

DOCUMENTATION OVERVIEW

KBP-11.7-DO-2005-04-29



The information in this documentation is furnished for your use only, and no disclosure or use of any portion of these materials may be made without the express, written consent of CSG Systems International, Inc. ("CSG"). The information is subject to change without notice, and CSG assumes no responsibility or liability for any errors or inaccuracies that may appear in this manual.

This documentation is the property of CSG and its licensors, and it contains confidential and proprietary information of CSG. Copying, modifying, or distributing this documentation in violation of a license agreement, confidentiality agreement, United States Copyright Law, or the copyright law of any applicable foreign jurisdiction is expressly prohibited.

Kenan[®]/BP, CSG Systems[®], and the CSG Logo[®] are registered trademarks or trademarks of CSG Systems International, Inc.[®] and its affiliates in the United States and other countries. All other brand and product names are trademarks, service marks, registered trademarks, or registered service marks of their respective owners.

Third-Party Software: This CSG product may contain or be distributed with third-party software. For information on any applicable third-party software, please refer to the Copyright Notices file that is bundled with your software.

Copyright 2005 CSG Systems International, Inc. All rights reserved.

Contents

1	Introduction	1
	What Is Kenan/BP?	1
	System Features	2
	Who Uses Kenan/BP	3
	User Categories	3
	Tasks	3
2	Core Documentation	5
	ARCH Guide	6
	Billing Operations Guide	6
	Common Configuration Tasks	6
	Database Reference	7
	Guide to Products, Rates, and Discounts	7
	Journals Guide	8
	Kenan/BP Highlights	8
	Module Configuration Guide	8
	Reports and File Layouts	8
	Software Documentation Update	8
	Software Product Description	9
	System Administrator Guide	9
	Technical Reference	9
	User Guide	9
3	Other Documentation	11
	Common Documents	12
	Kenan/BP Glossary	12
	Software Documentation Update	12
	Software Product Description	12
	Component Documents	13
	C-API Guide	13
	C-API Reference	13
	Collections Guide	13
	Configurator Guide	13
	Customer Center User Guide	14
	Operations Center Guide	14
	Orders Services Guide	14
	Security Server Guide	14

1 Introduction

Welcome to the Kenan/BP Documentation Overview.

The overview describes the three kinds of documentation relevant to Kenan/BP:

- Core documentation describes functionality associated with each release of Kenan/BP.
- Common documentation includes standard documents associated with any specific product release.
- Component documentation describes other products or other functionality that may be useful to the Kenan/BP user.

What Is Kenan/BP?

Kenan/BP is a comprehensive system that supports billing and customer care for products and services in the converging telecommunications markets such as voice, data, and multimedia applications.

Kenan/BP consists of task-separated modules that are integrated with a relational database management system. Each module performs activities based on its database-resident processing schedule.

Kenan/BP supports both usage- and non-usage-based products and services such as:

- telephony
- cable services
- leased lines
- wireless and GSM services
- enhanced services
- Internet access and online services
- electronic information services
- combinations of services from multiple providers

Kenan/BP supports billing activities such as:

- customer usage accumulation
- advanced rating and taxation
- customer invoice preparation
- payments processing (credit card, lockbox, and electronic funds transfer)
- invoice formatting and dispatching
- complete archiving of all system data
- exchanging data with third-party systems

System Features

Kenan/BP includes the following general features:

- **Open systems architecture**
Kenan/BP runs under UNIX and is coded in ANSI C, making full use of industry Open Systems standards.
- **Relational database**
Kenan/BP functional processes are tightly coupled with an ANSI SQL-compliant relational database management system. All billing data, including rates, discounts, products, services, and customer information, is held within relational database tables. By modifying tables, without any additional software development, you can create, combine, and change products, services, and discounts.
- **Client/server architecture**
Kenan/BP interfaces and processes interact with one or more central database servers to enable easy system scaling up or down based on the size of your deployment.
- **Core and configurable processes**
Kenan/BP consists of core processes within a configurable shell. Configurable elements include pricing plans (rates and discounts), product hierarchies, invoice formats, reports, languages, taxes, and graphical interfaces.
- **Application programmer interface (API)**
APIs enable external applications to perform provisioning, query provisioned elements, and retrieve some transactions records (call details and bill images) automatically, bypassing the graphical user interfaces.
- **Distributed networking**
Kenan/BP takes advantage of distributed TCP/IP networking.
- **Security and access control**
Kenan/BP uses a multilayer security architecture that controls user access across platforms, file/directory permissions, access to graphical interface features, and database object security.
- **Continuous availability**
All system backups can be performed while the system is operational.
- **Point-in-time recovery**
All database actions are recorded in real time and logged. Each module supports recovery to a particular point in time.
- **Multiple archive media**
Available archive media include tape drives (525MB 0.25", 4mm DAT, and 0.5" 9-track cartridges), CD optical, and floppy disks.

Note Not all deployments use every Kenan/BP feature.

Who Uses Kenan/BP

Kenan/BP is a highly configurable, flexible billing and customer care system that performs a variety of tasks. This section briefly describes many of the common tasks Kenan/BP users and administrators perform, and points to more detailed documentation.

User Categories

Kenan/BP has five broad categories of users, who are responsible for certain kinds of tasks:

- Customer service representatives (CSRs)
These users are responsible for front-line customer care and are authorized to review and make adjustments to individual accounts within certain amount thresholds.
- Supervisors
These users are responsible for handling customer care escalation and are authorized to perform general tasks not associated with an individual account.
- Financial users
These users are responsible for financial reporting and accounting and potentially for high-level customer care tasks involving financial investigations.
- Billing operators
These users are responsible for configuring and running billing processes, payment processing, and other technical tasks specific to Kenan/xx.
- System administrators
These users monitor system activity and maintain the UNIX network and the relational database management system including archiving and recovery.

These categories are general descriptions only. Every company's organization is unique, and an individual Kenan/BP user may have tasks that span several or all categories.

Tasks

The following kinds of common tasks are typically performed by users from the categories indicated. This list is an example only and is not exhaustive.

- Creating and modifying accounts
CSRs and supervisors create new customer accounts, assign products and services to them, and record initial customer information. They review and modify the information associated with an account as needed. Documented in the *User Guide*.
- Adjustment processing
CSRs can make adjustments to a customer's account up to a predetermined maximum and initiate refund requests. Supervisors can authorize refunds and other adjustments and generally have higher amount thresholds. Documented in the *User Guide*.
- Payment processing
Billing operators configure the Kenan/BP processes that handle lockbox, credit card, electronic funds transfer (EFT), direct debit, and other forms of payment for an account. Documented in the *Billing Operations Guide*.
- Creating notes and memos
Any user can add a note to a customer account or send a timed reminder to other users as described in the *User Guide*.

- **Investigations**
Billing operators investigate particular transactions set aside by several Kenan/BP modules before they are completely processed. For example, if the clearinghouse cannot process a credit card charge, Kenan/BP places the charge on hold pending investigation. Investigation interfaces and processes are documented in the *Billing Operations Guide*.
- **Reporting**
Most users can generate and browse any of the predefined reports included with Kenan/BP, as documented in *Reports and File Layouts*.
- **Booking and accounting**
Financial users and billing operators use the Kenan/BP Journals module to book accounts receivable and other financial information for general ledger operations. Configuration of the Journals module is documented in the *Journals Guide* and the *Billing Operations Guide*.
- **System configuration**
System administrators handle hardware and operating system configuration and set up new users and user groups. Documented in the *System Administrator Guide*.
Billing operators and system administrators configure individual Kenan/BP processes to run and perform their tasks. Documented in the *Billing Operations Guide* and the *Module Configuration Guide*.
- **System monitoring**
System administrators monitor system performance and make adjustments as needed to operating system, hardware, and software parameters. Kenan/BP system parameters are controlled through a single table, documented in the *Module Configuration Guide*.
Billing operators monitor bill runs to ensure that bills are issued regularly and that errors are corrected. They monitor error files for usage records, credit card payments, electronic funds transfer, and lockbox payments.
- **Database maintenance**
System administrators perform regular database backups and archive selected data, perform recoveries as needed, and monitor space usage in database and transaction logs.
Billing operators maintain key database tables including product, rate, discount, and tax definitions. Documented in the *Guide to Products, Rates and Discounts*.

2 Core Documentation

This chapter covers the Core portion of the Kenan/BP documentation set. Core documentation describes functionality associated with each release of Kenan/BP.

Core documentation includes:

<i>ARCH Guide</i>	<i>6</i>
<i>Billing Operations Guide</i>	<i>6</i>
<i>Common Configuration Tasks</i>	<i>6</i>
<i>Database Reference</i>	<i>7</i>
<i>Guide to Products, Rates, and Discounts</i>	<i>7</i>
<i>Journals Guide.....</i>	<i>8</i>
<i>Kenan/BP Highlights</i>	<i>8</i>
<i>Module Configuration Guide</i>	<i>8</i>
<i>Reports and File Layouts</i>	<i>8</i>
<i>Software Documentation Update</i>	<i>8</i>
<i>Software Product Description.....</i>	<i>9</i>
<i>System Administrator Guide</i>	<i>9</i>
<i>Technical Reference.....</i>	<i>9</i>
<i>User Guide.....</i>	<i>9</i>

ARCH Guide

Instructions for using the Archiver module for Kenan/BP.

This document is a complete guide to the use of ARCH in the Kenan/BP billing system, covering the installation, configuration, and running of the process.

Billing Operations Guide

Guide to billing, processing payments, and collecting from delinquent accounts.

The *Billing Operations Guide* is a users' guide to back-end billing tasks, from receiving usage records through calculating balances, generating invoices, processing payments, executing collections, and performing various administrative tasks. It details scheduling modules through Command Center, describes task modes of various processes, and explains how to use investigation interfaces to correct errors. The book has a practical emphasis, explaining how to perform tasks and review their results and how best to schedule modules, and offering suggestions on correcting problems.

Common Configuration Tasks

This manual provides step-by-step instructions for configuring the most common billing entities used in Kenan/BP, such as recurring charges, usage, discounts, and contracts. It contains new material as well as information previously found in the Kenan/BP *Configuration Guide Vol. 2 (Tables)* and the *Guide to Products, Rates and Discounts*. Occasionally this manual may refer you to these books and others in the Kenan/BP documentation set.

Database Reference

The *Database Reference* includes three volumes:

Database Reference (Administration Tables, Vol. 1) A-I, *Database Reference (Administration Tables, Vol. 2) J-Z*, and *Database Reference (Catalog and Customer Tables)*

Detailed description of fields and tables in the Admin, Catalog, and Customer databases.

Each table entry includes:

- table description
- field information

Each table entry may also include lists of:

- modules that use the table
- tables that are dependent on the table
- SQL triggers
- indexes, foreign keys, and check constraints.

Each chart of field information includes:

- field name
- data type and size
- comments
- accepted values
- accepted null

Guide to Products, Rates, and Discounts

Overview of data model entities (such as products and rate schedules) and how to configure them in the database.

This document describes:

- how to represent your organization's products and services, and their corresponding rates and charge schedule, within Kenan/BP.
- how to implement your organization's product business model in terms of the Kenan/BP configurable data model. It is intended for use by product managers and other individuals who plan and implement changes in their organization's product lines.
- an in-depth view of the configurable and nonconfigurable data entities for products. Refer to *Common Configuration Tasks*, *Module Configuration Guide*, and the *Database Reference* for additional information about the tables and the system parameters described in this document.

Journals Guide

Detailed description of Journal module functionality.

This document is a complete guide to the Journals module (JNL) in the Kenan/BP billing system, covering the theory, configuration, and running of the process. This document is intended for anyone who wants to know about the journals process, although not all sections may be relevant to all types of personnel.

Kenan/BP Highlights

Overview of the changes in Kenan/BP functionality.

Kenan/BP Highlights provides an overview of the changes to Kenan/BP functionality. The changes for each release are further organized in functional subsections, such as usage processing, payments processing, and system administration.

Module Configuration Guide

Detailed instructions for configuring modules.

This document provides instructions for configuring Kenan/BP modules (processes, utilities, and interfaces), along with a brief description of the function of each module. The sections on each module describe the steps you must perform before running that module for the first time, and changes you can make to tailor its performance to your particular needs. A lengthy section describes the function and configuration of all Kenan/BP system parameters.

Reports and File Layouts

Detailed descriptions of control reports, summary and detail reports, and input and output file formats.

This document explains the Reports interface of Kenan/BP. It covers different types of reports and file layouts that a business may need in its day-to-day operations.

Software Documentation Update

Detailed description of the enhancements in the current release.

This document describes the cumulative changes to the product since the previous release. It is intended for experienced users of the product and should be used in conjunction with the most recent version of the complete documentation set.

Software Product Description

Short summary of product functionality and requirements.

This document briefly summarizes the product. It is small but powerful: the *Software Product Description* provides the basis for contract and warranty agreements.

System Administrator Guide

Guide to installation, configuration, and operation of Kenan/BP from a system administration perspective.

The *System Administrator Guide* is a guide to proper configuration and maintenance of Kenan/BP at the most basic level. It covers installation and upgrading, access control, configuring directory structures and environment variables, and basic system maintenance and monitoring. Directory structures are covered in some detail, as are database updates and general RDBMS maintenance, and system messaging. Since every installation of Kenan/BP is customized to some degree, the *System Administrator Guide* cannot stand alone as an installation guide but should be used in conjunction with system-specific documentation.

Technical Reference

Reference manual describing process flows for modules and interactions between modules, servers, and databases.

The *Technical Reference* is just that — a reference. It does not explain how to use any of the modules in Kenan/BP. It does explain how the modules work, and how they work together. It describes each module's functions and lists all tables and system parameters each module uses. Functional groupings of modules and tables like the Message Processing System are delineated. Detailed descriptions of module behavior are useful in configuring for specific tasks, but the book is also good as an overview picture of BP.

User Guide

Instructions for using the Customer Care interface.

A task-oriented guide for Customer Service Representatives and their supervisors. Describes how to use several Kenan/BP interfaces to view and manage customer billing information and carry out other related tasks.

3 Other Documentation

This chapter covers component and common documentation associated with the Kenan/BP documentation set. Common documentation consists of standard documents associated with any specific product release. Component documentation describes other products or other functionality that may be useful to the Kenan/BP user.

Common documentation includes:

<i>Kenan/BP Glossary.....</i>	<i>12</i>
<i>Software Documentation Update</i>	<i>12</i>
<i>Software Product Description.....</i>	<i>12</i>

Component documentation includes:

<i>C-API Guide.....</i>	<i>13</i>
<i>C-API Reference</i>	<i>13</i>
<i>Collections Guide.....</i>	<i>13</i>
<i>Configurator Guide.....</i>	<i>13</i>
<i>Customer Center User Guide.....</i>	<i>14</i>
<i>Operations Center Guide</i>	<i>14</i>
<i>Orders Services Guide.....</i>	<i>14</i>
<i>Security Server Guide.....</i>	<i>14</i>

Common Documents

Kenan/BP Glossary

Glossary for Kenan/BP.

This book contains a glossary of terms and abbreviations for Kenan/BP and its associated modules.

Software Documentation Update

Detailed description of the enhancements in the current release.

This document describes the cumulative changes to the product since the previous release. It is intended for experienced users of the product and should be used in conjunction with the most recent version of the complete documentation set.

Software Product Description

Short summary of product functionality and requirements.

This document briefly summarizes the product. It is small but powerful: the *Software Product Description* provides the basis for contract and warranty agreements.

Component Documents

C-API Guide

Overview of functions in, and use of, the Application Programmer Interface.

This document provides a general overview of the Kenan/BP Application Programmer Interface (API) and specific information about the data types and functions it comprises. It is intended for use by developers with prior knowledge of Kenan/BP. This guide discusses how to implement aspects of your business model by using APIs.

C-API Reference

The *API Reference* includes two volumes.

Detailed description of all fields and objects in the Application Programmer Interface.

Ordered alphabetically, this two-volume document provides a detailed reference providing in-depth information about each object in the Kenan/BP APIs. Ordered alphabetically, this book includes general information, a complete list of fields and their type, and a complete list of functions for each object.

Collections Guide

Instructions for using the Advanced Collections module of Kenan/BP.

This manual is for anyone who wants to use, run, or configure the Advanced Collections module. Advanced Collections is used to identify and aid in the collection of delinquent debts by identifying entities whose overdue balances exceed certain threshold amounts. Advanced Collections schedules and processes collections events and removes entities from collections when the debt is sufficiently paid off. This manual contains information on configuring Advanced Collections database tables, running the Advanced Collections module, and using the Advanced Collections interface.

Configurator Guide

Instructions for using Kenan Configurator.

This document provides detailed instructions for using Kenan Configurator, the configuration tool for the CSG Kenan product line. Configurator is a client application for working with configurable database tables — that is, tables that can be configured by end users — in your CSG Kenan product. It offers a multitiered structure that enables users of any skill level to work with an interface adapted to their requirements. The Configurator Guide is tailored to the needs of a variety of users, so that even novices can quickly learn to configure CSG Kenan database tables.

Customer Center User Guide

Instructions for using Customer Center

This manual is a task-oriented guide for CSRs and their supervisors who use Customer Center. Customer Center supports billing and customer care for products and services in voice, data, and multimedia applications. CSRs and supervisors use the Customer Center interfaces to view and manage customer billing information and to carry out related tasks.

Operations Center Guide

Complete guide to the CSG Operations Center features.

The guide describes the CSG Operations Center that supports the availability, performance, and recovery of applications running in geographically distributed environments. The CSG Operations Center enables seamless and automated real-time monitoring and control. It provides administrators with an instant overall view of the system.

Advanced features are under separate licensing. Details of those features, including BIC and SNMP, are available in the Operations Center with Advanced Features Guide.

Orders Services Guide

Guide to the Orders Services and Order Investigation Unit.

This document covers the structure and features of Orders Services, including a database reference and feature overviews. It is intended for use by back-office system administrators who are responsible for configuring, installing, and managing Orders Services processes. Front-end users who interact with Kenan/BP through the Customer Center interface can refer to Customer Center documentation for information about customer order entry.

Security Server Guide

Guide to the Security Services system.

This document provides specific information describing the architecture, installation, configuration, and operation of the various components of the Security Services system. It is intended for use by system administrators who are responsible for any aspect of the administration of the Security Services system.