configured to 1.00 representing the default monetary amount of credit card authorization or settlement.
CCVerAutoEnable	This value is pre-configured to D, disabling the Invoice Method Provisioning Wizard from placing an event in the event queue during provisioning.
CCVerEventClass	This value is pre-configured to 16.
CCVerEventType	This value is pre-configured.
CCVerManAuthAmt	This value is pre-configured to 1.00 defining the default monetary amount that displays when a CSR presses the Authorization button in the Subscriber Detail Credit Card window.
CCVerManAuthEnable	This value is pre-configured to OFF preventing CSRs from manually authorizing a credit card transaction.
CCVerManAuthOverride	This value is pre-configured to OFF preventing CSRs from overriding the default amount.
CnctNumCount	This value is pre-configured to 7 specifying the default amount of connection numbers that a CSR sees within the Service Provisioning Wizard.
EventClassCredit	This value is pre-configured to 14. It is the Event Class of the Credit Bureau application.
EventTypeCredit	This value is pre-configured to 0. It is the Event Type of the Credit Bureau application.
GeocodeEnabled	This value is pre-configured to ON. It enables geocoding.

Default Name	Description
GeocodeListLength	This value is pre-configured to 8 stipulating the maximum number of different geocodes that BillPlex displays to a user.
LogCommTaxCalculations	This value is pre-configured to F defining the value used to determine if output from CommTax is logged.
MessageWindowSpinDays	This value is pre-configured to 10. It defines the default maximum number of days that users can view Message window records.
PostalDataSource	This value is pre-configured to C:\Current\Client\PostalCode.Txt. It is the directory path where BillPlex loads postal data.
PrimaryTaxVendor	This value is pre-configured to 1 indicating the number of the primary Tax Vendor as well as defining a third-party vendor that performs taxation.
Provider_SUR_Error.rpt	This value is pre-configured providing a SUR Volume error report for date through date.
Provider_SUR_ErrorOracle.rpt	This value is pre-configured providing a SUR Volume error report.
REG_SRVR_IP	This value is pre-configured to 10.100.1.255. It indicates the IP address that the BillPlex Registration server uses.
REG_SRVR_PORT	This value is pre-configured to 3000. It indicates the Port that the BillPlex Registration server uses.
SURVolumeLand.rpt	This value is pre-configured and should not be modified. It is the total SUR volume statistics for date through date.
SUR_Vol_Stat_ProvDate.rpt	This value is pre-configured and should not be modified. It is a report that shows SUR Volume statistics for date through date for the Provider ID type_.
SUR_Vol_Stat_ProvDateCtNum.rpt	This value is pre-configured and should not be modified. It is a report that shows SUR Volume statistics for date through date for the Provider ID and Connection number.

Default Name	Description
SUR_Vol_Stat_ProvDateFeat.rpt	This value is pre-configured and should not be modified. It is a report that shows SUR Volume statistics for date through date for the Provider ID and the Feature Type_.
ServiceName	This value is pre-configured to blpxmsgwinsrv. It is the BillPlex communicator name and must match the entry in the service file.
UseThirdPartyTaxing	This value is pre-configured to T. It designates that a third-party taxing system will be used. The third-party taxing must be set up in v_tax_vndr.
auto_print	This value is pre-configured to F indicating that the system does not use the auto print function.
client_cache_timeout_hours	This value is pre-configured to 12 indicating the amount of time a CSR is requested to update cache data.
override_auto_print	This value is pre-configured to F, preventing the user from turning on auto print.
schema	This value is pre-configured to 076c. It defaults to the database schema of your BillPlex CLEC Package release.
ssn_msk	This value is pre-configured defining the mask of social security numbers and other types of ID.
sub_tax_pln_typ	This value is pre-configured to 2, representing the unique identifier of a subscriber's tax plan type ID in table SUBSCRIBER TAX PLAN TYPE.
use_treatment_code	This value is pre-configured to True, indicating that the system does use treatment codes.
validate_invoices	This value is pre-configured to X, indicating that invoices will be validated.
write_off	This value is pre-configured.
zip_msk	This value is pre-configured. It defines the mask for zip codes.
database_type	This value is pre-configured to Oracle, indicating that Oracle is the database that BillPlex uses.

Default Name	Description
SURJOIN	This value is pre-configured.
vndr_geo_dflt	This value is pre-configured.
fein	This value is pre-configured.
bp_compress_program	This value is pre-configured.
T-1 Local Service	This value is pre-configured.

**Table listing non-configured values**

The following table lists the values that you must set in accordance with the business rules for your company.

Default Name	Description
companyname	Type the name of the country that will print out in the header section of BillPlex reports.
country	Specifies the default country that the system should use.
currency	This enables the user to set the default currency within the system.
next_sub_id	This numeric value represents the next subscriber identification number that BillPlex will assign to a new subscriber.
payment_description	Allows the user to set the default message associated with a payment.
phn_area_cd	Allows the user to set the default area code within the system.
state	Specifies the default state that BillPlex should use.
invoice_telephone	The information entered here actually appears on the invoice.
invoice_telephone2	The information entered here actually appears on the invoice.

invoice_web_address	The information entered here actually appears on the invoice.
smtp_server	The information entered here actually appears on the invoice.
smtp_port	The information entered here actually appears on the invoice.



## Comments

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### Overview

On the Comments screen, you are making configurations that allow the Customer Service Representative to enter comments in the Subscriber Detail window.

### Configuring Comments

In the Comment Class column, create groupings of anticipated types of calls. In the Comment Type column, create comments that are indicative of the corresponding Comment Class.

For example, let's say that you created a Comment Class called Billing Inquiry. You would then create Comment Types. Some examples of Comment Types for the Billing Inquiry Comment Class are, disputed payment, disputed amount, account balance, or research call.

You can:

- create Comment Classes and Comment Types
- delete Comment Classes and Comment Types





### Creating Comment Classes

Use the following instructions to create Comment Classes.

Step	Action
1	Locate the Administration menu and select System, Configure, and Comments. Result: The Configure Comments window appears.
2	Select a vacant area in the Comment Class column and right-click. Result: A pop-up menu appears.
3	Select New Comment Class. Result: BillPlex creates a new Comment Class icon and names it "New Comment 1."
4	Change the new Comment Class name by right-clicking on "New Comment 1," choose Modify Comment Class Name, then type the desired name for the new Comment Class.

## Creating Comment Types

Use the following instructions to create a Comment Type.

Step	Action
1	Locate the Administration menu and select System, Configure, then Comments. Result: The Configure Comments window appears.
2	Click inside the Comment Types column and right-click. Result: A pop-up menu appears.
3	Select New Comment Type. Result: The Comment Types window appears.
4	Click  on the BillPlex tool bar. Result: BillPlex inserts a new row to hold the new Comment Type information.
5	Type the new Comment Type name in the new row.
6	Click the  button.
7	Click  to save your changes.
8	Click  to exit the Comment Types window. Result: The Configure Comments window appears displaying the Comment Type that you created.


## Rules for Deleting a Comment Class

Before you can delete a Comment Class, you must first remove the Comment Types that are assigned to the Comment Class. For example, if you created a Comment Class called Billing Inquiry and created a Account Balance Comment Type associated with Billing Inquiry, then you must delete the Account Balance Comment Type before you can delete the Billing Inquiry Comment Class.

**Note:** The Comment Type that you delete will still remain in the Comment Type's column. BillPlex just removes the association between the Comment Type and the Comment Class.

## Deleting a Comment Type Associated with a Comment Class

To delete a Comment Type associated with a Comment Class that you want to delete:

Step	Action
1	Locate the Administration menu and select System, Configure, then Comments. Result: The Configure Comments window appears.
2	Locate the Comment Class that you want to remove and click  located next to it to expand the Comment Class' associated Comment Types.
3	Select the associated Comment Type and right-click. Result: A pop-up menu appears.
4	Select Delete Comment Type. Result: BillPlex removes the associated Comment Type from that Comment Class.
5	Repeat steps 2, 3, and 4 until you delete all Comment Types associated with the Comment Class that you want to delete.

### Deleting a Comment Class


Make sure that there are no Comment Types associated with the Comment Class that you want to delete.



Use the following instructions to delete a Comment Class.

Step	Action
1	Locate the Administration menu and select System, Configure, then Comments. Result: The Configure Comments window appears.
2	Highlight the Comment Class that you want to remove and right-click. Result: A pop-up menu appears.
3	Select Delete Comment Class. Result: BillPlex deletes the selected Comment Class.

### Deleting a Comment Type from the Comment Type Column

Use the following instructions to delete a Comment Type from the Comment Type column.

Step	Action
1	Locate the Administration menu and select System, Configure, then Comments. Result: The Configure Comments window appears.
2	Highlight the Comment Type that you want to remove and right-click. Result: A pop-up menu appears.
3	Select New Comment Type. Result: The Comment Types window appears.
4	Select the Comment Type that you want to delete.
5	Click  . Result: BillPlex displays a confirm delete message.
6	Click OK on the Confirm message. Result: BillPlex deletes the selected Comment Type.

Step	Action
7	Click  to save the changes.
8	Click  to exit the Comment Types window.



# Chapter 5

## Subscriber Data

### **Chapter 5 Contents**

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## Subscriber Data

---

### Overview

In the Subscriber menu windows of BillPlex, you are defining and setting up information for your customer. Because Subscriber data is specific to your customer, it is not pre-configured in the CLEC Package; therefore, you are responsible for setting up the Subscriber data.

### Tasks Involved in Configuring Subscriber Data

The following table provides a listing of the configuration tasks that you must perform for Subscriber data.

Task	Action
1	Create Market Types or use the BillPlex pre-configured Market Types.
2	Create External Market Types.
3	Assign Billing Cycles to Market Types.
4	Configure Characteristics.
5	Configure Characteristic Lookups.

### Description of each Configuration Task

The following table lists the Subscriber Data configuration tasks that you must perform and describes why you must perform these tasks.

You . . .	to . . .
create Market Types	define and group your customers based on their anticipated use of services and features.
create External Market Types	enable BillPlex to recognize the Market Types of third-party vendors that your company uses.
assign Billing Cycles to Market Types	associate billing cycles with market types.



<b>You . . .</b>	<b>to . . .</b>
configure Characteristics	collect information that reflects preferences of your subscribers.

## Market Types

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### Overview

Market Types enable you to define and group your customers based on the anticipated services and features that your customer will use.

### Pre-configured Market Types



The CLEC Package contains three pre-configured Market Types:

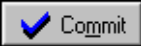

- Business (for business customers)
- Commercial (for wholesale customers)
- Residence

You can use the pre-configured Market Types or you can create your own. You can also rename the pre-configured Market Types or delete them altogether.

### Creating Market Types



Use the following instructions to create new Market Types.

Step	Action
1	From the Administration menu, select Subscriber, select Create, then choose Market Types. Result: The Market Types window appears.
2	Click the  button. Result: BillPlex automatically creates a new row to hold the information you want to add.
3	Enter the new Market Type information.
4	Click the  button.

Step	Action
5	Click  to save the information.
6	Click  to exit the Market Types window.


## Renaming Market Types


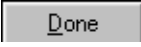
Use the following instructions to rename the existing pre-configured Market Types. You can also use these instructions to rename Market Types that you create.

Step	Action
1	From the Administration menu, select Subscriber, select Create, then choose Market Types. Result: The Market Types window appears.
2	Select the Market Type record you want to rename. Result: BillPlex highlights the Market Type.
3	Type the new Market Type then press Enter.
4	Click  to save the information.
5	Click  to exit the Market Types window.

## Deleting Market Types

Use the following instructions to delete Market Types.

Step	Action
1	From the Administration menu, select Subscriber, select Create, then choose Market Types. Result: The Market Types window appears.
2	Select the Market Type record you want to delete.
3	Click the  button.

Step	Action
4	Click  to save the information.
5	Click  to exit the Market Types window.

### About Assigning Billing Cycles to Market Types

When assigning Billing Cycles to Market Types, you are associating any of the Billing Cycles to a selected Market Type. This process permits the CSRs to automatically populate the Billing Cycle field with default billing cycle information when they use the Subscriber Provisioning Wizard.

You may want to assign Billing Cycles to Market Types if you are using multiple Market Types and you do not want the Billing Cycle running at the same time for each Market Type. Thus, you assign the Billing Cycle that you want to the appropriate Market Type.

You can add, change, or delete any Billing Cycle/Market Type assignment that meets your needs.

### Pre-configured Billing Cycles

The CLEC Package offers the following pre-configured Billing Cycles

Pre-configured Billing Cycle	Number of Days in the Billing Cycle
Annually	365
Bi-monthly	059
Bi-weekly	014
Daily	001
Monthly	030
Never	The Subscriber Never receives a bill.

<b>Pre-configured Billing Cycle</b>	<b>Number of Days in the Billing Cycle</b>
Quarterly	090
Semi-annually	181
Weekly	007

**Instructions for Assigning Billing Cycles to Market Types**

Use the following instructions to assign Billing Cycles to Market Types.

<b>Step</b>	<b>Action</b>
<b>1</b>	Go to the Administration menu and select Subscriber, select Assign, then choose Billing Cycles to Market Types. Result: The Assign Billing Cycles to Market Types window appears.
<b>2</b>	Locate the Billing Cycles column and select the Billing Cycle that you want to assign.
<b>3</b>	Drag and Drop the Billing Cycle to the appropriate Market Type. Result: The selected Billing Cycle appears under the assigned Market Type.

## Removing a Billing Cycle from the Assigned Market Type

Use the following instructions to unassign a Billing Cycle from a Market Type.

Step	Action
1	From the Administration menu, select Subscriber, select Assign, then choose Billing Cycles to Market Types. Result: The Assign Billing Cycles to Market Types window appears.
2	Select the Billing Cycle that you want to remove and right-click. Result: A pop-up menu appears.
3	Choose Remove Billing Cycle from the pop-up menu. Result: BillPlex removes the assigned Billing Cycle from the Market Type.

## External Market Types

---

### Overview



If your system supports optional credit bureau and third-party taxation functions, you need to create external Market Types.



External Market types are Market Types that third-party credit bureaus and tax vendors use. When you create External Market Types, you are assigning them to BillPlex Market Types. This enables BillPlex to recognize the Market Types of the third-party vendors.

Create External Market Types by associating existing BillPlex Market Type definitions to an external vendor name, type, and value. There are no pre-configured External Market Types in the CLEC Package; therefore, you must create your own using the following instructions.

### Creating External Market Types




Use the following instructions to create External Market Types.

Step	Action
1	From the Administration menu, select Subscriber, select Create, then choose External Market Types. Result: The External Market Types window appears.
2	Click the  button. Result: BillPlex automatically creates a new row to hold the information you want to add.
3	Select the Market Type from the Market Type Name drop-down list.
4	Select the appropriate Vendor ID Name and External Vendor ID Type from the drop-down lists.
5	Type the External Vendor Value.
6	Click the  button.

Step	Action
7	Click  to save the information.
8	Click  to exit the External Market Types window.

### Deleting an External Market Type

Use the following instructions to delete an External Market Type.

Step	Action
1	From the Administration menu, select Subscriber, select Create, then choose External Market Types. Result: The External Market Types window appears.
2	Select the External Market Type that you want to delete.
3	Click the  button. Result: BillPlex deletes the specified External Market Type.
4	Click  to save the information.
5	Click  to exit the External Market Types window.

## Characteristics

---

### Overview

Subscriber characteristics enable your company to collect information that reflects preferences of your subscribers or customers. Using the subscriber characteristics feature you may:

- define custom characteristics
- track demographic information
- follow marketing trends
- track buying behavior

Configure subscriber characteristics in the Characteristic Configuration window. This window provides a visual environment for creating and linking custom characteristic questions to associated characteristic groups and Market Types.

### Characteristic Configuration Tasks

The following table delineates the tasks that you must perform to configure subscriber characteristics.

Task	Action
1	Create unique Characteristic questions.
2	Create Characteristic Groups.
3	Assign Characteristics to Characteristic Groups.
4	Associate Characteristic Groups to Market Types.

The variables that you are configuring represent field components that constitute a single characteristics tab, which displays in the Subscriber Provisioning Wizard, and the Subscriber Detail Data Characteristic window.

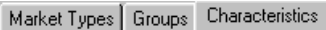





## Creating Unique Characteristics

Creating characteristics entails that you:

- Create the Characteristic, by naming the characteristic and giving it a description, display label, and an external tag.
- Define the properties of the Characteristic, such as start and end dates, and the method of data entry required when users access questions regarding the Characteristic

Use the following instructions to create unique characteristics.

Step	Action
1	From the Administration menu, select Subscriber, Configure, then Characteristics. Result: The Characteristic Configuration window appears.
2	Click the Characteristics tab.  Result: The All Characteristics view appears in the left panel of the window and Description and Properties tabs appear in the right panel.
3	Right-click in the Characteristics view panel. Result: A pop-up menu appears.
4	Select New Characteristic.
5	Click the Description tab.  Result: Descriptive fields appear in the right panel of the Configure Characteristics window.
6	Enter the name of the characteristic, the display label, a description of the characteristic, and an external tag for the characteristic in the provided fields.
7	Click  to save your changes.

Step	Action
8	Click the Properties tab.  Result: BillPlex displays Properties fields, where you can define properties for the new Characteristic.
9	Complete the Properties fields.

### About Characteristic Groups

A Characteristic Group represents a collection of associated characteristic input field variables. BillPlex provides a flexible solution in managing and controlling characteristic groups by allowing you to:



- Choose whether user input is required or optional for each characteristic within a group. You can require Characteristics in one group and not require them in another group.
- Determine whether a selected characteristic group applies to billable, non-billable, or both types of subscribers.
- Set up the display order of Characteristics that appear within a group tab.
- Configure a different default value for a Characteristic that appears in multiple groups.
- Customize the Group tab that appears in the Subscriber Provisioning Wizard and on the Subscriber Detail Data window.
- Assign the same characteristics to many groups.


## Creating Characteristics Groups

Creating Characteristics Groups entails that you:

- Create the Characteristic group
- Define the properties for the Characteristic group
- Assign Characteristics to Characteristic groups

Use the following table to create Characteristic Groups that represents a collection of associated characteristic input field variables.

Step	Action
1	From the Administration menu, select Subscriber, Configure, then Characteristics. Result: The Characteristic Configuration window appears.
2	Click the Groups tab.  Result: BillPlex displays the All Groups panel on the left side of the window.
3	Right-click in the Groups view panel. Result: A pop-up menu appears.
4	Select New Group. Result: BillPlex creates a new Characteristic group named <no description> in the All Groups panel.
5	Locate the Group Name field and type the name of the new Characteristic group.
6	Locate the Tab Title field and type the title or name of a Characteristic group that will display to the users.
7	Locate the Display For Subscriber Type field and choose the type of subscriber associated with the Characteristic group.
8	Click the All Characteristics tab.  Result: BillPlex displays all Characteristics in the left panel.

Step	Action
9	Drag and drop the Characteristic on the Characteristic Group to which you want it assigned.
10	Click  to save your changes.

# Chapter 6

## Transactions and Taxation

### **Chapter 6 Contents**

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## Transactions

---

### Overview

The Transactions option of BillPlex consists of setting up:

- Transaction Relation Codes
- Chart of Accounts Codes
- Transaction Types

### Tasks Involved in Setting Up Transactions

The following table delineates the tasks that you must accomplish to fully set up the Transactions section of BillPlex.

Task	Action
1	Add Transaction Relation Codes.
2	Create a Chart of Accounts.
3	Add Transaction Types
4	Assign Transaction Types to Chart of Accounts Codes.





### Transaction Relation Codes

Transaction Relation Codes are codes that you define to specify the relationship between transactions. These codes are used for taxation purposes, enabling BillPlex to link taxes to their related transactions so that you receive the appropriate transaction result in your General Ledger.

### Adding a Transaction Relation Code



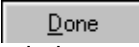
Use the following instructions to add a Transaction Relation Code.

Step	Action
1	From the Administration menu, select Transactions, Create, then choose Transaction Relation Codes. Result: The Transaction Relation Codes window appears.

Step	Action
2	Click the  button. Result: BillPlex automatically inserts a new row to hold the information you want to add.
3	Locate the Relation code field, and type a designated code that specifies the relationship between transactions.
4	Locate the Relation Name field and type an explanation of the code you entered in step 3.
5	Click the  button.
6	Click  to save your changes.
7	Click  to exit the Transaction Relation Codes window.

### Deleting a Transaction Relation Code

Use the following instructions to delete a Transaction Relation Code.

Step	Action
1	From the Administration menu, select Transaction, Create, then choose Transaction Relation Code. Result: The Transaction Relation Code window appears.
2	Select the Relation Code that you want to delete.
3	Click the  button.
4	Click  to save the information.
5	Click  to exit the Transaction Relation Code window.

**Chart of Accounts Code Table**





Chart of Account Codes are unique accounting codes that you assign to a transaction type. The accounting codes and descriptions originate in an external General Ledger System.

Creating Chart of Accounts Codes enable you to quickly extract revenue information from BillPlex that you want to use in your General Ledger System.

You are setting up codes that map to the General Ledger for accounting purposes. Because accounting codes are company specific, Chart of Accounts Codes are not pre-configured in the CLEC Package.

**Creating a Chart of Accounts**

Use the following instructions to create a Chart of Accounts.

Step	Action
1	From the Administration menu, select Transactions, Create, then choose Chart of Accounts Codes. Result: The Chart of Accounts window appears.
2	Click the  button. Result: BillPlex automatically inserts a new row to hold the information you want to add.
3	Locate the Chart of Accounts code field, and type a designated code.
4	Locate the Charts of Accounts Description field and type a description of the code you entered in step 3.
5	Click the  button.
6	Click  to save your changes.
7	Click  to exit the Chart of Accounts window.



**Pre-configured Transaction Types**

A Transaction Type is an ordered combination of numbers that the system uses to identify different transactions. BillPlex uses a unique numbering scheme that the Rendering engine recognizes.

The BillPlex Rendering engine uses the Transaction Types to determine the kind of transaction being initiated. The Rendering Engine references the numbering scheme and the location of the digits in the numbering scheme in the Transaction Type column on the Transaction Type screen.

**NOTE:** A complete listing of the pre-configured Transaction Types is in Appendix A of this manual.

**Rules for Adding Transaction Types**

**If you are going to add Transaction Types to the pre-configured Transaction Types, you must follow the unique numbering scheme or the system will not recognize the Transaction Types that you add. If the system does not recognize the added Transaction Types, it will negatively effect the outcome of your invoice.**

**Transaction Types are linked to Taxation. The Taxing model is fully pre-configured. If you create new Transaction Types, you will also need to: create new charges, credits, and adjustments and assign Tax Types, Tax Plans, and Vendor Codes.**

**Transaction Type Numbering Scheme**

The Transaction Type is comprised of a:

- Product Code,
- Class Type,
- Service Code,
- Feature Code, and a
- Charge Type.

The result of the combination of the codes and types listed above, is the Transaction Type.

**Product Code**

The first digit in the Transaction Type is the Product Code.

Enter . . .	For . . .
1	Local
2	Long Distance
3	ISP
4	Wireless
9	Taxes

**Class Type**

The second digit in the Transaction Type is the Class Type.

Enter . . .	For . . .
0	Reserved
1	Charge
2	Credit
3	Adjustment
9	Refund

**Service Code**

The third digit in the Transaction Type is the Service Code.

Enter . . .	For . . .
0	Reserved
1	Switched LD
2	Dedicated LD
3	Calling Card
4	Late Payment
5	Access
6	Basic Service

**Feature Code**

The fourth, fifth, and sixth numbers in the Transaction Type is the Feature Code.

<b>Enter . . .</b>	<b>For . . .</b>
000	Reserved
001	PICC
002	Intrastate
003	Interstate
004	International
005	Interstate Toll Free
006	Intrastate Toll Free
007	Opp Assist
008	Dir Assist
009	Third Number Billing
010	Collect Calling
011	Person to Person
012	Station to Station
013	Additional Listing
014	Non Listed Number
015	Non Published Number
016	Returned Check
017	Account Charges
018	Line Restoral
019	Service Suspension
020	FCC Network Access
100	T-1 Charge

<b>Enter . . .</b>	<b>For . . .</b>
101	Local Loop Charge
102	IXC Loop Charge
103	Mileage
104	E-911
105	Pulsing
106	Relay
107	Channel Charge
108	Digital PBX Trunks
109	Hunting
115	ISDN/Voice Data
116	B Channel
120	Channel Bank
121	CSU Charge
122	Card Charge
200	Zone 1 Usage
201	Zone 2 Usage
202	Zone 3 Usage
210	EAS 1 Usage
211	EAS 2 Usage
212	EAS 3 Usage
213	EAS 4 Usage
214	EAS 5 Usage
220	Band 1 Usage
221	Band 2 Usage

<b>Enter . . .</b>	<b>For . . .</b>
222	Band 3 Usage
223	Band 4 Usage
224	Band 5 Usage
250	Intralata Usage
260	Basic Service
300	Call Forwarding
301	Preferred Call Forwarding
302	Flexible Call Forwarding
303	Call Forwarding Busy
304	Call Forwarding No Answer
305	Call Forward Variable
306	Remote Call Forward Activ.
307	Call Waiting
308	Call Block
309	Call Tracing
310	Call Selector
311	Three Way Calling
312	Caller ID
313	Memory Call
314	Ringmaster
315	Speed Calling
316	Automatic Call Back *69

<b>Enter . . .</b>	<b>For . . .</b>
317	Automatic Recall *66
318	Message Waiting Indicator
319	Directory Listing
320	Code Restriction
321	Inside Wire Maintenance
322	Conference 6
400	Late Payment Charge
901	Federal Excise Tax Charge
910	State Utility users Tax
911	State Business & Occupation
912	State 911
913	State P.U.C. Tax (Fees)
914	State Telephone Sales Tax
915	State Statutory Gross Receipts Tax
916	State License Tax
917	State Service Tax
918	State Transit Tax
919	State Excise Tax
920	State Special Tax
921	State Surcharge
922	State Sales Tax

<b>Enter . . .</b>	<b>For . . .</b>
930	County Utility Users Tax
931	County Business & Occupation Taxes
932	County 911 Tax
933	County P.U.C. Tax (Fees)
934	County Telephone Sales Tax
935	County Statutory Gross Receipts
936	County License Tax
937	County Service Tax
938	County Transit Tax
939	County Excise Tax
940	County Special Tax
941	County Surcharge
942	County Sales Tax
950	Local Utility Users Tax
951	Local Business & Occupation Tax
952	Local 911 Tax
953	Local P.U.C. Tax (Fees)
954	Local Telephone Sales Tax
955	Local Statutory Gross Receipts Tax
956	Local License Tax

<b>Enter . . .</b>	<b>For . . .</b>
957	Local Service Tax
958	Local Transit Tax
959	Local Excise Tax
960	Local Special Tax
961	Local Surcharge
962	Local Sales Tax
970	Unincorporated Utility Users Tax Charge
971	Unincorporated Business & Occupation Tax Charge
972	Unincorporated 911 Tax Charge
973	Unincorporated P.U.C. Tax Charge
974	Unincorporated Telephone Sales Tax Charge
975	Unincorporated Statutory Gross Receipts Charge
976	Unincorporated Carrier Gross Receipts Charge
977	Unincorporated License Tax Charge
978	Unincorporated Service Tax Charge
979	Unincorporated Transit Tax Charge
980	Unincorporated Excise Tax Charge



Enter . . .	For . . .
981	Unincorporated Special Tax Charge
982	Unincorporated Surcharge Charge
983	Unincorporated Sales Tax Charge
990	Federal Service Tax Charge
991	Federal Transit Tax Charge
992	Federal Excise Tax Charge
993	Federal Special Tax Charge
994	Federal Surcharge Charge
995	Federal Sales Tax Charge

### Charge Type

The seventh digit in the Transaction Type is a Charge Type.

Enter . . .	For . . .
0	Reserved
1	Usage
2	MRC
3	NRC
4	Tax
5	Finance Charge
6	Other

The last two positions in the Transaction Type are reserved for unique identifiers. Both positions contain zeros.

**Example of a  
Transaction Type**

The Transaction Type ID is: **116200100**

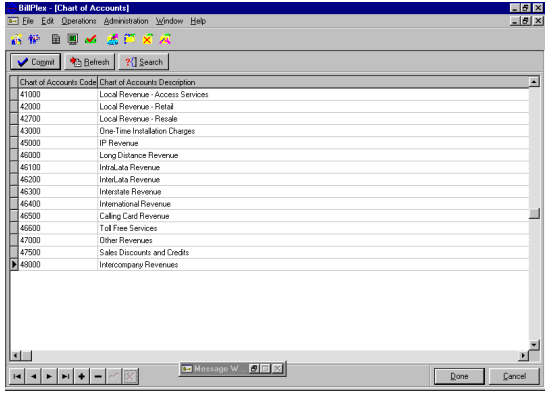

The Transaction Name is: CLEC Charge Basic Service Zone  
1 Usage



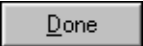
<b>This number</b>	<b>represents</b>	<b>and is the</b>
1	Local	Product Code
1	Charge	Class Type
6	Basic Service	Service Code
200	Zone 1 Usage	Feature Code
1	Usage	Charge Type

## Instructions for Adding a Transaction Type

We recommend that you use the pre-configured Transaction Types that are provided for you. But if you need to add a Transaction Type remember that you must:

- Construct the Transaction Type using the Product Code, Class Type, Service Code, Feature Code, and Charge Type.
- Create a new charge for the added Transaction Type.
- Create a new credit for the added Transaction Type.
- Create a new adjustment for the added Transaction Type.
- Assign the added Transaction Type to Tax Types.
- Assign the added Transaction to Tax Plans.
- Assign the added Transaction Type to Vendor Codes.

Step	Action																																
<p><b>1</b></p>	<p>From the Administration menu, select Transaction, select Create, then choose Transaction Types.</p> <p>Result: The Transaction Types window appears.</p>  <p>The screenshot shows a window titled "BillPlex - [Chart of Accounts]". It has a menu bar with "File", "Edit", "Operations", "Administration", "Window", and "Help". Below the menu bar are icons for "Logoff", "Refresh", and "Search". The main area is a list box containing the following items:</p> <table border="1"> <thead> <tr> <th>Chart of Accounts Code</th> <th>Chart of Accounts Description</th> </tr> </thead> <tbody> <tr><td>41000</td><td>Local Revenue - Access Services</td></tr> <tr><td>42000</td><td>Local Revenue - Retail</td></tr> <tr><td>42700</td><td>Local Revenue - Retail</td></tr> <tr><td>43000</td><td>One Time Installation Charges</td></tr> <tr><td>45000</td><td>IP Revenue</td></tr> <tr><td>46000</td><td>Long Distance Revenue</td></tr> <tr><td>46100</td><td>Intrala Revenue</td></tr> <tr><td>46200</td><td>Interlata Revenue</td></tr> <tr><td>46300</td><td>Interstate Revenue</td></tr> <tr><td>46400</td><td>International Revenue</td></tr> <tr><td>46500</td><td>Calling Card Revenue</td></tr> <tr><td>46600</td><td>Toll Free Services</td></tr> <tr><td>47000</td><td>Other Revenue</td></tr> <tr><td>47500</td><td>Sales Discounts and Credits</td></tr> <tr><td>48000</td><td>Intercompany Revenues</td></tr> </tbody> </table> <p>At the bottom of the window are navigation buttons: "Done" and "Cancel".</p>	Chart of Accounts Code	Chart of Accounts Description	41000	Local Revenue - Access Services	42000	Local Revenue - Retail	42700	Local Revenue - Retail	43000	One Time Installation Charges	45000	IP Revenue	46000	Long Distance Revenue	46100	Intrala Revenue	46200	Interlata Revenue	46300	Interstate Revenue	46400	International Revenue	46500	Calling Card Revenue	46600	Toll Free Services	47000	Other Revenue	47500	Sales Discounts and Credits	48000	Intercompany Revenues
Chart of Accounts Code	Chart of Accounts Description																																
41000	Local Revenue - Access Services																																
42000	Local Revenue - Retail																																
42700	Local Revenue - Retail																																
43000	One Time Installation Charges																																
45000	IP Revenue																																
46000	Long Distance Revenue																																
46100	Intrala Revenue																																
46200	Interlata Revenue																																
46300	Interstate Revenue																																
46400	International Revenue																																
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47000	Other Revenue																																
47500	Sales Discounts and Credits																																
48000	Intercompany Revenues																																
<p><b>2</b></p>	<p>Click the  button.</p> <p>Result: BillPlex automatically creates a new row to hold the information you want to add.</p>																																
<p><b>3</b></p>	<p>Type the Transaction Type into the Transaction Type field. Remember that you must use the combination of Codes and Types.</p>																																

Step	Action
4	Type a Transaction Type Name that describes the Transaction Type.
5	Select a Transaction Class from the drop-down list.
6	Select a Charts of Accounts Code from the drop-down list.
7	Select True or False from the Aggregate drop-down list.
8	Click the  button.
9	Click  to save your changes.
10	Click  to exit the Transaction Type window.

## Taxation

---

### Overview

The Taxation features in the BillPlex CLEC Package provide a flexible solution to the many requirements of tax jurisdictions that effect your business operations. The Tax model is completely set up for you.

With the pre-configured CLEC Package, when a subscriber uses services, BillPlex automatically applies the appropriate tax to any activity that requires taxation.

The following sections explain the components of BillPlex taxing and provide lists of the pre-configurations for taxing in the CLEC Package.

**Taxation Pre-configurations**

The CLEC Package's taxation features include the pre-configuration of:

- tax types
- tax plans
- tax vendors
- tax vendor codes
- tax plan validation codes
- tax plan utility codes
- tax vendor tax types

Additionally the following assignments are also pre-configured:

- taxes to transactions (unless you added transactions)
- tax vendors to transactions
- tax vendor types to tax types
- geocodes to tax plans
- geocodes to utility codes

**Tax Type**

The BillPlex taxation process begins with Tax Types. Tax Types define both the name of a tax and percentage rate applied to the subscriber's charges.

A complete listing of the pre-configured Tax Types appears in Appendix B.

**Tax Plan**

Tax Plans are pre-configured for you in the CLEC Package. A Tax Plan is a related collection of BillPlex Tax Types that apply to a subscriber's taxing jurisdiction.

To access the Tax Plans, selecting Administration, Taxing, Create, then Tax Types. The Tax Type window will appear.

The Tax Type window is divided into two frames. The top frame lists all the tax plan for all 50 states, plus a Simple % tax plan. The bottom frame contains the corresponding Tax Types for each Tax Plan.

## Tax Vendor

A Tax Vendor represents the name of a third-party system that provides geocode and tax plan data in BillPlex.

The CLEC Package supports the third-party tax software, COMMTAX™ Telecommunication Tax Compliance System by Vertex™. It enables your company to automatically calculate subscriber's taxable transactions generated during the billing process. Vertex is pre-configured to look-up and reference geocodes, perform tax validation, and automatically assign a tax plan to the subscriber's address.

## Tax Vendor Codes

Tax Vendor Codes are the result of assigning Tax Vendors to parameters. Vendor Code records include the name of the Tax Vendor, a description of the Tax Parameter, and the Tax Code response expected by a Tax Vendor.

The CLEC Package contains pre-configured parameters for Vertex. The pre-configured parameters appear below.

Parameter	Description
1,1	Intrastate, Dial Tone Line (DTL)
1,2	Intrastate, Too
1,3	Intrastate, Private Line
1,4	Intrastate, Outbound Calling Plan
1,5	Intrastate, 800
1,6	Intrastate, Access Charges
2,1	Other, Installation
2,2	Other, Repair
4,1	Interstate, Toll
4,2	Interstate, Private Line
4,3	Interstate, Outbound Calling Plan
4,4	Interstate, 800
4,5	Interstate, Access Charges

## **Taxing Relationships**

The pre-configured Taxing relationships in the CLEC Package are:

- Tax Vendor Tax Types to Tax Types
- Tax Vendors to Transactions
- Tax Plan Types to Geocodes

## **Tax Vendor Tax Types to Tax Types**

The process of assigning Tax Vendor Tax Types to Tax Types is to create an association between BillPlex Tax Types and Vertex Tax Types. This relationship is already set up for you.

You can view these relationships by selecting Administration, Taxing, Assign, Tax Vendor Tax Types to Tax Types. The Tax Vendor Tax Types to Tax Types window will appear.

The Tax Vendor Tax Types to Tax Types window is divided into two frames. The top frame displays BillPlex specific Tax Types. The bottom frame displays the Tax Types for Vertex; for example, if you select the State Special Tax in the Tax Types frame, the associated Vertex Tax Type, VTX State Special Tax, appears in the Tax Vendor Tax Types frame.

## **Tax Vendors to Transactions**

You assign Tax Vendors to transactions if you are using the BillPlex Vendor and the Vertex Vendor simultaneously. BillPlex contains two pre-configured Tax Vendors: BillPlex and Vertex. If you are using BillPlex to generate taxes for certain transactions and Vertex for other transactions, you must make an association that identifies which vendor is taking care of each transaction.

## **Tax Plan Types to Geocodes**

Geocodes are unique geographical codes for every location. The CLEC Package assigns geocodes to Tax Plan Types at the state level.





# Chapter 7

## Agents

### **Chapter 7 Contents**

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*Agent Types* 97

*Companies* 98

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## Maintaining Agent Information

---

<b>Overview</b>	BillPlex allows you to create, track, and maintain custom distribution channels associated with Services and Features.
<b>Distribution Channels</b>	A typical distribution channel includes one or more Agent Types, Companies, and Agents that distribute services for your company. These may include many custom settings that define the special requirements of your business.
<b>The Agent Maintenance Window</b>	The Agent Maintenance window is divided into two panels. The left panel contains four tab selections that allow you to configure and maintain the custom settings associated with each part of a service distribution channel. The right panel allows you to enter description information about the custom settings associated with each part of a service distribution channel.
<b>Parts of a Service Distribution Channel</b>	The four parts of a Service Distribution Channel are: <ul style="list-style-type: none"><li>• Channels</li><li>• Agent Types</li><li>• Companies</li><li>• Agents</li></ul>

## Channels

---

### **About Channels**

Channels enable you to set up and maintain channel code information associated with agent types.

### **Pre-configured Channels**

From the Channels tab, you can add and delete channels and assigned Agent Types, enter channel codes and descriptions, and view agent types that are already assigned to channel types.

The CLEC Package contains two pre-configured channels:

- Direct Sales
- Agent Sales

## Agent Types

---

### **About Agent Types**

Agent Types permit you to set up and maintain Agent Type definitions.

### **Pre-configured Agent Types**

From the Agent Types tab, you can add and delete Agent Types and enter Agent Type descriptions.

The CLEC Package contains four pre-configured Agent Types:

- Sales Person
- Sales Manager
- Sales Agent
- Account Manager

## Companies


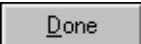
---

### About the Companies Tab

Using the Companies tab, you can set up and maintain company definitions, add and delete companies, and view agent information.

### Adding Companies


Use the following instructions to add companies.

Step	Action
1	From the Administration menu, select Agents. Result: The Agents Maintenance window appears.
2	Click the Companies Tab.
3	Right-click any where inside the All Companies panel. Result: A pop-up menu appears.
4	Select New Company. Result: An icon appears in the All Companies panel.
5	Complete the fields under the Details tab for the company that you are adding.
6	Click  to save the information.
7	Repeat steps 3 through 6 for each company that you want to add.
8	Click  to exit the Agents Maintenance window.

### Deleting Companies

Use the following instructions to delete companies from the system.

Step	Action
1	From the Administration menu, select Agents. Result: The Agents Maintenance window appears.

<b>Step</b>	<b>Action</b>
<b>2</b>	Click the Companies Tab.
<b>3</b>	Select the company that you want to delete.
<b>4</b>	Right-click any where inside the All Companies panel. Result: A pop-up menu appears.
<b>5</b>	Select Delete Company. Result: Billplex removes the company.
<b>6</b>	Click  to exit the Agents Maintenance window.

## Agents



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### About the Agents Tab

Using the Agents tab, you can set up and maintain agent definitions, add and delete agents, and enter agent detail information.

### Adding Agents

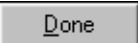
Use the following instructions to add agents.

Step	Action
1	From the Administration menu, select Agents. Result: The Agents Maintenance window appears.
2	Click the Agents Tab.
3	Right-click any where inside the All Agents panel. Result: A pop-up menu appears.
4	Select New Agent. Result: An icon appears in the All Agents panel.
5	Complete the fields under the Details tab for the agent that you are adding.
6	Click  to save the information.
7	Repeat steps 3 through 6 for each agent that you want to add.
8	Click  to exit the Agents Maintenance window.

### Deleting Agents

Use the following instructions to delete agents from the system.

Step	Action
1	From the Administration menu, select Agents. Result: The Agents Maintenance window appears.
2	Click the Agents Tab.

<b>Step</b>	<b>Action</b>
<b>3</b>	Select the agent that you want to delete.
<b>4</b>	Right-click any where inside the All Agents panel. Result: A pop-up menu appears.
<b>5</b>	Select Delete Agent. Result: Billplex removes the agent.
<b>6</b>	Click  to exit the Agents Maintenance window.





# Chapter 8

## Services, Features, & Parameters

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*Adding Service, Feature, Parameter Information* 107

## Services/Features/Parameters

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### **Service/Feature/ Parameter Relationship**

A hierarchal relationship exists between Services, Features, and Parameters. This relationship is created through Service Types, Feature Types, and Parameter Types.

The lowest common denominator in the hierarchy is the Parameter Type, which is used to further define the Feature Type. The Feature Type is then used to further define the Service Type.

BillPlex recognizes the Service Types, Feature Types, and the Parameter Types, not the Services, Features, and Parameters.

### **Services**

Services are the products that your company offers to subscribers. You and your customers recognize the Services. BillPlex recognizes the Service Types for each Service.

### **Service Types**

BillPlex uses the Service Types to identify the Services. Each Service has a related Service Type.

The CLEC Package contains 11 pre-configured Service Types. These Service Types are listed in the following table.

<b>Service Types</b>
Business Dedicated 800 LD
Business Dedicated LD
Business Fixed Rate Line
Business Switched LD
Calling Card
Late Payment
PRI Local Service
Residential Fixed Rate Line
Residential Service LD

<b>Service Types</b>
T-1 Local Service
T-1 Service

**Features** Features extend services by specifying characteristics that further define the service.

**Feature Types** Feature Types define the attributes of a Feature. BillPlex looks for and uses Feature Types during the creation and association of actual Features. You and your customers recognize the Features. BillPlex recognizes the Feature Types.

**Pre-configured Feature Types** Currently, the CLEC Package contains 106 pre-configured Feature Types. A complete listing of the Feature Types exist in Appendix C.

**Parameter Types** A Parameter Type defines the characteristics and settings within a Features. Every Feature has a Parameter Type associated with it.

**Pre-configured Parameter Types** Currently the CLEC Package contains 15 pre-configured Parameter Types. If needed, you can add Parameter Types. You can also modify them; however, we suggest that you use the existing Parameter Types that are available to you in the CLEC Package.

The following table lists the pre-configured Parameter Types in the CLEC Package.

<b>Parameter Types</b>
CIC #
Charge (10)
Charge Discount (6)
Installation Charge (1)
Interest Rate (4)
Long Distance Carrier

Parameter Types
Monthly Charge (2)
PIC Status
Quantity of B Channels
Quantity of DSOs
Rate Discount (3)
Term (9)
Tracking Code (5)
Waive Charge (7)
Waive Fee (8)

There are three informational Parameters that you can modify:

- Long Distance Carrier
- CIC #
- Tracking Code

We recommend that the other pre-configured Parameter Types remain unchanged.

### **Service Management Types**

The hierarchal union of a Service, Feature, and Parameter results in a Service Management Type. Once you associate a Parameter to a Feature and a Feature to a Service, the combination results in a Service-Feature Management Type.

## Adding Service, Feature, Parameter Information

---

### Overview

The CLEC Package contains pre-configured Service, Feature, and Parameter Types that are essential to the functionality of the CLEC Model. You can add Service, Features, and Parameter Types, but we suggest that you do not modify the pre-configurations.

If you need to make extensive changes to the CLEC Model you must purchase Daleen's Developer Toolkit. Daleen is not responsible for functionality problems arising from alterations made to the pre-configurations in the Package.







### The Service Management Types Window

The Service Management Types window is where the Service Types, Feature Types, Parameter Types, and their relationships are defined.

To access the Service Management Types window, go to the Administration menu, select Services, select Create, then choose Service Management Types.

### Adding Types

Use the following instructions to add Service, Feature, and Parameter Types.

If you want to ...	then right-click inside the ...	and select ...	then click ...	and click ...
add a Parameter Type	Parameter Types column	Add Parameter Type	the  button	 to save.
add a Feature Type	Feature-Parameter Types column	Add Feature Type	the  button	 to save.
add a Service Type	Service-Feature-Market Types column	Add Service Type	the  button	 to save.

- Using the drag and drop process, assign Parameter Types to Feature Types.
- Using the drag and drop process, assign Feature Types to Service Types.



# Chapter 9

## Connections

### **Chapter 9 Contents**

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## Connection Numbers

---

### Overview

The Connection Number section of the CLEC Package consists of:

- Connection Numbers
- Connection Number Types
- Connection Types
- Connection Number Statuses

These components combined produce the structure for a Connection Number.

### Connection Numbers

A Connection Number represents a link to a subscriber's actual service. BillPlex uses Connection Numbers as an interconnection between Service Usage Records (SURs), subscriber records, and their associated rate plans.

You will input Connection Numbers into the system via importing or manually entering the numbers.

### Connection Number Types

Connection Number Types are groups that contain similar kinds of Connection Numbers. Each Connection Number Type contains a consolidation of similar Connection Numbers.

### Pre-configured Connection Number Types

The following table displays the pre-configured Connection Number Types included in the CLEC Package.

<b>Connection Number Types</b>	<b>Description</b>
POTS	Plain old telephone service
800	1-800 Toll Free Numbers
Circuit ID	Circuit ID
Calling Card	Calling Card



## Connection Type

Connection Types guide the calls to the Rate Plans.

## Pre-configured Connection Types

The following table displays the pre-configured Connection Types that the CLEC Package offers.

Connection Number Types	Description
POTS	Plain old telephone service
800	1-800 Toll Free Numbers
Circuit ID	Circuit ID
Auth Code + Pin	Substantiates the user of the calling card

## Connection Number Status

The Connection Number Status indicates how the Connection Number is being used. BillPlex assigns statuses to each Connection Number. This assignment is based on actions that you initiate. Use the pre-configured statuses. BillPlex will not recognize added statuses.

## Pre-configured Connection Number Statuses

The CLEC Package offers the following pre-configured Connection Number Statuses:

This Connection Number Status . . .	Indicates Connection Numbers that . . .
Unassigned (U)	are not assigned to a subscriber's service.
Assigned (A)	belong to a subscriber's service and are not currently assignable.
Inactive (I)	are suspended.
Retired (R)	are deactivated, but are still available for assignment.
Permanently Retired (P)	are no longer available for assignment at all.

## Altering the Pre-configurations

All of the Connection Number components are pre-configured, except the Connection Numbers. You can add Connection Number Types; however, you will also need to add Services and Features that will use the Connection Number Types that you add.

## Process for Configuring Connection Numbers

To configure your Connection Numbers:

Task	Action
1	Create Connection Numbers.
2	Assign Connection Numbers to Connection Types.
3	Assign the Services to their associated Connection Number Types.

## Creating Connection Numbers

---

### Introducing Connection Numbers to BillPlex




Connection Numbers are not pre-configured in the CLEC Package; therefore, you input the Connection Numbers into the system. There are three ways to bring Connection Numbers into BillPlex:

- Manually typing the Connection Numbers in BillPlex.
- Generating the Connection Numbers from within BillPlex.
- Importing the Connection Numbers into BillPlex using a comma delimited format.

### Manually Entering Connection Numbers

Use the following instructions to manually enter Connection Numbers into BillPlex.

Step	Action
1	Go to the Administration menu, and select Connections, Create, then Connection Numbers. Result: The Connection Number Type window appears.

Step	Action
2	Locate the empty Connection Number field and type the first Connection Number. Result: The Connection Number is in the Connection Number field with an Unassigned status in the Number Status field.
3	Click inside the Number Status field to display the drop-down list, then select the appropriate status for the Connection Number.
4	Click the  located at the bottom of the window. Result: BillPlex automatically creates a new row to hold the next Connection Number.
5	Type the next Connection Number and assign it the proper status. Continue steps 4 and 5 until you have entered all the desired Connection Numbers.
6	Click  to save your entries.
7	Click  to exit the Connection Number Type window.

**Rules for Importing Connection Numbers into BillPlex**

- The file containing the Connection Numbers must be in ASCII format (comma delimited or text file).
- You cannot import any files that contain duplicated Connection Numbers.
- BillPlex only recognizes the pre-configured status codes: A, I, P, R, and U. For descriptions of the Statuses, please see “Pre-configured Connection Number Statuses ” on page 111.

**Imported Connection Number Format**

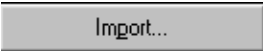
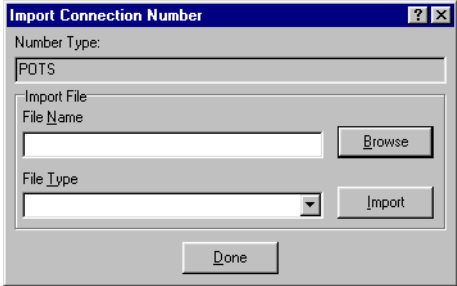

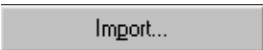
The following table outlines the format that the Connection Numbers take on for BillPlex to successfully accept the imported file.

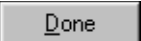
The . . .	is the . . .
First character	delimiter representation character, which is the only character on the first line.

<b>The . . .</b>	<b>is the . . .</b>
Second item	Connection Number followed with a delimitation character, followed by a status code letter, followed with another delimitation character.

### Importing Connection Numbers into BillPlex

Use the following instructions to import Connections Numbers into BillPlex.

Step	Action
1	Go to the Administration menu, and select Connections, Create, then Connection Numbers. Result: The Connection Number Type window appears.
2	Click  . Result: BillPlex displays the Import Connection Number window. 
3	Locate the File Name field and type the location of the file or use the  button to navigate and find the file's location.
4	Locate the File Type field and select Delimited or Text File from the drop-down list.
5	Click  . Result: The import occurs automatically, then BillPlex returns you to the Import Connection Number window.

Step	Action
6	Click  to exit the Import Connection Number window.

### About Generating Connection Numbers within BillPlex

The Generate Connection Numbers feature automatically generates connection numbers when you enter a range of digits for Connection Number selection.

BillPlex allows you to select from a range of digits in the following ways:

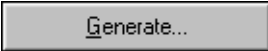
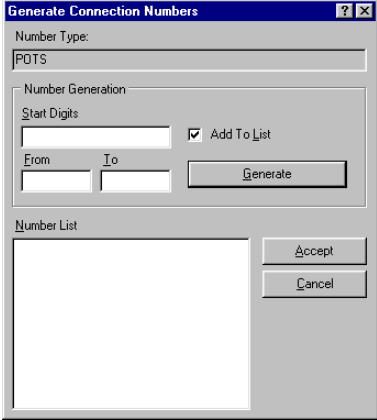
- by typing the beginning digits of the Connection Number in the Start Digits field
- by entering the first digit of the next group of the connection numbers in the From field and the last digit of the connection numbers in the To field


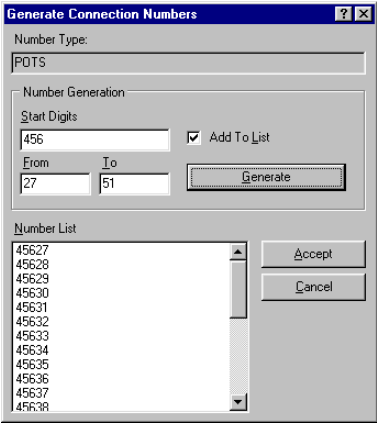

BillPlex displays the resulting numbers in the Numbers List field, where you can select the desired Connection Numbers that you want to assign to the database.

### Generating Connection Numbers within BillPlex

Use the following instructions to generate Connections Numbers within BillPlex.

Step	Action
1	Go to the Administration menu, and select Connections, Create, then Connection Numbers. Result: The Connection Number Type window appears.

Step	Action
2	<p>Click .</p> <p>Result: The Generate Connection Number window appears.</p> 
3	In the Start Digits field, type the starting numbers of a connection number. Example: 456
4	In the From field, type the first group of Connection Numbers after the Start Digits. Example: 27
5	In the To field, type the last group of Connection Numbers after the Start Digits. Example: 51

Step	Action
<p><b>6</b></p>	<p>Click  to generate the Connection Numbers.                      Result: The resulting numbers display in the Numbers List field, as shown below.</p> 
<p><b>7</b></p>	<p>Click  to keep the Numbers that BillPlex generated.</p>

## Assigning Connection Numbers to Connection Types

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### Overview

After you create Connection Numbers, you must assign the Connection Numbers to Connection Type Numbers. This process provides a link between service providers and subscribers that use the service. For example, a Connection Type such as “telephone” uses a “telephone number” as the Connection Type Number.


The CLEC Package contains pre-configured Connection Types. For a listing of the pre-configured Connection Types, see “Pre-configured Connection Types ” on page 111.

### Assigning Connection Numbers to Connection Types

Use the following instructions to link Connection Numbers with Connection Types.

Step	Action
1	Go to the Administration menu, and select Connections, Assign, then choose Numbers to Connection Types. Result: The Connection - Connection Number Type window appears.
2	Click the  button located at the bottom of the window. Result: BillPlex automatically creates a new row to hold the next Connection Number.
3	Select a Connection Type from the Connection Type drop-down list.
4	Select a Number Type from the Number Type drop-down list.
5	Enter the minimum and maximum required amount of Connection Numbers in the appropriate fields.
6	Click  to save your entries.



<b>Step</b>	<b>Action</b>
<b>7</b>	Repeat steps 2 through 6 until you have assigned all Connection Numbers to Connection Types.
<b>8</b>	Click  to exit the Connection - Connection Number Type window.



# Chapter 10

## Rating and SUR Masks

### Chapter 10 Contents

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## Rating

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### Overview

The BillPlex CLEC Package consists of Atomic and Aggregate Rating plug-ins, a set of standard Rate Control Data (RCD) Group structures, and a Render application.

The primary component of the BillPlex CLEC Package is the set of rating plug-ins for Atomic and Aggregate rating. These plug-ins are designed and built through assigning control and rates in a standard set of RCD Groups. The plug-ins understand and know the RCD Group structures.

The Rating structure is pre-configured for you; however, you can change the rates to conform to your own rate plans and you can rename the pre-configured Rate Plans.

### Atomic Rating

Atomic rating is the process of rating a call record according to the duration of usage. This occurs each time the call is initiated.

### Aggregate Rating

Aggregate rating occurs once per month at the time of the billing cycle. It is the process of applying taxes to the usage records.

### Rating Components

The following table contains the components for Rating.

Component	Description
<b>RCD Groups</b>	Rate Control Data (RCD) Groups essentially provide the structure and basic components for the Rate Plans. They are comprised of Element Types and Data Types. RCD Groups are the catapult for the Rate Plans.
<b>Rate Plans</b>	Rate Plans consist of Rate Plan Types, which are linked to Features. This connection between the Rate Plan and the Features enable accurate rating for calls and usage.

<b>Component</b>	<b>Description</b>
<b>RCD Data Types</b>	An RCD Data Type is used to define the actual value of an element. For example, the “Charge” element’s RCD Data Type is “Money.”
<b>RCD Element Types</b>	Element Types are physical attributes that BillPlex uses to rate a call. Element Types provide internal logic for RCD Groups.
<b>Rating Procedures</b>	C++ code that is mapped to Dynamic Link Libraries (DLLs) to perform tasks for Aggregate and Atomic Rating.

## The Rating Process

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### Atomic Rating Process

During Atomic rating, the atomic rating plug-in evaluates individual service usage records based on a subscriber's assigned Rate Plan, not including taxes. BillPlex maintains all resulting charge transactions in a database table until the SURS are invoiced to the appropriate subscriber.

The following table displays the event process that occurs during Atomic Rating.

Stage	Process
1	BillPlex reads the service usage records from a database table.
2	BillPlex locates the service, feature, connection number, and rate plan that is applicable to each service usage record (sur).
3	BillPlex calls the appropriate atomic rating plug-in that is associated with the rate plan.
4	The Atomic Rating plug-in responds to the request and extracts RCD Group structures from the Rate plan.
5	The Atomic Rating plug-in extracts charges associated with a usage record.
6	The Atomic Rating plug-in generates one or more transactions for a service usage record.

### Aggregate Rating Process

During Aggregate rating, the aggregate rating plug-in performs “end of the month” rating. This occurs at the end of every billing period. BillPlex generates an aggregate rating event for each subscriber whose billing cycle falls at the end of the billing period.

The following table displays the event process that occurs during Aggregate Rating.

Stage	Process
1	BillPlex generates an aggregate rating event for each subscriber whose billing cycle falls at the end of the billing period.
2	The Aggregate rating plug-in receives the event and loads data from the database.
3	The Aggregate rating plug-in assesses end of the month charges and generates invoices for all uninvoiced transactions.
4	The Aggregate rating plug-in applies payments on all uninvoiced transactions.
5	The Aggregate rating plug-in generates Deposit Refunds for all uninvoiced transactions.
6	The Aggregate rating plug-in generates Invoice Messages on all uninvoiced transactions.
7	The Aggregate rating plug-in performs treatment and collection processing.
8	The Aggregate rating plug-in generates a Rendering Event for each successfully processed subscriber.
9	BillPlex passes this rendering event to the Invoice Rendering plug-in for further processing.

## Atomic Rating RCD Groups

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### Overview

The RCD Groups in the CLEC Package are designed to maximize the RCD Group's reuse and configureability. They provide the logic in performing Atomic and Aggregate rating. The rating plug-ins use the elements in the RCD Groups for guidance and direction to rate. RCD Elements are the building blocks for RCD Groups. Each RCD Group contains a variety of mandatory Elements. Please see the "RCD Group Elements" on page 132 for details about each Element.

### Standard RCD Group Structures for Atomic Rating

Atomic Rating is the rating of usage charges. You can turn this on or off by assigning values to RCD Elements residing in the RCD Groups.

There are four standard RCD Group structures that are used in configuring an Atomic Rating Rate Plan. The following table contains these standard RCD Groups.

Atomic RCD Groups	Function
Control	sets up the rules that govern how Atomic Rating performs for a specific feature
Charge	applies non-duration sensitive charges and surcharges to a call record
Usg Intro Rater	carries the initial period and additional period rates for an introductory period, should one exist
Usg Rater	carries the initial period and additional period rates for any calls that fall outside of an introductory period



### **Control Group Elements for Atomic Rating**

The Elements in the Control RCD Group provide the overall usage rating controls.

The Atomic Rating Control Group must contain the following RCD Elements:

- Addl Prd Increment
- Bill Format
- Base Rate Increment
- Charge Rounding Method
- Discount
- Discount Override Allowed
- Discount Override Parm
- Group Class
- Init Prd Increment
- Init Prd Number of Increments
- Intro Prd Number Of Periods
- Intro Prd Override Allowed
- Intro Prd Override Parm
- Intro Prd Period Type
- Precision
- Repeating Sets
- Unit Type
- Waive Allowed
- Waive Parm

### **Charge Group Elements for Atomic Rating**

The Elements in the Charge group support the application of non-duration sensitive charges to a call record.

The Atomic Rating Charge Group must contain the following Elements:

- Charge
- Group Class
- Repeating Set Id
- Surcharge

### **Usg Intro Rater Group Elements for Atomic Rating**

The Elements in the Usg Intro Rater Group allow you to define a set of rates for an Introductory Period. These rates are only valid for a configurable number of days/months from the time a subscriber has a Rate Plan assigned to them.

The Usg Intro Rater Group must contain the following Elements:

- Addl Prd Incr Override (optional override of Control Group value)
- Addl Prd Rate
- Group Class (always equal to '02')
- Init Prd Incr Override (optional override of Control Group value)
- Init Prd Nmbr Of Incr Override (optional override of Control Group value)
- Init Prd Rate
- Repeating Set ID
- Time Start
- Time End

### **Usg Rater Group Elements for Atomic Rating**

The Elements in the Usg Rater group allow you to specify a set of rates to use when the Introductory Period ends.

The Usg Rater Group must contain the following Elements:

- Addl Prd Incr Override (optional override of Control Group value)
- Addl Prd Rate
- Group Class (always equal to '04')
- Init Prd Incr Override (optional override of Control Group value)
- Init Prd Nmbr Of Incr Override (optional override of Control Group value)
- Init Prd Rate
- Repeating Set ID
- Time Start
- Time End

## Aggregate Rating RCD Groups

---

### Overview

The RCD Groups in the CLEC Package are designed to maximize the RCD Group's reuse and configureability. They provide the logic in performing Atomic and Aggregate rating. The rating plug-ins use the elements in the RCD Groups for guidance and direction to rate. RCD Elements are the building blocks for RCD Groups. Each RCD Group contains a variety of mandatory Elements. Please see the "RCD Group Elements" on page 132 for details about each Element.

The Aggregate Rating plug-ins perform some generic, bill day rating functions, such as:

- recurring charge rating
- non-recurring charge rating, and
- late payment charge calculation

### Standard RCD Group Structures for Aggregate Rating

There are four standard RCD Group structures that are used in configuring an Aggregate Rating Rate Plan. The following table contains these standard RCD Groups.

<b>Aggregate RCD Groups</b>	<b>Function</b>
Recurring Intro	allows you to define recurring charges for a Rate Plan during an Introductory Period
Recurring	supports the application of recurring charges in a Rate Plan beyond the Introductory Period
Non-Recurring	supports the application of non-recurring charges to a Feature
Late Payment	allows you to define late payment fees to overdue amounts

### **Recurring Intro Group Elements for Aggregate Rating**

The Elements in the Recurring Intro Group enable you to define recurring charges for a Rate Plan during an Introductory Period.

The Aggregate Rating Recurring Intro Group must contain the following Elements:

- Advance Billing
- Advance Crdt Tran Id
- Bill Format
- Charge
- Charge Override Allowed
- Charge Override Parm
- Discount
- Discount Override Allowed
- Discount Override Parm
- Group Class (equals 51)
- Intro Prd Number Of Periods
- Intro Prd Override Allowed
- Intro Prd Override Parm
- Intro Prd Period Type
- Prorate
- Surcharge
- Waive Allowed
- Waive Parm

### **Recurring Group Elements for Aggregate Rating**

The Elements in the Recurring Group support the application of recurring charges in a Rate Plan beyond the Introductory Period.

The Aggregate Rating Recurring Group must contain the following Elements:

- Advance Billing
- Advance Crdt Tran Id
- Bill Format
- Charge Override Allowed
- Charge Override Parm
- Charge
- Discount
- Discount Override Allowed
- Discount Override Parm
- Group Class (equal to 50)
- Prorate
- Surcharge
- Waive Allowed
- Waive Parm

**Non-Recurring Group Elements for Aggregate Rating**

The Elements in the Non-Recurring Group support the application of non-recurring charges to a feature.

The Aggregate Rating Non-Recurring Group must contain the following Elements:

- Bill Format
- Charge
- Charge Override Allowed
- Charge Override Parm
- Discount
- Discount Override Allowed
- Discount Override Parm
- Group Class (equal to 52)
- Surcharge
- Waive Allowed
- Waive Parm

**Late Payment Group Elements for Aggregate Rating**

The Elements in the Late Payment Group enable you to define late payment fees to overdue amounts.

The Aggregate Rating Late Payment Group must contain the following Elements:

- Any Balance
- Bill Format
- Group Class (equal to 99)
- Minimum Balance
- Percentage
- Number of Days Old
- Waive Allowed
- Waive Parm

## RCD Group Elements

---

### Overview

The RCD Groups contain mandatory RCD Elements that provide specific instructions to the rating plug-ins. These RCD Elements and descriptions are listed below in alphabetical order.

### Addl Prd Increment Element

<b>Addl Prd Increment</b>	
<b>Description</b>	Specifies the number of units that make up a rateable increment to which the Addl Prd Rate element will be applied.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	000001
<b>Valid Value</b>	999999

### Addl Prd Rate Element

<b>Addl Prd Rate</b>	
<b>Description</b>	Specifies the duration sensitive amount applied to each increment that falls outside of the initial period.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	00.0000
<b>Valid Value</b>	Defined as decimal 99.9999

### Advance Billing Element

<b>Advance Billing</b>	
<b>Description</b>	Used in RCD Groups that support the rating of recurring charges. Using this element, you can instruct the plug-in to calculate recurring charges in arrears (obligation) of the bill period close date or into the future beyond the bill period close date.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	Y
<b>Valid Value</b>	N - calculate in arrears of the bill period close date Y - calculate beyond the bill period close date

### Advance Crdt Tran Id Element

<b>Advance Crdt Tran Id</b>	
<b>Description</b>	Holds the Transaction Type of the credit transaction that the plug-in creates when a Rate Plan requires that recurring charges be rated in advance and the plug-in must create a credit transaction to recover from Rate Plan changes made during the last bill cycle.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	NULL
<b>Format</b>	9999999999

### Any Balance Element

<b>Any Balance</b>	
<b>Description</b>	Indicates whether a late payment fee calculation should be based on any outstanding balance or on money being a number of days old.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	Y
<b>Valid Values</b>	Y - based on any outstanding balance N - based on money being a number of days old

### Base Rate Increment Element

<b>Base Rate Increment</b>	
<b>Description</b>	Holds the number of units that make up the increment for which a rate is valid. Most usage rates are defined in terms of full minutes, even when 6 second rating increments are required. The plug-ins will use this field to determine the base increment from which an increment rate can be calculated.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	60
<b>Format</b>	999999



**Bill Format Element**

<b>Bill Format</b>	
<b>Description</b>	Indicates the general classification that a call record falls into for presentation on a bill.
<b>Rating Type</b>	Both Atomic and Aggregate Rating
<b>Default Value</b>	NULL
<b>Valid Values</b>	O - Outgoing I - Incoming C - Calling Card

**Charge Element**

<b>Charge</b>	
<b>Description</b>	Allows you to enter non-duration sensitive amount applied to call records.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	00.0000
<b>Defined as</b>	decimal 99.9999

**Charge Method  
Rounding Element**

<b>Charge Method Rounding</b>
-------------------------------

<b>Description</b>	Allows you to define what type of rounding you want applied to the charge for a call.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	True
<b>Valid Values</b>	Truncate True Up

### Discount Element

<b>Discount</b>	
<b>Description</b>	Enables you to enter a decimal that represents the percentage discount that you applied to a charge.
<b>Rating Type</b>	Both Atomic and Aggregate Rating
<b>Default Value</b>	0.000
<b>Defined as</b>	decimal 9.999

## Discount Allowed Override Element

<b>Discount Allowed Override</b>	
<b>Description</b>	Allows you to specify whether a CSR can enter a subscriber specific discount.
<b>Rating Type</b>	Both Atomic and Aggregate Rating
<b>Default Value</b>	N
<b>Valid Values</b>	Y - Yes N - No

## Discount Parm Override Element

<b>Discount Parm Override</b>	
<b>Description</b>	When Discount Override Allowed equals 'Y', this element will contain the parm_type of the Parameter Type that carries the subscriber specific discount percentage.
<b>Rating Type</b>	Both Atomic and Aggregate Rating
<b>Default Value</b>	0
<b>Defined as</b>	9999999999
<b>See Also</b>	Discount Allowed Override

## Group Class Element

<b>Group Class</b>	
<b>Description</b>	The plug-ins use this element to identify a class of RCD Groups. This is useful for groups that may repeat within a single rate plan; as in groups used to rate usage according to state or country specific rates.
<b>Rating Type</b>	Both Atomic and Aggregate Rating
<b>Format</b>	99
<b>Valid Values</b>	00 = Default 01 = Control 02 = Charge 03 = Intro Usg Rater 04 = Usg Rater 50 = Recurring 51 = Recurring Intro 52 = Non-recurring 99 = Late Payment
<b>See Also</b>	The Group Class section

## Init Prd Increment Element

<b>Init Prd Increment</b>	
<b>Description</b>	Allows you to enter the number of units that make up a rateable increment to which the Init Prd Rate will be applied.
<b>Rating Type</b>	Atomic
<b>Default Value</b>	000001
<b>Defined as</b>	999999
<b>See Also</b>	Init Prd Rate

### Init Prd Number of Increments Element

Init Prd Number of Increment	
<b>Description</b>	Enables you to define the maximum number of increments that will make up the initial period.
<b>Rating Type</b>	Atomic
<b>Default Value</b>	000000
<b>Defined as</b>	999999

### Init Prd Rate Element

Init Prd Rate	
<b>Description</b>	Allows you to enter the duration sensitive amount applied to each increment that falls into the initial period.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	00.0000
<b>Defined as</b>	99.9999

### Intro Prd Number of Periods Element

Intro Prd Number of Periods	
<b>Description</b>	Enables you to define the number of periods of the type defined in Period Type that the plug-ins will use to calculate the Introductory Period.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	000000
<b>Format</b>	999999

### Intro Prd Override Allowed Element

<b>Intro Prd Override Allowed</b>	
<b>Description</b>	Enables you to indicate whether a CSR can enter a subscriber specific override to the number of periods in the Introductory Period.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	N
<b>Valid Values</b>	Y - Yes N - No
<b>See Also</b>	Introductory Period

### Intro Prd Override Parm Element

<b>Intro Prd Override Parm</b>	
<b>Description</b>	Contains the parm_type of the Parameter Type that carries subscriber specific number of periods when Intro Prd Override Allowed equals 'Y'.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	0
<b>Defined as</b>	9999999999
<b>See Also</b>	Prd Override Allowed

### Minimum Balance Element

Minimum Balance	
<b>Description</b>	Allows you to define a minimum amount below which no late payment fee will be applied to an account. Used in Late Payment.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	000.00
<b>Defined as</b>	999.99
<b>See Also</b>	Late Payment

### Number of Days Old Element

Number of Days Old	
<b>Description</b>	Enables you to indicate the number of days old that the money must be to which the system will apply late payment charges.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	0
<b>Valid Values</b>	00 to 99, inclusive
<b>See Also</b>	Late Payment

### Percentage Element

Percentage	
<b>Description</b>	Allows you to define the percentage used to calculate a fee. Used in Late Payment calculation.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	0.000
<b>Defined as</b>	Decimal 9.999

## Precision Element

<b>Precision</b>	
<b>Description</b>	Indicates the number of positions to the right of the decimal point to be used to carry the charge associated with a call.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	2
<b>Defined as</b>	Decimal 9.999

## Prorate Element

<b>Prorate</b>	
<b>Description</b>	Allows you to specify whether a recurring charge should be rated based on the number of days a Rate Plan was active during a bill period or whether the full period charge should always be applied.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	Y
<b>Valid Values</b>	Y - rate based on the number of days a Rate Plan was active during a bill period N - always apply the full period charge



## Repeating Sets Element

Repeating Sets	
<b>Description</b>	Allows you to define state or country specific RCD group sets.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	N
<b>Valid Values</b>	Y - repeating group sets exist N - repeating group sets do not exist
<b>See Also</b>	Repeating Set ID

## Repeating Set Id Element

Repeating Set Id	
<b>Description</b>	Use this value to uniquely identify all of the groups that belong to a state or country specific set.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	NULL
<b>Format</b>	VarChar(10) May contain a state or country code
<b>See Also</b>	Repeating Set ID

## Surcharge Element

Surcharge	
<b>Description</b>	Holds the amount of a non-duration sensitive surcharge.
<b>Rating Type</b>	Both Atomic and Aggregate Rating
<b>Default Value</b>	00.0000
<b>Format</b>	99.9999

### Time Start Element

Time Start	
<b>Description</b>	Enables you to specify the start time for a rate period.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	00:00:00
<b>Format</b>	HH:MM:SS

### Time End Element

Time End	
<b>Description</b>	Enables you to specify the end time for a rate period.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	23:59:59
<b>Format</b>	HH:MM:SS

### Unit Type Element

Unit Type	
<b>Description</b>	Allows you to specify the type of unit represented in the call record's Unit field.
<b>Rating Type</b>	Atomic Rating
<b>Default Value</b>	Seconds
<b>Valid Values</b>	Seconds

**Waive Allowed  
Element**

<b>Waive Allowed</b>	
<b>Description</b>	Allows you to indicate whether a CSR can waive non-Surcharge rates or charges for a specific subscriber.
<b>Rating Type</b>	Aggregate Rating
<b>Default Value</b>	N
<b>Valid Values</b>	Y - Yes the CSR can waive N - No the CSR cannot waive

## Atomic Rating Prerequisites

---

### Overview

The performance of the Atomic Rating plug-ins is dependent upon the existence of a specific set of fields in a service usage record (SUR) table. The plug-ins refer to these fields by name, so the SUR tables must be defined with names shown here. The list of these fields and their definitions resides in the following table.

To ensure that these fields are present:

Step	Action
1	Locate the Administration menu, and select SUR, select Configure, then choose Column Format. Result: The Column Format Configuration window appears.
2	Ensure that each field appears in the SUR Tables column.
3	Map your data to these fields.

Column Name	Name	Format	Definition
Jurs	Jurisdiction	Char(2)	Defines a call record's jurisdiction. The valid values include: 01=IntraLATA/Intrastate 02=IntraLATA/Intrastate 03=IntraLATA/Intrastate 04=IntraLATA/Intrastate 30=International
units	units	Integer(6)	The number of measured units in the call record.
acct_cd	Account Code	VarChar(10)	Special digits entered by caller when a call is placed. Used to identify the caller, and to group call details on the bill.

Column Name	Name	Format	Definition
from_num	Originating Number	VarChar(30)	Telephone number from which the call was originated.
from_city	Originating City	VarChar(10)	City in which the originating number is located.
from_state	Originating State	Char(2)	State in which the originating number is located.
to_num	Terminating Number	VarChar(30)	Telephone number at which the call was terminated.
to_city	Terminating City	VarChar(10)	City in which the terminating number is located.
to_state	Terminating State	Char(2)	State in which the terminating number is located.
rt_pin_cd	Rate Plan Code	VarChar(10)	Used to indicate to the Long Distance Atomic Rating plug-in which state or country specific rate plan should be applied to this call. Will contain either a state code or a country code.
orig_meth	Origination Method	Char(1)	Indicates type of set from which the call was originated. Value of '0' means no special handling, and a value of '1' means the call was originated from a pay phone.
metho_of_rec	Method of Recording	Char(2)	Used primarily to indicate an operator's involvement in the completion of a call. Valid values are: 00-09=No operator involvement 10-19=Operator Serviced 20-29=Operator Completed

## Building RCD Groups for Atomic and Aggregate Rating

---

### Overview

You must use a specific structure to build RCD groups. The RCD Group Elements form the internal logic of an RCD Group and specify the functions of the group. Each RCD Group structure must contain specified RCD Elements to function properly. To direct the system to perform rating for your company, you can alter values for the RCD Elements.

### Objective

The preceding sections of this chapter delineated which RCD Groups you should use for specific purposes and which Elements you must include in those specific RCD Groups. This section specifies what values you should enter for the defined Elements to make the Atomic rating plug-ins perform Atomic rating to suit the needs of your company.

### Instructions for Modifying the RCD Group Elements for Atomic Rating

The following table provides directions for entering values for pertinent Elements so that Atomic Rating occurs to suit your company's needs.

To modify these values, go to the Administration menu, select Rating, select Configure, then choose Rate Plans.

If you want to . . .	Then . . .	And . . .	Result
Assign the 'Dummy' Transaction Type to any instance of the Control Group	select Rating from the Administration menu, and select Configure/ Rate Plans	select 'Dummy' from the Transaction Type field's drop-down list for the specified group	an entry will not be made into the General Ledger when a charge is sent using this group
Define rateable increments as a number of seconds	enter a <b>Unit Type</b> in the Control Group		the base unit of measurement is defined
Define the increment that is associated with all duration sensitive rates contained within all occurrences of the usage rating groups	enter the <b>Base Rate Increment</b>		the plug-in correctly applies a per minute rate to some other increment

If you want to . . .	Then . . .	And . . .	Result
Define an initial rate period for each call record to support the application of one rate for the first segment of a call and another rate for any additional segments	enter an initial period by first defining the number of units that make up a rateable increment in the initial period in the <b>Init Prd Increment</b> element	assign the number of increments in the initial period in the <b>Init Prd Number Of Increments</b> element to further define the initial period.	The plug-ins will apply a specific rate only to the portion of the call's duration that falls into the initial period.
Define the number of units that make up an additional period rateable increment	assign a number to the <b>Addl Prd Increment</b> element	the definition of an additional period increment is required when an initial period is defined.	The plug-ins will apply the Addl Prd Rate from the Usg Rater group to all additional period increments.
Instruct the plug-ins to look for and expect many groups of the same structure one for each state or country because the Rate Plan requires the entry of many jurisdiction specific rates	assign a 'Y' value to the <b>Repeating Sets</b> element.		The plug-ins will use the Repeating Sets ID to find the correct RCD Group or set of RCD Groups required to rate a call record.
Have the system produce a specific bill format on the invoice for the call record	assign a 'O', 'I', or 'C' value to the <b>Bill Format</b> element.		The system will produce a specific bill format on the invoice for the call record.
Define the number of positions to the right of the decimal point that should be used to carry the charge for a call record	enter any value between zero and four in the <b>Precision</b> element.		

If you want to . . .	Then . . .	And . . .	Result
Have the plug-ins round the calculated charge for a call record	set the <b>Charge Rounding Method</b> element to True, Up, or Truncate	where True causes the plug-ins to round .005 through .009 up to .01; .000 through .004 is rounded down to 000; Up causes the plug-ins to round up; and Truncate causes the plug-ins to round down.	The plug-ins will round the calculated charge for a call record.
Define multiple rate periods within a given day	use the <b>Time Start</b> and <b>Time End</b> elements.		
Enter your own rates	populate the <b>Add Prd Increment</b> and <b>Init Prd Increment</b> elements	populate the Init Prd Number of Increments element to specify the maximum number of increments that will make up the initial period.	The plug-ins will use the values entered.
Re-use the same RCD Group structure multiple times within a single Rate Plan	assign each instance of an RCD Group within a single Rate Plan a unique name	assign a Group Class element to each RCD Group within the Rate Plan.	The plug-ins will use the Group Class element to determine which RCD Group structure is used for each rating calculation.



**Instructions for Modifying the RCD Group Elements for Aggregate Rating**

Use the following table for directions on modifying the values of pertinent Elements so that Aggregate Rating occurs to suit your company's needs.

To modify these values, go to the Administration menu, select Rating, select Configure, then choose Rate Plans.

<b>If you want to . . .</b>	<b>Then . . .</b>	<b>And . . .</b>	<b>Result</b>
Instruct the plug-ins to bill recurring charges in advance	assign a Y to the <b>Advance Billing</b> element.		The plug-in will bill the associated recurring charges through the close of the next bill period.
Have the plug-ins credit advance charges when service is terminated prior to the next bill period	assign the trans_typ of the Transaction Type that the credit amount should be carried in, in the <b>Advance Crdt Tran Id</b> element	enter the actual recurring charge in the <b>Charge</b> element.	The plug-ins will credit the advance charges when the next bill is run for the subscriber.
Instruct the plug-ins to prorate the amount in the <b>Charge</b> element	assign a 'Y' to the <b>Prorate</b> element	if you set the <b>Prorate</b> element to 'N', the plug-ins will apply the full charge, even if the Rate Plan is active for only a single day during the bill period.	The plug-ins will calculate the number of days that the Rate Plan has been active in the current month or the number of days the Rate Plan will be active in the next month, and apply only the portion of the charge that is appropriate for that number of active days.
Have the plug-ins apply the surcharge amount on a recurring basis	enter an amount in the <b>Surcharge</b> element.		The amount will always be applied in full and not prorated, discounted, or waived.

If you want to . . .	Then . . .	And . . .	Result
Apply a one time charge (associated with installation, disconnection, or reconfiguration of a subscriber)	enter the non-recurring amount in the <b>Charge</b> element	this value is discountable and waiveable if you so desire.	The system will automatically apply this charge once.
Have the plug-ins apply a one time surcharge amount when the non-recurring charge is applied	enter the surcharge amount in the <b>Surcharge</b> element	this amount is not discountable or waiveable.	The system will always apply this amount in full.
Have the plug-ins calculate a late payment fee when a subscriber is late in sending in a payment	type in the <b>Minimum Balance</b> element; a minimum amount below which a late payment fee will not be applied.		The plug-ins will not apply a late fee when it encounters a late balance equal to or less than the specified amount.
Instruct the plug-in to apply a late payment fee to any still outstanding balance forward that exceeds the Minimum Balance amount on the day the next bill is run	set the <b>Any Balance</b> element to 'Y'.		The plug-in will apply a late payment fee to any outstanding balance exceeding the specified minimum balance amount.
Have the plug-in calculate a late balance date by subtracting the Number Of Days Old from the current date and not the bill period close date	set the <b>Any Balance</b> element to 'N' so that the plug-in will calculate a late balance date by subtracting the Number Of Days Old from the actual current date.		The plug-in will search for any unpaid amount that was billed to the subscriber prior to the calculated date and apply a late payment fee to late balances exceeding the minimum balance amount, based on the percentage you entered in the <b>Percentage</b> element.

**Modifying the RCD Elements for both Atomic and Aggregate Rating**

Discounts, discount overrides, waivers, charge overrides, and introductory periods can occur in both Atomic and Aggregate rating; therefore, the RCD Group Elements that initiate those processes reside in both Atomic and Aggregate RCD Groups.

**Discount Percentage**

The CLEC Package provides you with the ability to assign a discount percentage that will be applied to the results of any rating calculation.

If you want to . . .	Then . . .	And . . .	Result
Assign a discount percentage to a rating calculation	assign a discount percentage to the <b>Discount</b> element.		The plug-ins will apply the discount percentage to the results of any rating calculation.
Create special wholesale versions of retail Rate Plans or for any reason where it is required that a discount percentage be applied to a charge	use the <b>Discount</b> element.		The plug-ins will create special wholesale versions.
Instruct the plug-ins to not apply a discount	set the <b>Discount</b> element to 0.000.		The plug-ins will not apply a discount.

**Subscriber Specific Overrides**

The CLEC Package provides you with the ability to allow or disallow the application of a subscriber specific discount percentage to charge amounts.

If you want to . . .	Then . . .	And . . .	Result
Have a subscriber specific discount	set the <b>Discount Override Allowed</b> element to 'Y'	associate a discount override Parameter with the Service/Feature that is provisioned to the subscriber.	The CSR can assign the subscriber specific discount percentage to this parameter.
Assign a name to the Parameter that you associated with the Service/Feature	assign the parm_typ, that the system assigned to the Parameter, to the <b>Discount Override Parm</b> element	look directly into the v_parm_typ table in the database to find the correct parm_typ value.	The system will automatically check the value assigned to the override Parameter to see if a subscriber specific override exists.
Have the system NOT allow discount overrides	set the <b>Discount Override Allowed</b> element to 'N'.		CSRs will be unable to assign subscriber specific discounts.

**Subscriber Specific Waivers**

The CLEC Package allows you to allow or disallow subscriber specific waivers of all charge amounts. This is separate from allowing a discount percentage override.

If you want to . . .	Then . . .	And . . .	Result
Have a subscriber specific waiver	set the <b>Waive Allowed</b> element to 'Y'	associate a waiver Parameter with the Service/Feature that is provisioned to the subscriber and assign a 'Y' to the Parameter.	The CSR can waive the charges within a Rate Plan for a specific subscriber.

If you want to . . .	Then . . .	And . . .	Result
Assign a name to the waive Parameter that you associated with the Service/Feature	assign the parm_typ, that the system assigned to the Parameter, to the <b>Waive Parm</b> element	look directly into the v_parm_typ table in the database to find the correct parm_typ value.	The system will automatically check the value assigned to the waive Parameter to see if a subscriber specific waiver exists.
Have the system NOT allow waiver overrides	set the <b>Waive Allowed</b> element to 'N'.		CSRs will be unable to perform subscriber specific waivers.

### Subscriber Specific Charge Overrides

For recurring and non-recurring charge applications, the CLEC Package allows you to allow or disallow CSRs to assign subscriber specific charge overrides.

If you want to . . .	Then . . .	And . . .	Result
Have a subscriber specific charge override	set the <b>Charge Override Allowed</b> element to 'Y'	associate a charge override Parameter with the Service/ Feature that is provisioned to the subscriber.	The CSR can assign the subscriber specific charge to this Parameter.
Assign a name to the charge override Parameter that you associated with the Service/Feature	assign the parm_typ, that the system assigned to the Parameter, to the <b>Charge Override Parm</b> element	look directly into the v_parm_typ table in the database to find the correct parm_typ value.	The system will automatically check the value assigned to the charge override Parameter to see if a subscriber specific override exists.
Have the system NOT allow charge overrides	set the <b>Charge Override Allowed</b> element to 'N'.		CSRs will be unable to perform charge overrides.

## Introductory Periods

The usage and recurring charge RCD Group sets allow you to define special introductory periods during which subscribers will receive special introductory rates.

You can generically define the introductory periods so that the introductory rates apply to all subscribers. Alternately, you can set up the introductory periods to only apply for specific subscribers that the CSR designates.

## Defining Introductory Periods

Define Introductory periods for Atomic Rating (usage) in the Control Group. Define Introductory periods for Aggregate Rating (recurring charges) in the Intro Recurring Group. In both cases you control the introductory period through the assignment of values to the following four elements:

- Intro Prd Number of Periods
- Intro Prd Override Allowed
- Intro Prd Override Parm
- Intro Prd Period Type

If you want to . . .	Then . . .	And . . .	Result
Define the length of an introductory period in days	assign 'Days' to the <b>Intro Prd Period Type</b> element	enter the number of days for the introductory period in the <b>Intro Prd Number Of Periods</b> element.	The plug-ins will use the values that you specified in the elements to calculate the end date of the introductory period.
Define the length of an introductory period in months	assign 'Months' to the <b>Intro Prd Period Type</b> element	enter the number of months for the introductory period in the <b>Intro Prd Number Of Periods</b> element.	The plug-ins will use the values that you specified in the elements to calculate the end date of the introductory period, and use the calculated introductory period end date to determine which rates to apply to a subscriber.

If you want to . . .	Then . . .	And . . .	Result
<p>Allow a CSR to define the length of the introductory period on a subscriber by subscriber basis</p>	<p>assign a 'Y' to the <b>Intro Prd Override Allowed</b> element</p>	<p>assign the parm_typ of the Parameter Type which will carry the subscriber specific override to the <b>Intro Prd Override Parm</b> element.</p>	<p>The system automatically checks this Parameter for subscriber specific overrides, thus allowing the CSR to define the length of the introductory period.</p>
<p>Have the plug-ins NOT allow the CSRs to have subscriber specific override capabilities</p>	<p>set the <b>Intro Prd Override Allowed</b> element to 'N'.</p>		<p>The CSRs cannot override subscriber specific information.</p>

## SUR Masks

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### **Service Usage Records (SUR)**

Service Usage Records (SUR) contain information about a call.

### **SUR Masks**

SUR Masks place the usage formats and information, for the calls, into the system without using pre-processing framework or writing a plug-in.

### **SUR Tables**

The SUR Tables hold the usage records.

### **Universal SUR Mask Format**

The CLEC Package supports the Universal SUR Masks. The Universal SUR Mask is pre-configured.

### **Pre-configured SUR Process**

The SUR process in the CLEC package is completely pre-configured unless you bring a new SUR Mask into the system.



# Chapter 11

## Invoicing

### **Chapter 11 Contents**

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## Invoicing in the CLEC Package

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### Overview

The CLEC Package offers a standard invoice that displays your subscribers' account information. Invoicing in the CLEC Package is completely pre-configured. However, you do have the flexibility of displaying your company logo, creating personalized messages, and presenting company information, on the invoice.

### Invoicing Components

The following table contains the configured components that determine the intricacies of the invoice.

Component	Description
External Application Types	tells what type of third-party applications can communicate with BillPlex
Format Types	specifies what information to include on the invoice
Method Types	determines invoice rendering
Delivery Types	defines invoice delivery

## Invoice Pre-configurations

---

### Pre-configuration Table

The following table lists tasks for the pre-configured invoice components and indicates whether or not the component is already created and set up. 'Pre-configured' indicates that the task is pre-configured. 'Not Pre-configured' indicates that the task is not pre-configured and you must perform the necessary configurations.

<b>Tasks</b>	<b>Created</b>
Create External Applications	Pre-configured
Create Format Types	Pre-configured
Create Method Types	Pre-configured
Create Delivery Types	Pre-configured
Configure Method-Format Types	Not pre-configured
Configure Method-Delivery Types	Not pre-configured
Configure Invoice Messages	Not pre-configured
Cosmetic customizations	Not pre-configured

### **External Application Types**

External Application Types enable the system to run third-party software. The CLEC Package offers three pre-configured external application types through which you can run third-party software for invoicing.

<b>External Application Type</b>	<b>Definition</b>
Executable	a compiled application, used to call plug-ins and scripts
Plug-in	an extension to the existing system
Shell Script	a script that is run to perform specific tasks

## Format Types

Format Types tell the plug-ins what information to display on the invoice. The CLEC Package contains six pre-configured Format Types.

<b>Format Type</b>	<b>Description</b>
CC Default	Credit Card
Detailed Bill	An invoice that displays a summary section and a usage detail section
EDI 810 Invoice	Electronic Data Interchange 810 Invoice that you receive via the computer
E-mail Text	An electronic mail message
Simple Bill	An invoice that only displays a summary section
Simple Statement	An invoice that displays only the summary section

## Method Types

Method Types define the mode in which your customers can receive the invoices.

The CLEC pre-configured Method Types are:

- Credit Card
- EDI-Electronic Data Interchange
- E-mail
- File
- Paper Fax
- Paper Mail

## Delivery Types

Delivery Types define the mode in which the invoices are delivered to your customers.

The pre-configured Delivery Types in the CLEC Package are:

- CC Default (Credit Card)
- CD-ROM
- DAT Tape
- Diskette
- FAX Server
- GE VAN
- Internet E-mail
- Postal Service

## Setting Up the Invoice

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### Invoice Component Assignments

The Method, Delivery, and Format Types are set up for you; however, you must assign





- Method to Format Types, and
- Method to Delivery Types.

You must perform these processes because the assignments are company specific. You may not use all of the pre-configured Format and Delivery Types; therefore, just link the ones that your company will use.

### Assigning Invoice Methods to Format Types

You assign Invoice Methods to Format Types to tell the system what information to include for each Method. Use the following instructions to complete this process.




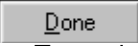
Step	Action
1	Select Administration, Invoice, Configure, then choose Method - Format Types. Result: The Invoice Method - Format Types window appears.

Step	Action
2	Locate the Invoice Methods section and click the Invoice Method to which you are assigning a Format Type.
3	Click the  button located at the bottom of the window. Result: BillPlex automatically creates a new row in the Invoice Format section to hold the information you want to add.
4	Select the Invoice Format, the Output Directory Alias, the External Application, and the Invoice Viewer Application from the drop-down lists.
5	Click the  button.
6	Click  to save your changes.
7	Repeat steps 2 through 6 for each Invoice Method.
8	Click  to exit the Invoice Method - Format Types window.

### Assigning Methods to Delivery Types

You assign Invoice Methods to Delivery Types to tell the system how to deliver each Invoice Method. Use the following instructions to complete this process.

Step	Action
1	Select Administration, Invoice, Configure, then choose Method - Delivery Types. Result: The Invoice Method - Delivery Types window appears.

Step	Action
2	Locate the Invoice Methods section and click the Invoice Method to which you are assigning a Delivery Type.
3	Click the  button. Result: BillPlex automatically creates a new row in the Invoice Method - Delivery Types section to hold the information you want to add.
4	Select the Invoice Delivery Type and the External Application from the drop-down lists.
5	Click the  button.
6	Click  to save your changes.
7	Repeat steps 2 through 6 for each Invoice Method.
8	Click  to exit the Invoice Method - Delivery Type window.

## Configuring Invoice Messages

---

### Overview

The Invoice Message Manager allows you to create personalized messages that display on your invoices. Using this feature, you can create and link invoice messages to selected subscriber groups.

### The Invoice Message Manager Screen

The Invoice Message Manager window displays four panels that define invoice messages and message links. The panels are as follows:

- Messages (upper left)
- Selected Message Text (lower left)
- Message Links (upper right)
- Message-Subscriber Links (lower right)

### The Messages and Selected Message Text Panels

The Messages and Selected Messages panels on the left side of the Invoice Message Manager window display invoice messages. When you select an entry in the Messages panel, the associated text appears in the Selected Message Text Panel. These panels allow you to add, change or delete text appearing in a subscriber's invoice.

### The Message Links and Message-Subscriber Links Panels

The Message Links and Message-Subscriber links panels on the right side of the Invoice Message Manager window enable you to target invoice messages to individual subscribers or groups that purchase products associated with a particular Service Type or Market Type. By linking invoice messages to subscriber groups, your company can send the right message to a specific individual or group of subscribers.

When you select a pre-defined invoice message from the Messages panel, the Message Subscriber Links panel shows the association between subscriber groups and the selected invoice message.

The Message Links panel shows messages linked to **ALL** Subscribers or those that purchase products incorporated in a Service Type, or belonging to a Market Type and Service-Market Type combination.




## Process for Configuring Invoice Messages

The following table provides a listing of the tasks that you must perform to configure Invoice Messages. Perform the tasks in the order that they appear in the table.




Task	Action
1	Add an Invoice Message.
2	Assign the Invoice Message to a Message Link.

## Adding an Invoice Message

Use the following instructions to add an Invoice Message.

Step	Action
1	Select Administration, Invoice, Message Manager. Result: The Invoice Message Manager window appears.
2	Click the  button. Result: The Create Message window appears.
3	Using the following Field table, complete the Create Message window.

Field	Description
Message Title	The title that will identify the message.
Message Order	Defines the priority in which the message will display on the invoice.
Message Tag	An alphanumeric field that is enabled when you select the conditional checkbox. The server uses the Message Tag to identify the message.
Position	The exact location of the message

	Service Type	Defines the association between the message and the Service Type, if the message is a Service Type message.
	Message Text	The text that appears on a subscriber's invoice.
4	Click  to save the message and close the Create Message window. Result: The message appears in the Message panel of the Invoice Message Manager window.	
5	Click  to save your changes.	
6	Click  to exit the Invoice Message Manager window.	
7	Assign the Invoice Message to a Message Link.	

### Assigning the Invoice Message to a Message Link

Use the following instructions to assign an invoice message to a message link.

Step	Action
1	Select Administration, Invoice, Message Manager. The Invoice Message Manager window appears.
2	Go to the Messages panel and select the message that you want to attach.
3	Go to the Message Links panel and select the Message Link to which you want to attach the message.
4	Right-click on the selected Message Link. Result: A pop-up menu appears.
5	Select Assign Link. Result: The Assign Invoice Message Wizard appears.

<b>Step</b>	<b>Action</b>
<b>6</b>	Follow the instructions on the Wizard to complete the process.

## Performing Cosmetic Customizations to your Invoices

---

### Customizable Information

On the invoice, you can customize company specific information such as:

- company name
- company logo
- company address and phone
- company personalized messages
- company personalized footer text

### Customizing Information

Some of these changes you can perform, but others must be performed by Daleen Professional Service Representatives. The following table outlines the customization tasks that you can perform.

<b>This customization . . .</b>	<b>Is performed by . . .</b>	<b>Modifying the . . .</b>
logo	Daleen	RenderControlSet rate plan
name	System Admin	database table v_comp_info
address	System Admin	database table v_comp_info
phone	System Admin	database table v_comp_info
personalized message	System Admin	Invoice Message Manager window
personalized footer text	System Admin	Render Control Set rate plan

## Standard Parts of the Invoice

---

### Overview

Daleen offers a Standard Pack Invoice. This standard invoice comes in either a Detailed bill or a Simple bill.

### Parts of the Invoice

The following table displays the information contained on the Detailed bill Standard Invoice.

Section of the Invoice	Description
Page 1, Section 1	displays a summary of all charges for the account, including previous bill activity, current charges for all services, and the total amount of the bill
Page 1, Section 2	contains the company personalized invoice message
Page 1, Section 3	displays the remittance stub that the customer takes off and returns with their payment
Page 2, Section 4	provides comprehensive usage information for each Connection Number, as well as tax information, long distance charges, and total amounts for usage, charges, and taxes
Page 3, Section 5	displays monthly recurring charges, non-recurring charges, usage charges, other charges and credits, and taxes. also displays the adjustments section.
Pages 4 & 5, Section 6	itemizes all phone calls and displays information such as location, date & time, duration, cost, and the destination number. Displays a line for every call made for each connection number with a subtotal for each connection number and a total for all connection numbers.

<b>Section of the Invoice</b>	<b>Description</b>
Page 6, Section 7	displays a breakdown of usage based on area code, product usage, account codes, long distance usage, frequency, minutes, and amount

# Chapter 12

## Treatment and Collections

### **Chapter 12 Contents**

*The Treatment Process 174*

*Treatment Pre-configurations 174*

## The Treatment Process

---

### Treatment Plan

The pre-configured CLEC package offers one treatment and collection plan that contains six steps. The following table delineates the treatment and collections process.

Step	Process
1	After 31 days the first collection letter is sent.
2	After 35 days the first call is made.
3	After 40 days a second collection letter is sent.
4	After 43 days a second call is made.
5	After 44 days the service is suspended.
6	After 75 days the account is written off.

## Treatment Pre-configurations

---

### Overview

The Treatment function is pre-configured in the CLEC package. However, there are some company specific tasks that you must perform.

### Treatment Pre-configuration Table

The following table lists the pre-configured Treatment tasks and shows the tasks that you must perform. 'Pre-configured' indicates that the task is already complete and ready. 'Not pre-configured' indicates that the task is not pre-configured and you must perform that tasks.

Task	Pre-configured or Not
Create Credit Classes	Pre-configured, but you can add more



<b>Task</b>	<b>Pre-configured or Not</b>
Create Treatment Codes	Pre-configured, but you can add more
Create Treatment Notices	Not pre-configured
Assign Actions to Steps to Plans	Pre-configured
Assign Credit Classes to Market Types	Pre-configured

## Credit Classes

A Credit Class defines the degree of risk associated with a specific subscriber. This is based on their credit worthiness. You can add and delete Credit Classes.

The following table lists the pre-configured Credit Classes in the CLEC Package.

<b>Credit Class Name</b>	<b>Description</b>
VHR	Very High Risk
HR	High Risk
MR	Medium Risk
LR	Low Risk
VLR	Very Low Risk

## Treatment Codes

A treatment code is a code designation that specifies the type of treatment assigned. The CLEC package offers one pre-configured treatment code, as displayed in the following table. If desired, you can add more treatment codes.

<b>Field</b>	<b>Description</b>
Treatment Code	STD
Name	Standard
Description	Default Treatment Code

Field	Description
Deposit Balance Cap	500

**Treatment Notices**

Treatment Notices are letters dispatched from BillPlex to your customers advising them on the past due or late status of their accounts.

# Chapter 13

## Revenue Reporting

### **Chapter 13 Contents**

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## List of Available BillPlex Reports

---

### Overview

BillPlex allows you to generate reports to make it easier for you to gather information. You can view and print these reports. This chapter provides a description of each of the following reports and provides instructions on how to generate each.

### Kinds of Reports

The following table contains a listing of the reports that you can generate.

For . . .	You can generate a report for . . .
Accounts Receivable	<ul style="list-style-type: none"> <li>• Cash Receipts for Date Range</li> <li>• Aging</li> </ul>
Atomic Rating	<ul style="list-style-type: none"> <li>• Batch ID</li> <li>• Date Range</li> <li>• Date Range &amp; Provider ID</li> </ul>
Batch Import Summary	<ul style="list-style-type: none"> <li>• Date Range &amp; Batch ID</li> <li>• Date Range</li> <li>• Date Range &amp; Provider ID</li> </ul>
Invoice Transactions	<ul style="list-style-type: none"> <li>• Summary for Batch ID</li> <li>• Detail for Batch ID</li> <li>• Summary for Invoice Date</li> <li>• Detail for Invoice Date</li> </ul>
Revenue	<ul style="list-style-type: none"> <li>• Billed for Date Range</li> <li>• Unbilled for Date Range</li> </ul>
SUR Volume	<ul style="list-style-type: none"> <li>• Errors by Date Range</li> <li>• Total Statistics for Date Range</li> <li>• Statistics for Date/Provider ID</li> <li>• Statistics for Date/Provider ID/Connection #</li> <li>• Statistics for Date/Provider ID/Feature</li> </ul>
Service Management	<ul style="list-style-type: none"> <li>• Changes in Progress</li> <li>• History Summary</li> </ul>

For . . .	You can generate a report for . . .
Subscriber Balances	<ul style="list-style-type: none"> <li>• Batch ID</li> <li>• Invoice ID</li> <li>• Invoice Date</li> </ul>
Subscriber Information	<ul style="list-style-type: none"> <li>• Account Structure</li> <li>• Account Status</li> <li>• Connection # for Subscriber ID</li> <li>• Suspended Accounts</li> </ul>
Subscriber Invoices	<ul style="list-style-type: none"> <li>• Detail for Preparation Date</li> <li>• Summary for Preparation Date</li> </ul>
Transactions	<ul style="list-style-type: none"> <li>• Credits for Date Range</li> <li>• History for Subscriber ID</li> </ul>


### Rule for Typing Dates for Reports

When asked to enter a date range:

- Type the date range in the following format, `date ( yyyy , mm , dd ) .`
- Type the word `date`.
- Type the parenthesis.
- Type the commas.
- Do not include any spaces.

### Generating the Reports

Use the following instructions to generate the BillPlex reports.

Step	Action
1	From the Operations menu, select Reports, then select the report of your choice.
2	Specify the parameters that BillPlex requests; for example, date, Batch ID, Invoice ID, Subscriber ID etc.
3	Click  . Result: BillPlex generates the report.

## Accounts Receivable Reports

---

### **Overview**

The Accounts Receivable reports are:

- Cash Receipts for Date Range
- Aging

### **Cash Reports for Date Range**

This report provides a detailed listing of all payments received for a given date range. Also included are subtotals by date and a grand total for all payments in the specified date range.

### **Aging Report**

This report lists all subscribers with an unclosed invoice. Their amounts due are divided into invoice aging categories (0-30 days, 31-60 days, etc.). Aging amounts are the invoice amount minus the allocated amount that was applied to the invoice.

## Atomic Rating Reports

---

### **Overview**

The Atomic Rating reports are:

- For Batch ID
- For Date Range
- For Date Range and Provider ID

### **Atomic Rating Summary for Batch IDs**

This report provides the atomic rating totals for the service usage records for selected Batch Id(s). This summary report lists the total number of records which went into the categories: SURs Ready, SURs Pending, etc.

### **Atomic Rating Summary for Date Range**

This report provides the atomic rating totals for the service usage records for a selected date range. This summary report lists the total number of records which went into the categories: SURs Ready, SURs Pending, etc.

### **Atomic Rating Summary for Date Range and Provider ID Report**

This report provides the atomic rating totals for the service usage records for a selected date range and provider Id. This summary report lists the total number of records which went into the categories: SURs Ready, SURs Pending, etc.

## Batch Import Summary Reports

---

### **Overview**

The Batch Import Summary reports are:

- For Date Range & Batch ID
- For Date Range
- For Date Range & Provider ID

### **Batch Import for Date Range & Batch ID Report**

This report displays each import batch for a specified date range and batch id(s), the count of records that were imported, and the count of records that were not imported due to errors.

### **Batch Import for Date Range Report**

This report displays each import batch for a specified date range, the count of records that were imported, and the count of records that were not imported due to errors.

### **Batch Import for Date Range & Provider ID**

This report displays each import batch for a specified date range and provider id(s), the count of records that were imported, and the count of records that were not imported due to errors.



## Invoice Transaction Reports

---

### **Overview**

The Invoice Transaction reports are:

- Summary for Batch ID
- Detail for Batch ID
- Summary for Invoice Date
- Detail for Invoice Date

### **Invoiced Transactions Report for Batch IDs**

This report provides a summary of all transaction types for each transaction class for selected Batch Ids (grouped by Batch Id).

### **Invoiced Transactions Detail for Batch IDs Report**

This report provides a detailed listing of all transaction types for each transaction class for selected Batch Ids (grouped by Batch Id).

### **Invoiced Transactions Report for Invoice Date**

This report provides a detailed listing of all transactions for a selected billing run.

### **Invoiced Transactions Detail for Invoice Date Report**

This report provides a detailed listing of all transactions, grouped by Batch ID for a selected invoice date.

## Revenue Reports

---

### Overview

The Revenue reports are:

- Billed for Date Range
- Unbilled for Date Range

### Billed Revenue Report for Date Range

This report displays the billed revenue for a given date range by service, feature, and transaction type. It includes subtotals by service and a grand total for all billed usage in the date range.

### Unbilled Revenue Report for Date Range

This report displays the unbilled revenue for a given date range by service, feature, and transaction type. It includes subtotals by service and a grand total for all unbilled usage in the date range.

## SUR Volume Reports

---

### Overview

The SUR Volume reports are:

- Errors by Date Range
- Total Statistics for Date Range
- Statistics for Date for Provider ID
- Statistics for Date, Provider ID, and Connection Number
- Statistics for Date, Provider ID, and Feature

### **SUR Volume Error Report for Date Range**

This report lists SUR Error Codes produced by the atomic rating process. It displays all errors for a given date range and includes the error message text.

### **Total SUR Volume Statistics for Date Range Report**

This report provides detailed usage information for each feature by hour, for a given date range. It also provides the status for each feature to show the total number of SURs completed, pending, ready, etc. for each hour of the day.

### **SUR Volume Statistics Report for Date Range/ Prov ID**

The Stats For Date/Prov ID option generates a SUR Volume Statistics for Date and Provider Id report. This report displays the detailed usage information by hour, by a selected date range and Provider Id.

### **SUR Volume Statistics Report for Date Range/ Provider ID/ Connection #**

This report provides detailed usage information by hour for a given Date Range, Provider Id, and Connection Number. Given for each hour of the day for each date and each connection number.

### **SUR Volume Stat Report for Date/ Provider ID/ Feature Type**

This report provides detailed usage information by hour, for a given date range, provider Id, and feature type. The report is given for each hour of the day for each date and each connection number.

## Service Management Reports

---

### **Overview**

The Service Management reports are:

- Changes in Progress
- History Summary

### **Changes in Progress Report**

This report provides a detailed list of all pending service orders.

### **Service Management History Report**

This report provides a detailed list of all service orders for a specified subscriber whose date is in the specified date range.

## Subscriber Balances Reports

---

### **Overview**

The Subscriber Balances reports are:

- For Batch ID
- For Invoice ID
- For Invoice Date

### **Subscriber Balance Report for Batch ID**

This report displays a history of all subscribers' balances for a selected billing batch Id. The report is grouped by market type.

### **Subscriber Balance Report for Invoice ID**

This report displays a history of all subscribers' balances for a selected Invoice Id. The report is grouped by market type.

### **Subscriber Balance Report for Invoice Date**

This report displays a history of all subscribers' balances for a selected invoice date. The report is grouped by market type.

## Subscriber Information Reports

---

### Overview

The Subscriber Information reports are:

- Account Structure
- Account Status
- Connection Numbers for Subscriber ID
- Suspended Accounts

### Subscriber Account Structure Report

This report lists all billable subscriber accounts and any non-billable accounts associated with the billable subscriber.

### Subscriber Account Status Report

This report displays some basic subscriber information (such as name, address, phone number) for subscribers with a certain account status (i.e., Active, Suspended, etc.). BillPlex prompts you to enter one or more account statuses when the report loads. If you do not select an account status, the report contains no data.

### Subscriber Report for Connection # and Subscriber ID

This report lists all connection numbers associated with selected Subscriber Ids. It shows the current service and status of the connection number.

### Subscriber Suspended Account Report

This report displays basic subscriber information (such as name, address, and telephone number) for subscribers whose account status is **Suspended**.

## Subscriber Invoice Reports

---

### Overview

The Subscriber Invoice reports are:

- Detail for Preparation Date
- Summary for Preparation Date

### Subscriber Report for Invoice Detail Prep Date

This report displays a list of billable subscribers and their account balance information for a selected billing preparation date. The report is grouped by market type with summary totals.

### Subscriber Invoice for Preparation Date

This report displays a list of billable subscribers and their account balance information for a selected billing preparation date. The report is grouped by market type with summary totals.

## Transactions Reports

---

### Overview

The reports for Transactions are:

- Credits for Date Range
- History for Subscriber ID

### Transaction Credit Class Report for Date Range

The Credits For Date Range option generates the Transactions Credit Class for Date Range report. This report displays the subscribers' credit transaction information.

### Transaction History Report for Subscriber ID

The History For Subscriber ID option generates the Transaction History for Subscriber report. This report displays all transactions by transaction class and Subscriber ID.

## Uploading External Reports to Billplex

---



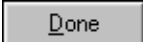
### Overview

BillPlex allows you to add existing or new reports to the BillPlex Report menu.

### Uploading Reports and Adding them to the BillPlex Report Menu

BillPlex will not display any report menu items that you add in the Report Configuration window until you assign user permissions for the reports in the Security window.

Use the following instructions to upload reports into BillPlex.



Step	Action
1	From the Administration menu, select System, select Create, then choose Reports. Result: The Report Configuration window appears.
2	Navigate to the appropriate directory path and select the report you want to add.
3	Click  . Result: The selected report appears in the right panel of the Report Configuration window.
4	Change the Report Display Name to reflect the name that you want to appear on the menu.
5	In the Report Menu Group field, type the appropriate group name that reflects the menu group where you want to assign the report.
7	Click the  button.
8	Click  to exit the Report Configuration window.
9	Access the BillPlex Security window to assign user permissions to the new report.

## Customizing Menu Names of Existing BillPlex Menu Reports

BillPlex allows you to change the name of the reports that appear under the Reports option of the Operations menu.

Use the following instructions to customize menu names of existing BillPlex menu report options.

**NOTE:** After you complete the following instructions, reboot the BillPlex system, and your changes will appear on the Reports menu.

Step	Action
1	From the Administration menu, select System, select Create, then choose Reports. Result: The Report Configuration window appears.
2	Select the Report Display Name that you want to change.
3	Type the new report name.
4	Click the  button.
5	Repeat steps 2 through 4 for all names that you want to change.
6	Click  to exit the Report Configuration window.
7	Reboot the BillPlex system. Result: The updated report information will appear on the Reports menu after you reboot.



# Appendix

## Transaction Types

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## Charges Transaction Types

---

### Pre-configured Charges Transaction Types

The following table lists the pre-configured Charges Transaction Types offered in the CLEC Package

Transaction Type ID	Transaction Type Name
116150200	CLEC Charge Basic Service Installation Charge
116200100	CLEC Charge Basic Service Zone 1 Usage
116201100	CLEC Charge Basic Service Zone 2 Usage
116202100	CLEC Charge Basic Service Zone 3 Usage
116210100	CLEC Charge Basic Service EAS 1 Usage
116211100	CLEC Charge Basic Service EAS 2 Usage
116212100	CLEC Charge Basic Service EAS 3 Usage
116213100	CLEC Charge Basic Service EAS 4 Usage
116214100	CLEC Charge Basic Service EAS 5 Usage
116220100	CLEC Charge Basic Service Band 1 Usage
116221110	CLEC Charge Basic Service Band 2 Usage
116222100	CLEC Charge Basic Service Band 3 Usage
116223100	CLEC Charge Basic Service Band 4 Usage
116224100	CLEC Charge Basic Service Band 5 Usage
116225100	CLEC Charge Basic Service IntraLATA Usage
116250100	CLEC Charge Basic Service IntraLata Usage
116260200	CLEC Charge Basic Service Basic Service
116300200	CLEC Charge Basic Service Call Forwarding
116301200	CLEC Charge Basic Service Preferred Call Forwarding
116302200	CLEC Charge Basic Service Flexible Call Forward

Transaction Type ID	Transaction Type Name
116303200	CLEC Charge Basic Service Call Forward Busy
116304200	CLEC Charge Basic Service Call Forward No Answer
116305200	CLEC Charge Basic Service Call Forward Variable
116306200	CLEC Charge Basic Service Remote Call Forward Act
116307200	CLEC Charge Basic Service Call Waiting
116308200	CLEC Charge Basic Service Call Block
116309200	CLEC Charge Basic Service Call Tracing
116310200	CLEC Charge Basic Service Call Selector
116311200	CLEC Charge Basic Service Three Way Calling
116312200	CLEC Charge Basic Service Caller ID
116313200	CLEC Charge Basic Service Memory Call
116314200	CLEC Charge Basic Service Ringmaster
116315200	CLEC Charge Basic Service Speed Calling
116316200	CLEC Charge Basic Service Automatic Call Back *69
116317200	CLEC Charge Basic Service Automatic Recall *66
116318200	CLEC Charge Basic Service Message Waiting Indicate
116319200	CLEC Charge Basic Service Directory Listing
116320200	CLEC Charge Basic Service Code Restriction
116321200	CLEC Charge Basic Service Inside Wire Maintenance
116400200	CLEC Charge Basic Service Late Payment Charge
211001100	LD Charge Switch LD PICC
211002100	LD Charge Switch LD Intrastate

<b>Transaction Type ID</b>	<b>Transaction Type Name</b>
211003100	LD Charge Switch LD Interstate
211004100	LD Charge Switch LD International
211005100	LD Charge Switch LD Interstate TF
211006100	LD Charge Switch Intrastate TF
211007100	LD Charge Switch LD Opp Assist
211008100	LD Charge Switch LD Dir Assist
212001100	LD Charge Dedicated LD PICC
212002100	LD Charge Dedicated LD Intrastate
212003100	LD Charge Dedicated LD Interstate
212004100	LD Charge Dedicated LD International
212005100	LD Charge Dedicated LD Interstate TF
212006100	LD Charge Dedicated LD Intrastate TF
212007100	LD Charge Dedicated LD Opp Assist
212008100	LD Charge Dedicated LD Dir Assist
213002100	LD Charge Calling Card Intrastate
213003100	LD Charge Calling Card Interstate
213004100	LD Charge Calling Card International
213005100	LD Charge Calling Card Interstate TF
213006100	LD Charge Calling Card Intrastate TF
213007100	LD Charge Calling Card Opp Assist
213008100	LD Charge Calling Card Dir Assist
214400300	LD Charge Late Payment Late Payment
215100200	LD Charge Access T-1 Charge
215100300	LD Charge Access T-1 Install

Transaction Type ID	Transaction Type Name
215101200	LD Charge Access Local Loop Charge
215101300	LD Charge Access Local Loop Install
215102200	LD Charge Access IXC Loop Charge
215102300	LD Charge Access IXC Loop Install
215103200	LD Charge Access Mileage
215104200	LD Charge Access E-911
215105200	LD Charge Access Pulsing
215106200	LD Charge Access Relay
215107200	LD Charge Access Channel Charge
215107300	LD Charge Access Channel Install
215108200	LD Charge Access Digital PBX Trunks
215108300	LD Charge Access PBX Trunks Install
215109200	LD Charge Access Hunting
215115200	LD Charge Access ISDN/Voice Data
215115300	LD Charge Access ISDN/Voice Data Install
215116200	LD Charge Access PRI B Channel
215116300	LD Charge Access PRI B Channel Install
215120200	LD Charge Access Channel Bank
215120300	LD Charge Access Channel Bank Install
215121200	LD Charge Access CSU
215121300	LD Charge Access CSU Install
215122200	LD Charge Access Card
215122300	LD Charge Access Card Install
215123200	LD Charge Access DSO Channel

<b>Transaction Type ID</b>	<b>Transaction Type Name</b>
215124200	LD Charge AccessDS1 Facility Access

## Credits Transaction Types

---

### Pre-configured Credits Transaction Types

The following table lists the pre-configured Credits Transaction Types offered in the CLEC Package.

Transaction Type ID	Transaction Type Name
126150200	CLEC Credit Basic Service
126200100	CLEC Credit Basic Service Zone 1 Usage
126201100	CLEC Credit Basic Service Zone 2 Usage
126202100	CLEC Credit Basic Service Zone 3 Usage
126210100	CLEC Credit Basic Service EAS 1 Usage
126211100	CLEC Credit Basic Service EAS 2 Usage
126212100	CLEC Credit Basic Service EAS 3 Usage
126213100	CLEC Credit Basic Service EAS 4 Usage
126214100	CLEC Credit Basic Service EAS 5 Usage
126220100	CLEC Credit Basic Service Band 1 Usage
126221100	CLEC Credit Basic Service Band 2 Usage
126222100	CLEC Credit Basic Service Band 3 Usage
126223100	CLEC Credit Basic Service Band 4 Usage
126224100	CLEC Credit Basic Service Band 5 Usage
126220100	CLEC Credit Basic Service IntraLATA Usage
126250100	CLEC Credit Basic Service Intralata Usage
126260200	CLEC Credit Basic Service Basic Service
126300200	CLEC Credit Basic Service Call Forwarding
126301200	CLEC Credit Basic Service Preferred Call Forwarding
126302200	CLEC Credit Basic Service Flexible Call Forward

Transaction Type ID	Transaction Type Name
126303200	CLEC Credit Basic Service Call Forward Busy
126304200	CLEC Credit Basic Service Call Forward No Answer
126305200	CLEC Credit Basic Service Call Forward Variable
126306200	CLEC Credit Basic Service Remote Call Forward Act
126307200	CLEC Credit Basic Service Call Waiting
126308200	CLEC Credit Basic Service Call Block
126309200	CLEC Credit Basic Service Call Tracing
126310200	CLEC Credit Basic Service Call Selector
126311200	CLEC Credit Basic Service Three Way Calling
126312200	CLEC Credit Basic Service Caller ID
126313200	CLEC Credit Basic Service Memory Call
126314200	CLEC Credit Basic Service Ringmaster
126315200	CLEC Credit Basic Service Speed Calling
126316200	CLEC Credit Basic Service Automatic Call Back *70
126317200	CLEC Credit Basic Service Automatic Recall *67
126318200	CLEC Credit Basic Service Message Waiting Indicate
126319200	CLEC Credit Basic Service Directory Listing
126320200	CLEC Credit Basic Service Code Restriction
126321200	CLEC Credit Basic Service Inside Wire Maintenance
126400200	CLEC Credit Basic Service Late Payment Charge
221001100	LD Credit Switch LD PICC
221002100	LD Credit Switch LD Intrastate
221003100	LD Credit Switch LD Interstate



Transaction Type ID	Transaction Type Name
221004100	LD Credit Switch LD International
221005100	LD Credit Switch LD Interstate TF
221006100	LD Credit Switch Intrastate TF
221007100	LD Credit Switch LD Opp Assist
221008100	LD Credit Switch LD Dir Assist
222001100	LD Credit Dedicated LD PICC
222002100	LD Credit Dedicated LD Intrastate
222003100	LD Credit Dedicated LD Interstate
222004100	LD Credit Dedicated LD International
222005100	LD Credit Dedicated LD Interstate TF
222006100	LD Credit Dedicated LD Intrastate TF
222007100	LD Credit Dedicated LD Opp Assist
222008100	LD Credit Dedicated LD Dir Assist
223002100	LD Credit Calling Card Intrastate
223003100	LD Credit Calling Card Interstate
223004100	LD Credit Calling Card International
223005100	LD Credit Calling Card Interstate TF
223006100	LD Credit Calling Card Intrastate
223007100	LD Credit Calling Card Opp Assist
223008100	LD Credit Calling Card Dir Assist
224400300	LD Credit Late Payment Late Payment
225100200	LD Credit Access T-1 Charge
225100300	LD Credit Access T-1 Install
225101200	LD Credit Access Local Loop Charge

Transaction Type ID	Transaction Type Name
225101300	LD Credit Access Local Loop Install
225102200	LD Credit Access IXC Loop Charge
225102300	LD Credit Access IXC Loop Install
225103200	LD Credit Access Mileage
225104200	LD Credit Access E-911
225105200	LD Credit Access Pulsing
225106200	LD Credit Access Relay
225107200	LD Credit Access Channel Charge
225107300	LD Credit Access Channel Install
225108200	LD Credit Access Digital PBX Trunks
225108300	LD Credit Access PBX Trunks Install
225109200	LD Credit Access Hunting
225115200	LD Credit Access ISDN/Voice Data
225115300	LD Credit Access ISDN/Voice Data Install
225116200	LD Credit Access PRI B Channel
225116300	LD Credit Access PRI B Channel Install
225120200	LD Credit Access Channel Bank
225120300	LD Credit Access Channel Bank Install
225121200	LD Credit Access CSU
225121300	LD Credit Access CSU Install
225122200	LD Credit Access Card
225122300	LD Credit Access Card Install
225123200	LD Credit Access DSO Channel
225123200	LD Credit Access DSO Channel

<b>Transaction Type ID</b>	<b>Transaction Type Name</b>
225124200	LD Credit Access DS1 Facility Access

## Adjustment Transaction Types

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### Pre-configured Adjustment Transaction Types

The following table lists the pre-configured Adjustment Transaction Types offered in the CLEC Package.

Transaction Type ID	Transaction Type Name
136150200	CLEC Adj Basic Service Installation Charge
136200100	CLEC Adj Basic Service Zone 1 Usage
136201100	CLEC Adj Basic Service Zone 2 Usage
136202100	CLEC Adj Basic Service Zone 3 Usage
136210100	CLEC Adj Basic Service EAS 1 Usage
136211100	CLEC Adj Basic Service EAS 2 Usage
136212100	CLEC Adj Basic Service EAS 3 Usage
136213100	CLEC Adj Basic Service EAS 4 Usage
136214100	CLEC Adj Basic Service EAS 5 Usage
136220100	CLEC Adj Basic Service Band 1 Usage
136221100	CLEC Adj Basic Service Band 2 Usage
136222100	CLEC Adj Basic Service Band 3 Usage
136223100	CLEC Adj Basic Service Band 4 Usage
136224100	CLEC Adj Basic Service Band 5 Usage
136225100	CLEC Adj Basic Service IntraLATA Usage
136250100	CLEC Adj Basic Service Intralata Usage
136260200	CLEC Adj Basic Service Basic Service
136300200	CLEC Adj Basic Service Call Forwarding
136301200	CLEC Adj Basic Service Preferred Call Forwarding
136302200	CLEC Adj Basic Service Flexible Call Forward

Transaction Type ID	Transaction Type Name
136303200	CLEC Adj Basic Service Call Forward Busy
136304200	CLEC Adj Basic Service Call Forward No Answer
136305200	CLEC Adj Basic Service Call Forward Variable
136306200	CLEC Adj Basic Service Remote Call Forward Act
136307200	CLEC Adj Basic Service Call Waiting
136308200	CLEC Adj Basic Service Call Block
136309200	CLEC Adj Basic Service Call Tracing
136310200	CLEC Adj Basic Service Call Selector
136311200	CLEC Adj Basic Service Three Way Calling
136312200	CLEC Adj Basic Service Caller ID
136313200	CLEC Adj Basic Service Memory Call
136314200	CLEC Adj Basic Service Ringmaster
136315200	CLEC Adj Basic Service Speed Calling
136316200	CLEC Adj Basic Service Automatic Call Back *71
136317200	CLEC Adj Basic Service Automatic Recall *68
136318200	CLEC Adj Basic Service Message Waiting Indicate
136319200	CLEC Adj Basic Service Directory Listing
136320200	CLEC Adj Basic Service Code Restriction
136321200	CLEC Adj Basic Service Inside Wire Maintenance
136400200	CLEC Adj Basic Service Late Payment Charge
231001100	LD Adj Switch LD PICC
231002100	LD Adj Switch LD Intrastate
231003100	LD Adj Switch LD Interstate
231004100	LD Adj Switch LD International

<b>Transaction Type ID</b>	<b>Transaction Type Name</b>
231005100	LD Adj Switch LD Interstate TF
231006100	LD Adj Switch Intrastate TF
231007100	LD Adj Switch LD Opp Assist
231008100	LD Adj Switch LD Dir Assist
232001100	LD Adj Dedicated LD PICC
232002100	LD Adj Dedicated LD Intrastate
232003100	LD Adj Dedicated LD Interstate
232004100	LD Adj Dedicated LD International
232005100	LD Adj Dedicated LD Interstate TF
232006100	LD Adj Dedicated LD Intrastate TF
232007100	LD Adj Dedicated LD Opp Assist
232008100	LD Adj Dedicated LD Dir Assist
233002100	LD Adj Calling Card Intrastate
233003100	LD Adj Calling Card Interstate
233004100	LD Adj Calling Card International
233005100	LD Adj Calling Card Interstate TF
233006100	LD Adj Calling Card Intrastate
233007100	LD Adj Calling Card Opp Assist
233008100	LD Adj Calling Card Dir Assist
234400300	LD Adj Late Payment Late Payment
235100200	LD Adj Access T-1 Charge
235100300	LD Adj Access T-1 Install
235101200	LD Adj Access Local Loop Charge
235101300	LD Adj Access Local Loop Install

Transaction Type ID	Transaction Type Name
235102200	LD Adj Access IXC Loop Charge
235102300	LD Adj Access IXC Loop Install
235103200	LD Adj Access Mileage
235104200	LD Adj Access E-911
235105200	LD Adj Access Pulsing
235106200	LD Adj Access Relay
235107200	LD Adj Access Channel Charge
235107300	LD Adj Access Channel Install
235108200	LD Adj Access Digital PBX Trunks
235108300	LD Adj Access PBX Trunks Install
235109200	LD Adj Access Hunting
235115200	LD Adj Access ISDN/Voice Data
235115300	LD Adj Access ISDN/Voice Data Install
235116200	LD Adj Access PRI B Channel
235116300	LD Adj Access PRI B Channel Install
235120200	LD Adj Access Channel Bank
235120300	LD Adj Access Channel Bank Install
235121200	LD Adj Access CSU
235121300	LD Adj Access CSU Install
235122200	LD Adj Access Card
235122300	LD Adj Access Card Install
235123200	LD Adj Access DSO Channel
235123200	LD Adj Access DSO Channel
235124200	LD Adj Access DS1 Facility Access

## Vertex Credit Tax Transaction Types

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### Vertex Credit Tax Transaction Types

The following table lists the pre-configured Credit Tax Transactions in the CLEC Package

<b>Tax ID</b>	<b>Tax Transaction Type Name</b>
929004	Universal Service Fund Credit
929014	Federal Excise Tax Credit
929024	Federal Utility Users Tax Credit
929034	Federal Business & Occupation Tax Credit
929044	Federal 911 Tax Credit
929054	Federal P.U.C. Tax Credit
929064	Federal Telephone Sales Tax Credit
929074	Federal Statutory Gross Receipts Credit
929084	Federal Carrier Gross Receipts Credit
929094	Federal License Tax Credit
929104	State Utility Users Tax Credit
929114	State Business & Occupation Credit
929124	State 911 Credit
929134	State PUC Tax (Fees) Credit
929144	State Telephone Tax Credit
929154	State Statutory Gross Receipts Tax Credit
929164	State License Tax Credit
929174	State Service Tax Credit
929184	State Transit Tax Credit
929194	State Excise Tax Credit
929204	State Special Tax Credit
929214	State Surcharge Credit



<b>Tax ID</b>	<b>Tax Transaction Type Name</b>
929224	State Sales Tax Credit
929304	County Utility Users Tax Credit
929314	County Business & Occupation Tax Credit
929324	County 911 Tax Charge Credit
929334	County PUC Tax (Fees) Credit
929344	County Telephone Sales Tax Credit
929354	County Statutory Gross Receipts Tax Credit
929364	County License Tax Credit
929374	County Service Tax Credit
929384	County Transit Tax Credit
929394	County Excise Tax Credit
929404	County Special Tax Credit
929414	County Surcharge Credit
929424	County Sales Tax Credit
929514	Local Utility Users Tax Credit
929524	Local Business & Occupation Tax Credit
929534	Local 911 Tax Credit
929544	Local PUC Tax (Fee) Credit
929554	Local Telephone Sales Tax Credit
929564	Local Statutory Gross Receipts Tax Credit
929574	Local License Tax Credit
929584	Local Service Tax Credit
929594	Local Transit Tax Credit
929604	Local Excise Tax Credit
929614	Local Special Tax Credit

<b>Tax ID</b>	<b>Tax Transaction Type Name</b>
929624	Local Surcharge Credit
929624	Local Surcharge Credit
929634	Local Sales Tax Credit
929704	Unincorporated Utility users Tax Credit
929714	Unincorporated Business & Occupation Tax Credit
929724	Unincorporated 911 Tax Credit
929734	Unincorporated P.U.C. Tax Credit
929744	Unincorporated Telephone Sales Tax Credit
929754	Unincorporated Statutory Gross Receipts Credit
929764	Unincorporated Carrier Gross Receipts Credit
929774	Unincorporated License Tax Credit
929784	Unincorporated Service Tax Credit
929794	Unincorporated Transit Tax Credit
929804	Unincorporated Excise Tax Credit
929814	Unincorporated Special Tax Credit
929824	Unincorporated Surcharge Credit
929834	Unincorporated Sales Tax Credit
929904	Federal Service Tax Credit
929914	Federal Transit Tax Credit
929934	Federal Special Tax Credit
929944	Federal Surcharge Credit
929954	Federal Sales Tax Credit

## Vertex Charges Tax Transaction Types

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### Pre-configured Charges Tax Transactions

The following table lists the pre-configured Vertex Charges Tax Transactions Types in the CLEC Package.

<b>Tax ID</b>	<b>Tax Transaction Type Name</b>
919004	Universal Service Fund Charge
919014	Federal Excise Tax Charge
919024	Federal Utility Users Tax Charge
919034	Federal Business & Occupation Tax Charge
919044	Federal 911 Tax Charge
919054	Federal P.U.C. Tax Charge
919064	Federal Telephone Sales Tax Charge
919074	Federal Statutory Gross Receipts Charge
919084	Federal Carrier Gross Receipts Charge
919094	Federal License Tax Charge
919104	State Utility Users Tax Charge
919114	State Business & Occupation Charge
919124	State 911 Charge
919134	State PUC Tax (Fees) Charge
919144	State Telephone Tax Charge
919154	State Statutory Gross Receipts Tax Charge
919164	State License Tax Charge
919174	State Service Tax Charge
919184	State Transit Tax Charge
919194	State Excise Tax Charge
919204	State Special Tax Charge

<b>Tax ID</b>	<b>Tax Transaction Type Name</b>
919214	State Surcharge Charge
919224	State Sales Tax Charge
919304	County Utility Users Tax Charge
919314	County Business & Occupation Tax Charge
919324	County 911 Tax Charge
919334	County PUC Tax (Fees) Charge
919344	County Telephone Sales Tax Charge
919354	County Statutory Gross Receipts Tax Charge
919364	County License Tax Charge
919374	County Service Tax Charge
919384	County Transit Tax Charge
919394	County Excise Tax Charge
919404	County Special Tax Charge
919414	County Surcharge Charge
919424	County Sales Tax Charge
919514	Local Utility Users Tax Charge
919524	Local Business & Occupation Tax Charge
919534	Local 911 Tax Charge
919544	Local PUC Tax (Fee) Charge
919554	Local Telephone Sales Tax Charge
919564	Local Statutory Gross Receipts Tax Charge
919574	Local License Tax Charge
919584	Local Service Tax Charge
919594	Local Transit Tax Charge
919604	Local Excise Tax Charge

<b>Tax ID</b>	<b>Tax Transaction Type Name</b>
919614	Local Special Tax Charge
919624	Local Surcharge Charge
919624	Local Surcharge Charge
919634	Local Sales Tax Charge
919704	Unincorporated Utility users Tax Charge
919714	Unincorporated Business & Occupation Tax Charge
919724	Unincorporated 911 Tax Charge
919734	Unincorporated P.U.C. Tax Charge
919744	Unincorporated Telephone Sales Tax Charge
919754	Unincorporated Statutory Gross Receipts Charge
919764	Unincorporated Carrier Gross Receipts Charge
919774	Unincorporated License Tax Charge
919784	Unincorporated Service Tax Charge
919794	Unincorporated Transit Tax Charge
919804	Unincorporated Excise Tax Charge
919814	Unincorporated Special Tax Charge
919824	Unincorporated Surcharge Charge
919834	Unincorporated Sales Tax Charge
919904	Federal Service Tax Charge
919914	Federal Transit Tax Charge
919934	Federal Special Tax Charge
919944	Federal Surcharge Charge
919954	Federal Sales Tax Charge

