



Application Guide for Siebel Communication Billing Manager (Business Edition)

Version 5.1
Date Published: 2.28.2006

Copyright © 2005, 2006, Oracle and/or its affiliates

All rights reserved

Printed in the United States of America

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

PRODUCT MODULES AND OPTIONS. This guide contains descriptions of modules that are optional and for which you may not have purchased a license. Siebel's Sample Database also includes data related to these optional modules. As a result, your software implementation may differ from descriptions in this guide. To find out more about the modules your organization has purchased, see your corporate purchasing agent or your Siebel sales representative.

U.S. GOVERNMENT RESTRICTED RIGHTS. Programs, Ancillary Programs and Documentation, delivered subject to the Department of Defense Federal Acquisition Regulation Supplement, are "commercial computer software" as set forth in DFARS 227.7202, Commercial Computer Software and Commercial Computer Software Documentation, and as such, any use, duplication and disclosure of the Programs, Ancillary Programs and Documentation shall be subject to the restrictions contained in the applicable Siebel license agreement. All other use, duplication and disclosure of the Programs, Ancillary Programs and Documentation by the U.S. Government shall be subject to the applicable Siebel license agreement and the restrictions contained in subsection (c) of FAR 52.227-19, Commercial Computer Software - Restricted Rights (June 1987), or FAR 52.227-14, Rights in Data—General, including Alternate III (June 1987), as applicable. Contractor/licensor is Siebel Systems, Inc., 2207 Bridgepointe Parkway, San Mateo, CA 94404.

Proprietary Information

Siebel Systems, Inc. considers information included in this documentation and in Siebel Online Help to be Confidential Information. Your access to and use of this Confidential Information are subject to the terms and conditions of: (1) the applicable Siebel Systems software license agreement, which has been executed and with which you agree to comply; and (2) the proprietary and restricted rights notices included in this documentation.

Contents

1 Introduction

- 1.1 Siebel Customer Self-Service 5
- 1.2 Siebel Billing Manager 5
- 1.3 Key Benefits of Billing Manager 15
- 1.4 Siebel Self-Service Suite 20
- 1.5 Conclusion 22

2 Business Processes and Application Logic

- 2.1 Overview 23
- 2.2 System Context Diagram 24
- 2.3 Menu Navigation 25
- 2.4 Site Map Overview 27
- 2.5 Site Map Detail 28

3 Application Use Cases

- 3.1 About Application Use Cases 35
- 3.2 Actors 35
- 3.3 Functionality Overview 36
- 3.4 General User Interface 39
- 3.5 Enrollment and Authentication Use Cases 65
- 3.6 Overview Use Case 74
- 3.7 Statement Use Cases 77
- 3.8 Payment Use Cases 118
- 3.9 Hierarchy Use Cases 142
- 3.10 Personal Profile Use Cases 191
- 3.11 Company Profile Use Cases 207
- 3.12 CSR Use Cases 222

3.13 System Use Cases 267

4 External Interfaces

Overview of Integration Points 287

Data Files 288

ACH Files 288

A/R Files 288

New Standards and Best Practices 289

1 Introduction

1.1 Siebel Customer Self-Service

Siebel is the world's leading provider of customer self-service and e-billing software and services. Its solutions help service providers increase customer loyalty while reducing the overall cost to serve their customers. Service providers use the software to move customer service interactions from expensive paper and call center-based channels to lower-cost and more responsive self-service and assisted care channels like the web, e-mail and IVR.

Siebel software has been deployed in some of the most challenging business and technical environments in the world and has proven to be the industry's most scalable and reliable solution. The applications have been continuously developed and refined to deliver the most comprehensive self-service functionality available. As a result, Siebel customers consistently gain the highest adoption and ROI – typically 5-10 times higher than companies using in-house or competing packaged solutions.

Self-Service for Consumers and Businesses

Many billing and customer care processes today are expensive, inefficient and unsatisfactory for both communication service providers (CSP's) and their customers. With Siebel's customer self-service and e-billing solutions, providers empower their business and consumer customers to serve themselves and address all of their account and service-related activities online, instead of going through a call center, account rep, or retail outlet. For end customers, this makes doing business with a service provider more convenient, more efficient, and more satisfying. For service providers, it means improved competitive differentiation, significantly reduced customer care costs, increased customer loyalty and streamlined billing/payment processing.

Contact centers provide the key to unlocking the potential business benefits of customer self-service. Contact center statistics show that 60-80 percent of customer service issues relate to a customer's account. For this reason, Siebel customer self-service solutions provide direct access to detailed account information, and interface with complementary front-and back-office systems to provide access to a variety of account-related services.

1.2 Siebel Billing Manager

Billing Manager Features

Siebel Billing Manager is the leading electronic bill presentment and payment (EBPP) solution for service providers.

Billing Manager provides the mission-critical application platform required for securely managing customer account information such as bills, statements, and other data. With Billing Manager, service providers can provide business and consumer customers with highly personalized online account information and self-service capabilities that can be served across multiple channels (Web, PDF, IVR, hand-held devices and e-mail). It serves as the foundation for managing recurring customer relationships.

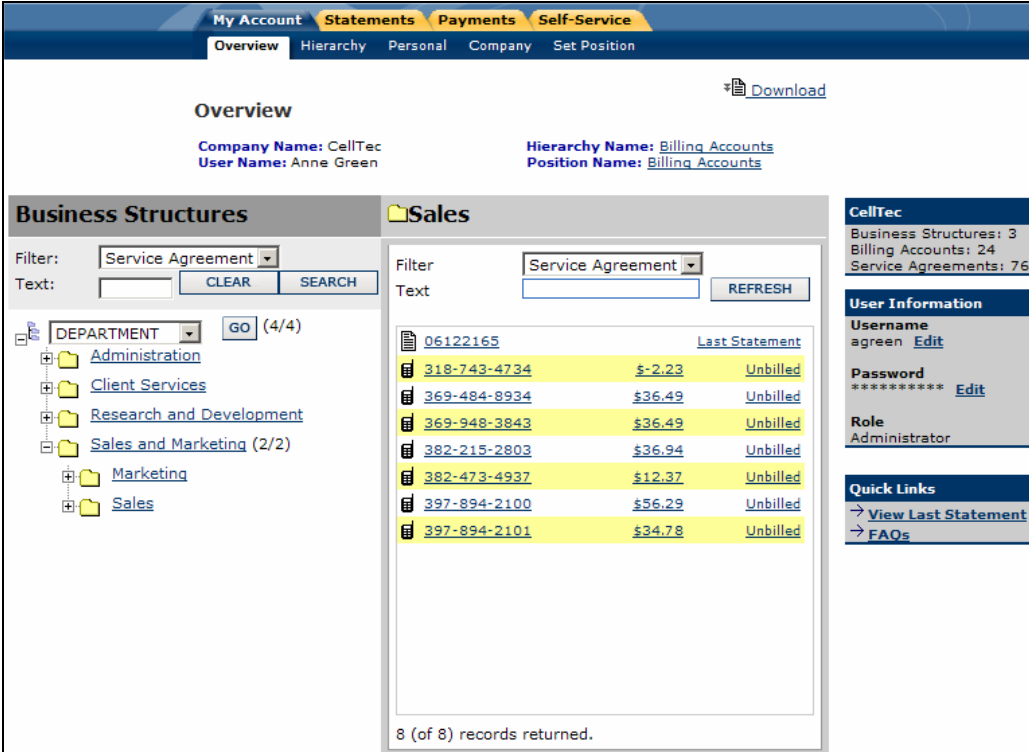
Billing Manager is specifically designed for organizations with large numbers of customers, high data volumes and extensive integration with systems and business processes across the enterprise. With its sophisticated data access layer, platform services, and data stores, Billing Manager is uniquely capable of powering the most complex EBPP and Customer Self-Service solutions.

Realizing that consumer and business customers have very different service needs, Billing Manager is available in a consumer edition and business edition with specific features and functionality designed for each user base.

The core capabilities of the Billing Manager application editions are detailed below.

Billing Manager Consumer Edition

Billing Manager Consumer Edition Overview



Overview

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: Billing Accounts

Business Structures

Filter: Service Agreement
Text:

DEPARTMENT (4/4)

- Administration
- Client Services
- Research and Development
- Sales and Marketing (2/2)
 - Marketing
 - Sales

Sales

Filter: Service Agreement
Text:

ID	Amount	Status
06122165		Last Statement
318-743-4734	\$-2.23	Unbilled
369-484-8934	\$36.49	Unbilled
369-948-3843	\$36.49	Unbilled
382-215-2803	\$36.94	Unbilled
382-473-4937	\$12.37	Unbilled
397-894-2100	\$56.29	Unbilled
397-894-2101	\$34.78	Unbilled

8 (of 8) records returned.

CellTec

Business Structures: 3
Billing Accounts: 24
Service Agreements: 76

User Information

Username: agreen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Quick Links

[View Last Statement](#)

[FAQs](#)

Billing Manager Consumer Edition is focused on the self-service needs of a large consumer base. The core features of the application are described below.

Customer Account Dashboard

Bills or statement data is dynamically presented within the application dashboard. Once properly authenticated, users can easily and conveniently navigate and view their billing statements, account summaries and call details.

Electronic Bill Presentment and Consolidation

Consumer customers can access their bills or invoices online, including historical bills stored for as many years as the service provider prefers. Each monthly bill, for a single service or consolidated for multiple services, is presented in dynamic fashion using HTML and can include up-to-date account information such as current balance, bill details, unbilled-usage, last payment received, last payment date, etc. Customers can sort table columns, filter and drill-down into the call detail to further validate charges.

Electronic Bill Payment and Posting

Customers have the complete flexibility to control how and when payments are made. Payment is set up via bank and/or other credit accounts within Billing Manager to execute instant payments or to schedule future automatic payments. Customers have the ability to view the status and record of previously made payments. Billing Manager also provides an accounts-receivable settlement file for the service provider with the following information: payment amount, payment date, statement number, account number, payment account, payment type (one-time/recurring) and return status (yes or no with corresponding negative amount). Users can change their payment options and user preferences within the application. They can also establish multiple payment methods and payment notification preferences, make one-time payments, automate recurring payments, and set payment thresholds and reminders.

User Profile Management and Notifications

User information and settings are presented and modified within the application. Users may update their profile information, correct personal data, and manage password or notification options, email addresses, and other personal preferences.

Customer profiles may be updated on a real-time basis at anytime while the customer is properly authenticated. Profile information such as the customer's preference for account notifications can be set. Billing Manager manages and sends e-mail and SMS messages concerning individual accounts or transaction events. A variety of conditions or circumstances can trigger email notifications. Service providers may wish to enable some common notifications:

- Current corporate statements are available
- Payment reminders
- Payment confirmations
- Payment rejections
- Threshold exceeded on recurring payments
- Credit card expiration pending

Users may establish multiple notification or alert options and modify their settings at any time.

Three-Tier Disputes

Users can contest a service change, call or surcharge within the application. Billing Manager provides a flexible system for handling both invoice and transaction level disputes. The application manages individual transaction disputes, dispute reason codes, account annotations, dispute capture and submission to back-end systems for reconciliation. This lets users view statements and dispute account information at the summary level, service level, or call detail directly through the interface. This feature may be configured based on the provider's business requirements or back-office integration needs.

Unbilled Data Presentment

Unbilled account charges can be viewed online prior to bill cycle closing within the application. Users can view their charges as well as analyze to-date spending for the current billing period.

Personal Address Book (PAB)

Using Billing Manager, customers can create a list of phone numbers and assign name pairs allowing them to view call detail with meaningful names exchanged for frequently called numbers. With this feature, users can associate bill detail with more familiar, meaningful identifiers. Once entered in the PAB, names may be toggled on to replace corresponding numbers on the bill, making online account management easier, more convenient and more valuable for users.

B2C Reporting

Specific reports come with the application whereby users may view summaries, analyze charts, and access their complete statement history using built-in reporting features. Furthermore, users may also drill-down through account information, bill or statement data within the application. Specifically, they can page through call details, sort across pages, subtotal and filter account information viewing dynamic reports.

Print Friendly Views, PDFs and Downloads

Users may access print friendly views, request a dynamic PDF of their statement, or select to download a dataset. These features are all available for key application views. Billing Manager's versioned, disk-efficient and high performance bill archiving feature along with its print-friendly views makes generating hard-copy reprints simple and efficient.

Customer Service Representative (CSR) Views

Billing Manager also provides a lightweight solution for customer service management. CSRs can also “impersonate” the user to facilitating the efficient servicing of online accounts. For example, representatives may have roles that provide application access to execute payments, reset passwords or simply search accounts to view the customer statement. The application may also be extended for complete case management with Siebel Call Center Application, providing additional case creation, routing and tracking, status views of cases, escalation workflows and queuing. Cases can either be completely automated without agent intervention based on predetermined business rules, or routed appropriately to engage an agent for resolution.

Multi-DDN

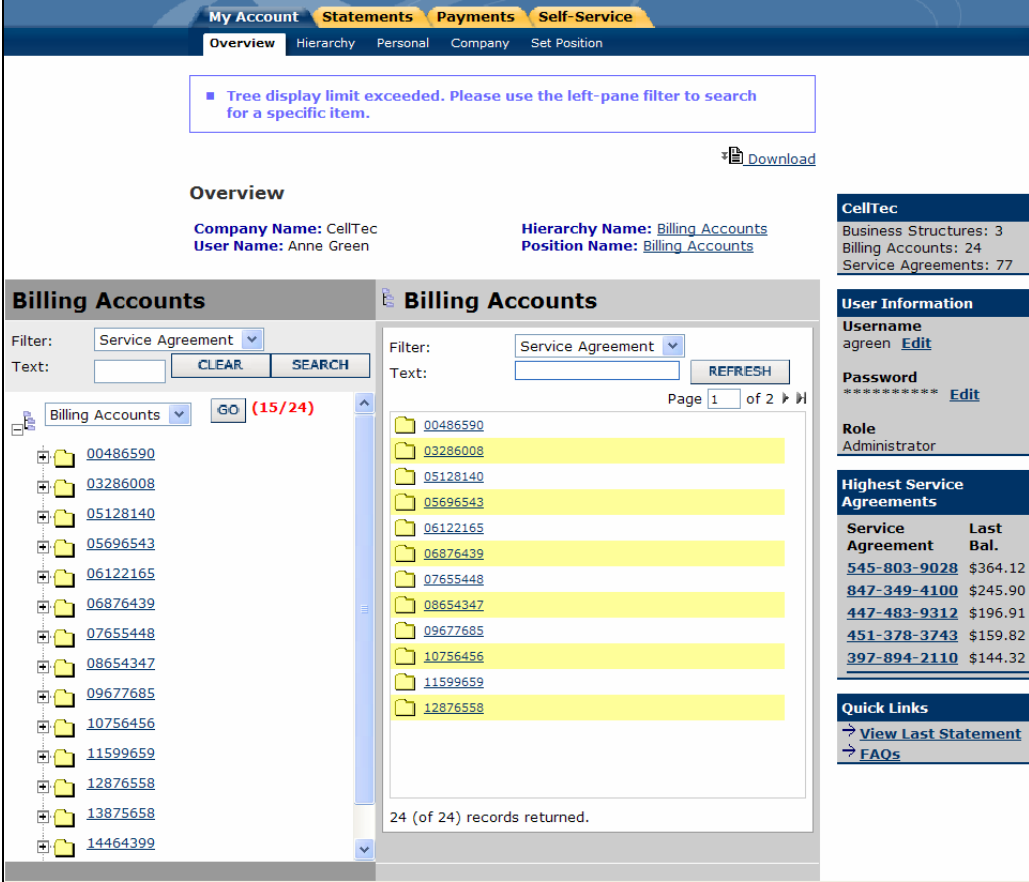
The application enables multiple DDN support. The application supports multiple billing feed formats from the same or different billing systems which is critical when multiple billing systems are involved or multiple billing formats are required to support multiple products (wireless, wire line, DSL).

Internationalization

Internationalization support in Billing Manager application allows the application to be translated into multiple languages. Taking advantage of Java’s inherent support for internationalization, the process involves localizing resource strings/messages to resource bundles corresponding to desired language(s). Localization is performed by simply adding locale-specific components, such as translated text, data describing locale-specific behavior, fonts, and input methods.

Billing Manager Business Edition

Billing Manager Business Edition Dashboard



The screenshot displays the Billing Manager Business Edition dashboard. At the top, there is a navigation bar with tabs for 'My Account', 'Statements', 'Payments', and 'Self-Service'. Below this, a sub-navigation bar includes 'Overview', 'Hierarchy', 'Personal', 'Company', and 'Set Position'. A message box states: 'Tree display limit exceeded. Please use the left-pane filter to search for a specific item.' A 'Download' button is also present.

The main content area is divided into two columns. The left column, titled 'Billing Accounts', features a filter dropdown set to 'Service Agreement', a text input field, and buttons for 'CLEAR' and 'SEARCH'. Below these is a tree view of 'Billing Accounts' with a 'GO' button and a count of '(15/24)'. The right column, also titled 'Billing Accounts', has a similar filter and search interface with a 'REFRESH' button. It displays a list of 24 records, with the first 15 visible on this page. The records are listed with their IDs and corresponding values.

On the right side of the dashboard, there are three summary boxes: 'CellTec' showing 'Business Structures: 3', 'Billing Accounts: 24', and 'Service Agreements: 77'; 'User Information' for 'agreen' with 'Edit' links for Username and Password; and 'Highest Service Agreements' showing a table of service agreements and their last balances.

Service Agreement	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

At the bottom right, there is a 'Quick Links' section with links to 'View Last Statement' and 'FAQs'.

Billing Manager Business Edition is focused on the self-service needs of an enterprise customer base. The core features of the application are described below.

Corporate Account Dashboard

Account information, bills or statement data is dynamically presented within the application by the business billing structure. Once properly authenticated, managers, administrators and users may view consolidated account summaries, sub-accounts, individual statements or all call details based on their access permissions for the billing structure.

Hierarchical Billing and Business Structures

Billing structures are presented within the application as account hierarchies. Managers or administrators may search, view and update their billing structure by assigning other attributes to hierarchy nodes, such as, meaningful names or device IDs, etc. Users are assigned within the billing structure, defining navigation within the account and sub-accounts of billing data. Administrator assignment in the billing structure may provide access to the entire enterprise or limit a single user to viewing their individual statement only. By creating separate business structures within the application, users may maintain multiple hierarchies of their own. Billing structures and user created business structures offer different views of account information for segmentation, payment, analysis and reporting.

Large Hierarchies

For customers with large numbers of accounts or service agreements, the foundation application UI has been enhanced to eliminate latency and make the UI more practical to navigate. The service provider can configure various thresholds above which the user will receive a message that not all records have been displayed and the user will need to filter the displayed records. Filters have been added throughout the application so that the user can narrow the scope of records being displayed on their screen. Additionally a number of system configurable thresholds have been implemented within the application. These include:

- Display Threshold Hierarchy Tree
- Display List Threshold
- Retrieval Threshold
- Dropdown Threshold
- Large Enterprise User

Further information on these thresholds can be found in the developer documentation for this product.

Electronic Bill Presentment and Consolidation

Business customers can access their bills or invoices online including historical bills stored for as many years as the service provider prefers. Each billing period, for a single service or consolidated for multiple services, is presented in dynamic fashion using HTML and can include up-to-date account information such as current balance, bill details, last payment received, last payment date, etc. Furthermore, accounts can be consolidated across disparate system using either full data consolidation via an external data store or summary consolidation by dynamically linking the accounts. Customers can sort table columns, filter and drill-down into the call detail to further validate charges.

Cross Invoice/Sub-Invoice Payment

Payment options and enterprise preferences can be presented and modified within Billing Manager. Administrators may establish multiple payment methods and payment notification preferences, make one-time payments, schedule automated recurring payments, and set payment thresholds and reminders. Administrators may also make a single payment across multiple invoices, defining the payment allocation, even allocating payment to sub-invoice charges. Administrators have the complete flexibility to control how and when payments are made. Payment is set-up via bank and/or other credit accounts within Billing Manager to execute instant payments or to schedule future automatic payments. Administrators also have the ability to view the status and record of previously made payments. Billing Manager integration provides an accounts receivable settlement file to the service provider with the following information: payment amount, payment date, statement number, account number, payment account, payment type (one-time/recurring) and return status (yes or no with corresponding negative amount).

User Roles and Permissions

User roles and permissions can also be presented and modified within the application. Administrators may update user role or access, establishing view only permissions, accounts receivable roles, managerial access, etc. This feature may be configured based on the provider business requirements or back-office integration needs.

Corporate and User Profile Management and Notifications

Corporate profiles are managed by designated administrators, whereas users may update their own profile information, correct personal data, and manage password or notification options, email addresses, and other personal preferences.

Corporate and user profiles may be updated on a real-time basis at anytime while properly authenticated. Profile information such as the corporate contact preferences for account notifications can be set. Billing Manager manages and sends e-mail messages concerning accounts or transaction events. Notifications may be aggregated for account and sub-accounts events and limited to administrator or managerial roles. A variety of conditions or circumstances can trigger email notifications, so service providers may wish to enable some common notifications:

- Current corporate statements are available
- Payment reminders
- Payment confirmations
- Payment rejections
- Threshold exceeded on recurring payments
- Credit card expiration pending

Corporate administrators and users may establish multiple notification or alert options and modify their settings at any time.

Unbilled Data Presentment

With Billing Manager, managers, administrators and users may view unbilled account charges prior to bill cycle closing. All users may view their charges and analyze to-date spending for the current billing period. This feature may be configured based on the provider business requirements or back-office integration needs.

Corporate and Personal Address Book

Administrators may create a global list of phone numbers and assigned name pairs within the application for their accounts. Individual users may also create and maintain a personal address of their own. Users may implement both address books and then view call detail with meaningful names exchanged for frequently called numbers.

Advanced Reporting

Specific reports come with the application whereby users may view summaries, analyze charts, and access their complete statement history using built-in reporting features. Additional business reports are also provided whereby administrators may view a set library of summarized call cost reports and charts. These “roll-up” reports provide for broad analysis of account activity for corporate managers. Furthermore, managers, administrators and users may drill-down through account information, bill or statement data within the application interface. Users can page through call details, sort across pages, sub-total and filter account information viewing dynamic reports. More complex reporting can be performed with Siebel Billing Analytics including extensive call, cost, cost-center, and variance reporting.

Print Friendly, PDFs and Downloads

Users may access print friendly views, request a dynamic PDF of their invoice, or select to download a dataset. Managers and administrators have greater access to account summary PDFs and datasets for the accounts they supervise. Billing Manager’s versioned, disk-efficient and high performance bill archiving feature along with its print-friendly views makes generating hardcopy reprints quick and easy.

Customer Service

CSRs may create corporate administrators for an organization, thereby enrolling a corporate account and establishing designated internal administrators. Service representatives and corporate administrators may create, manage and search the business organizations and accounts under their supervision. The designated administrators accessing corporate billing statements use Billing Manager’s on-line Self-Service application features to manage their own organization and users.

The application enables multiple DDN support. The application supports multiple billing feed formats from the same or different billing systems which is critical when multiple billing systems are involved or multiple billing formats are required to support multiple products (wireless, wire line, DSL).

Multi-DDN

The application enables multiple DDN support. The application supports multiple billing feed formats from the same or different billing systems which is critical when multiple billing systems are involved or multiple billing formats are required to support multiple products (wireless, wire line, DSL).

Internationalization

Internationalization support in Billing Manager application allows the application to be translated into multiple languages. Taking advantage of Java's inherent support for internationalization, the process involves localizing resource strings/messages to resource bundles corresponding to desired language(s). Localization is performed by simply adding locale-specific components, such as translated text, data describing locale-specific behavior, fonts, and input methods.

Billing Manager Edition Comparisons

Feature Comparisons of Billing Manager Editions	B2C	B2B
Bill Presentment	X	X
Unbilled Data Presentment	X	X
Service-Level Consolidation	X	X
Account-Level Consolidation/Linking		X
Hierarchical Navigation		X
Bill Payment	X	X
Cross and Sub-Invoice Payment		X
Notifications	X	X
Consumer (Simple) Reporting	X	X
Advanced Reporting		X
CSR Access	X	X
User Profile Management	X	X
Roles Based Access Control		X
Personal Address Book	X	X
Corporate Address Book		X
CSM Connector	X	X
CBA Connector		X

1.3 Key Benefits of Billing Manager

By combining comprehensive online account management functionality with the world's most scalable and reliable e-billing platform, Billing Manager enables service providers to gain outstanding adoption and ROI typically 5-10 times higher than companies using in-house, customer or competing packaged solutions. Some of the primary benefits Billing Manager enables include:

Business Benefits

Call Center Deflection

By enabling customers to serve themselves online, Billing Manager moves expensive call center interactions (globally these costs translate to \$5-\$10 USD per consumer interaction; \$10-\$30 USD per business customer interaction) to the web site where costs run at less than \$1 USD per interaction.

Reduced Paper, Printing and Postage Costs

In countries where paper turn-off is a legal option, providers are saving enormous printing, post-age, reprint and logistical costs. Even when rules do apply, to guarantee postage revenues, paper may be reduced for reprints services and logistical savings realized.

Streamlined Payment Processing

Online payments are proven to reduce payment time as well as errors associated with them. In addition, it is less expensive for the service provider to process an electronic payment when compared to all the manual handling required to process a paper-based payment. Online payment eliminates lockbox fees, minimizes exception processing, and replaces the costly and time-consuming procedure of processing paper checks.

Case Example	
Total customer base	19,700,000
× Online adoption	12%
× Not paying	30%
× Savings per payment	\$0.14
× Payments per year	12
= Annual Savings	\$1,191,456

Some recent metrics:

- Adoption: 5%-60%
- Percentage paying: 30%-85%
- Savings per transaction: \$0.11 - \$1.08 USD

Given these numbers, an attractive ROI can be rapidly achieved.

Improved Days Sales Outstanding (DSO)

By making statements easier to access and read, speeding approval cycles and automating disputes, Billing Manager reduces the time it takes for customers to pay their bills. This improves cash flow and reduces DSO.

Increased Customer Satisfaction (Reduce Churn)

By providing the option for 24/7/365 online service, service providers make it more convenient and more satisfying for their customers. Although somewhat more difficult to measure, increased customer satisfaction may ultimately be the most critical differentiator. This is particularly true in the B2B world of electronic invoice presentment and payment (EIPP). As evidenced by an independent AMR Research report, “The ROI exercise that generally launches EIPP projects cites process automation and cash flow as key benefits, but the biggest appeal of electronic billing, as it is used today, is its account management and customer support functionality. In reference to calls we conducted, Siebel users remarked that the main benefit of implementing EIPP is the dramatic improvement in customer service they can provide. In some cases, where the supplier took the extra step of helping customers incorporate EIPP into A/P workflows, satisfaction went through the roof. Reduction in DSO and paper-based billing costs – the quantifiable benefits of EIPP – paled as suppliers basked in the warm glow of happy customers.” In today’s economy of high customer acquisition costs, providing a robust online account management and electronic payment experience is critical to doing business and keeping your existing customers satisfied.

Application Benefits

Billing Manager is a packaged enterprise software application with support, training, and regularly scheduled product enhancements and upgrades. Standard deployments are predictable and deliver “quick wins” for the service provider.

Modularity

Billing Manager may be deployed and additional Self-Service for applications added to the deployment, all using the complementary Siebel platform services.

Open Standards Based

Billing Manager is built on a Java 2 Enterprise Edition (J2EE™) architecture making it highly scalable and flexible. Based on leading Java standards like Enterprise Java Beans™ (EJB™), Java Server Pages™ (JSP™), and Java Servlet application programming interfaces (APIs), users of Billing Manager can leverage all the sophisticated application management tools, enterprise-class performance, scalability, portability, and easy extensibility this environment provides. The Siebel applications presentation layer use struts and tiles standards and may be easily “re-skinned” for branding, internationalization, or customized look and feel.

Proven Scalability

Billing Manager has a linearly scalable architecture that supports millions of complex accounts and thousands of concurrent users. Its flexible data access layer provides for truly massive scalability in a way no competing architecture can claim. In fact, data volumes do not impact the real-time performance of the core Siebel solution at all. This means organizations can retrieve, process, and archive tens of millions of accounts, but only need to scale the application server tier to handle the growing user adoption. These services scale linearly, meaning the platform can easily be extended to accommodate growth in volumes, users, or additional application services. Independent scalability reports from Sun Microsystems and IBM that demonstrate this power can be provided upon request.

Ease of Deployment

The off line authoring components of the Siebel Self-Service Suite visual development environment provide menus and wizards that dramatically reduce the time required to configure and deploy Billing Manager. Simulation capability is built-in allowing developers to test designs prior to deploying an application. Early testing lowers risks and costly late changes. Through the intuitive, easy-to-use graphical development environment, users can analyze the data sources, define the essential data, map the account data to presentation templates, and define business rules for one-to-one marketing and customer service messaging. Designers can create any aspect of account presentation for the Web or other delivery devices.

Unmatched Data Access Flexibility

Siebel provides a flexible Business Services Layer (BSL) that can leverage a wide variety of data sources for account information/Tariff analysis. Extensible APIs provide a full suite of integration services for robust comprehensive functionality. Simply stated, Billing Manager transforms account data for Internet consumption. But Billing Manager is not a simple data translation application: it re-purposes available account data, dynamically retrieving only the information required for the new presentation media.

Simple Integration

Billing Manager preserves investment in and extends capabilities of existing infrastructure through enterprise wide integration. The Siebel design environment allows designers to develop and integrate custom features with existing system processes into the Customer Self-Service solution. Integration of custom functionality or external legacy systems can be accomplished quickly and easily using standard tools and technologies. Siebel Self-Service Architecture and Platform Services APIs are Java-based with XML-interfaces detailed in the Billing Manager Software Developer's Kit (SDK). Integration is straightforward for linking existing enrollment and authentication systems, payment processing, online dispute processes, order management processes, accounts receivable systems, customer service and CRM systems, middleware infrastructure, and third-party operational tools.

Operational Oversight

The Command Center console provides a single production management browser application for the Siebel Self-Service Suite including scheduling of services, statement and account application configuration, customer statement notification configuration, auditing and event logging with general system administration and reporting.

Proven Performance

Billing Manager delivers superior performance without regard to data volumes or user loads.

Multiple Communication Channels

Billing Manager supports a multi-channel deployment paradigm for data delivery via, HTML, XML, IVR, PDF, Email, SMS and devices.

Personalization

Any Billing Manager application view (or the entire template itself) can be replaced or modified based on business logic. By leveraging the account information contained in the data stream, Billing Manager can present highly personalized and dynamic views of a customer's account. Designers define logical expressions based on actual account data that will modify the presentation to the customer. This means that all account data can be used as variables in the dynamic of the rendered account view. The mapping of data elements to logical expressions is encapsulated in an XML file used at run-time.

Architecture Benefits

Reduced Storage Requirements

Competing approaches generally only offer transforming and storing statement data as XML or as normalized rows and columns in a database. The XML tags, which need to be stored as part of the data file, can increase file sizes by 30-40% in most cases. Siebel solution may store data in native file formats, and convert it to delivery formats (including XML) only on-demand. This dramatically reduces storage requirements. Data compression may also be optionally provided to further reduce storage by a ratio of greater than 3:1.

A Tunable Application

Billing information is the corner stone of any Customer Self Service solution, it is the data held within the bill that affects the bottom line of a customer's business or a consumer's likelihood to delay payment or switch providers. Billing Manager manages arriving bill data, processes it for storage, and archives the statement files into an extensible statement repository. A data store of account tables are also maintained in a relational database along with user management information, disputes pertaining to the statement files, and logging and tracking information. This data store may be "dialed down" using a lightweight metadata index to dynamically access statements, or "dialed up" creating a content repository of billing data. Billing Manager offers this option of loading meter detail or account summary information into a content repository for sophisticated customer reporting and analysis. The Billing Manager application and platform is therefore "tunable," providing a flexible approach to managing account-based communications for multi-channel delivery.

Reduced Database Licensing Requirements

Siebel data store generally comprises only 3% of the size of the raw statement data. Competing architectures, on the other hand, require a massive database deployment as the full content of each statement is stored as database rows. Database licensing implications can therefore add a significant cost load to competing solutions.

Enhanced Performance and Memory Management

Siebel utilizes dynamic data extraction and transformation for presentation of statement data. In addition, individual statements are decomposed into "views" such as summary, detail, sub-accounts, etc. Only the view being requested by the user is extracted and transformed. By carefully tuning view size, the developer retains complete control over the application's real time performance profile.

Improved Reliability and Data Quality

Competing architectures require batch data transformation to convert data formats. Any time data transformation occurs, there is a risk of user or system error where data will be "left on the cutting room floor," improperly truncated, or generally mis-mapped. Since transformation occurs in large-scale batch jobs, error recovery is very expensive. In the case of error, all of the errant data needs to be identified and purged from the database, the source data needs to be recreated, transformation rules corrected, and the batch jobs rerun. If the batch cycle is long, the correction may be impossible if several days have passed before the error was detected. Siebel utilizes "dynamic data transformation" whereby data is transformed on the fly by dynamically applying extraction and presentation rules. As such, if an error should occur, the rules can be fixed and re-published on the fly without having to rerun the batch process or drop data.

Reduced Batch Cycle

Siebel batch cycle consists of scanning and indexing arriving batch files. Depending on the file format, the batch process typically runs at 7.5 GB of source data per hour. The process may even be configured to run parallel across server clusters for greater throughput. Competing architectures are simply not able to achieve this load time, leading to consumption of additional system resources and higher stakes for error recovery.

Robust Version Management

Siebel realizes the frequency with which businesses change: new products are introduced, statements are redesigned, and old products are discontinued. As such, Siebel makes extensive use of a template-based architecture and provides robust capabilities for versioning templates. Essentially, rules for transforming and presenting data are versioned by date and stored with the source files they correspond to. As such, if a new service offering or bill format is introduced, a developer need only publish new templates which accommodate the changes and need not worry about affecting historical statements. Competing approaches to changing fixed relational database schemas are far more complicated to manage. These advantages translate in to a lower total cost of ownership, which offers returns every day that the system is in production.

1.4 Siebel Self-Service Suite

The Siebel Self-Service Suite is a set of packaged software solutions that enable service providers to realize the full benefits of customer self-service and e-Billing.

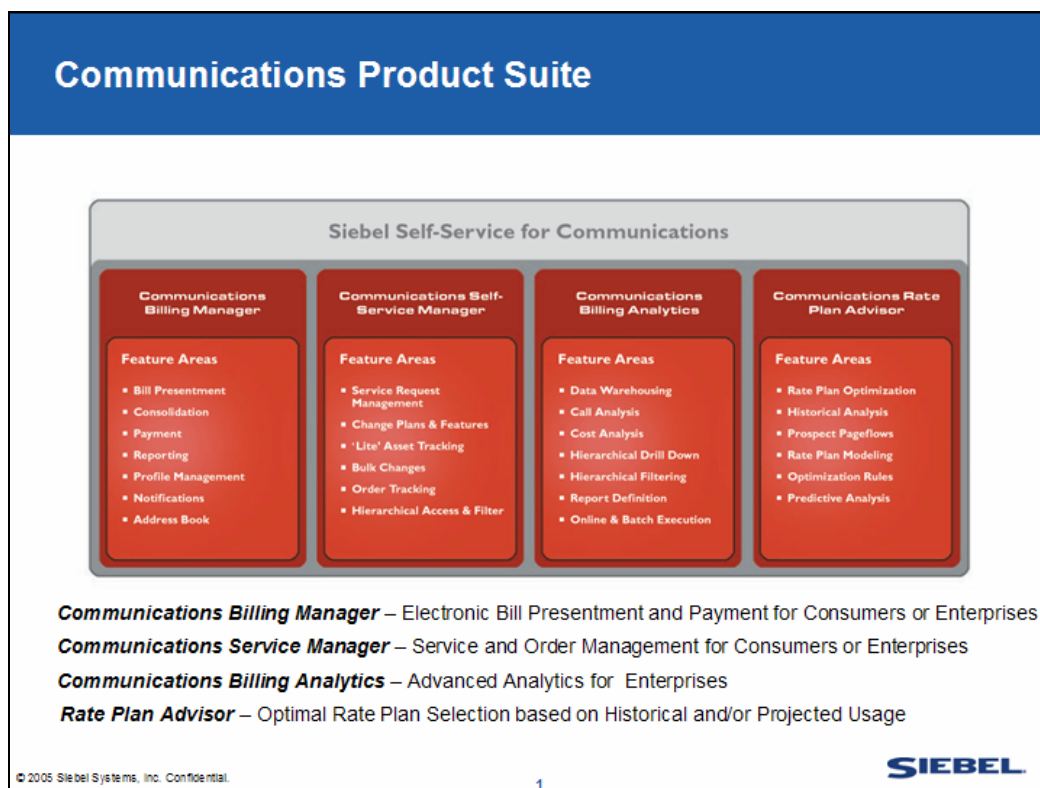
The suite includes a rich set of applications and functionality that give providers a complete multi-channel customer-self service capability. The suite includes packaged solutions for:

- e-Billing and Payment
- Service Management
- Reporting and Analytics
- Rate Plan Advice

Siebel solutions are packaged applications with sophisticated out-of-the-box capabilities. They can be tailored to meet specific customer requirements and business concerns, while establishing a solid platform for future business development.

The Siebel Self-Services Suite

Siebel Multi-Channel Customer Self-Service offerings include the following applications:



Billing Manager – Business and Consumer Editions

Siebel Billing Manager is a complete e-billing application for service providers that gives business and consumer customers valuable and convenient access to their bills along with the ability to easily make online payments.

Service Manager

Siebel Service Manager enables business and consumer customers of service providers to manage every aspect of their service relationship online. From a single convenient interface, customers can easily activate and manage subscriptions, order new products and services, and report and resolve problems. Business customers are able to complete these activities for individual employees, as well as company departments and divisions, across the entire organization.

Billing Analytics

Billing Analytics is a reporting solution for business customers that empowers both individual employees and business managers to analyze and understand their costs and usage by investigating and identifying trends and patterns across multiple views of their own unique organization.

Rate Plan Advisor

Siebel Rate Plan Advisor is a web-based application that recommends the ideal rate plan for service subscribers in real-time. Individual consumers as well as large businesses can analyze their actual historical voice/mobile/data usage, find the best-fit rate plans, and compare the features offered by those plans. With its intuitive wizard user interface, RPA quickly guides end-customers or customer service representatives through the entire analysis process. In addition, a service provider's customer care and marketing groups can also use RPA to identify pre-churn subscribers, simulate new rate plans, and run predictive analytics.

1.5 Conclusion

Siebel Billing Manager is the proven software platform for scalable, high-performance Self-Service and e-billing applications that enable organizations to manage account relationships with business and consumer customers online. Billing Manager application solutions:

- Reduce support and processing costs
- Improve operational effectiveness
- Increase customer satisfaction
- Enhance marketing effectiveness

Billing Manager's out-of-the-box consumer and business applications for data access, online account composition, analytics, one-to-one messaging, and business hierarchy dramatically decrease time to market for deploying Self-Service solutions. Developed on J2EE technology, the Billing Manager platform is flexible, extensible, and easy to manage, and is the proven platform for online consumer and business applications.

Billing Manager leverages available data from transactional systems to dramatically reduce the costs associated with producing, delivering, and paying account communications, while simultaneously transforming accounts into dynamic, interactive self-service and marketing tools.

Billing Manager goes far beyond bill presentment solutions providing packaged applications with many e-billing features, including online account and statement composition, payment, business logic, one-to-one marketing, hierarchy, customer service access, and service messaging with application management.

Billing Manager's EJB platform architecture has been proven scalable in production and through independent testing. This is a key differentiator in comparing packaged solutions.

Finally, because of Billing Manager's flexibility and methodology, time to market with a Siebel Self-Service Suite solution is extremely rapid, stable, and scalable resulting in a total cost of ownership lower than competing or home grown solutions.

2

Business Processes and Application Logic

2.1 Overview

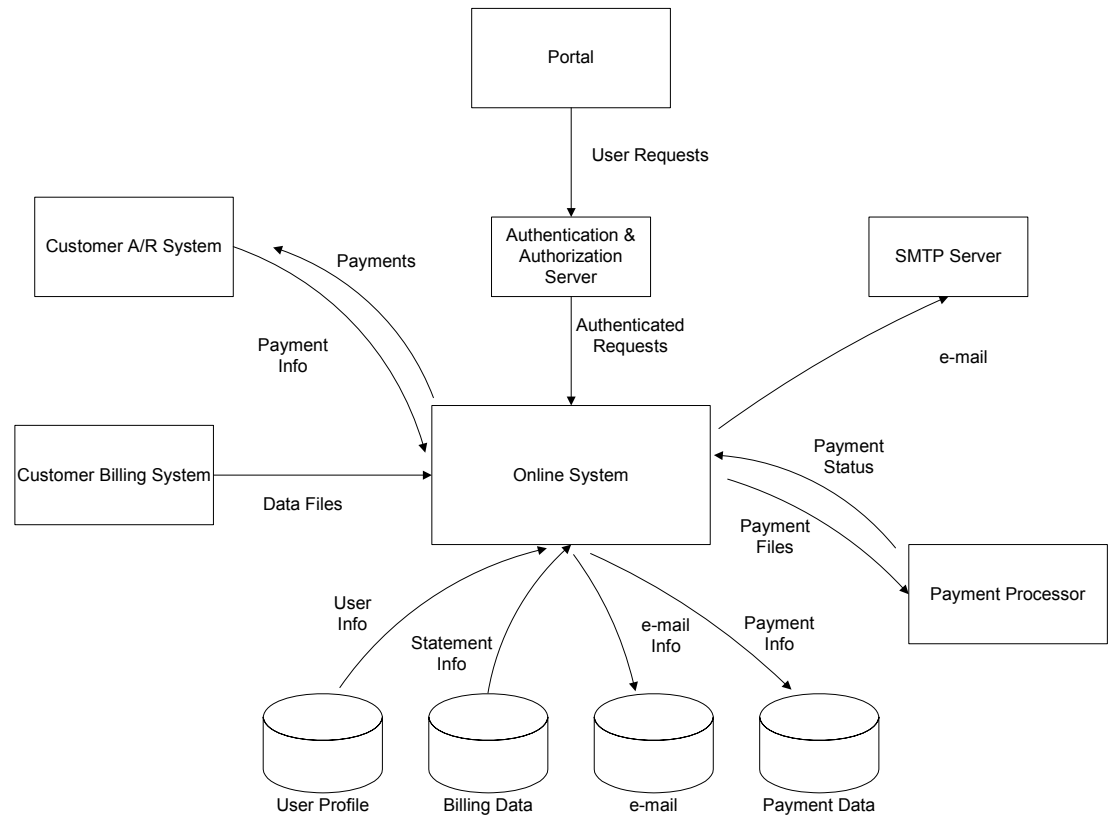
Billing Manager (Business Edition) provides online account management and customer self service for business customers.

The main features of Billing Manager B2B are:

- **Hierarchy** – Maintaining hierarchy structures and user access control.
- **Personal Profile** – Users are able to manage personal profiles and address books, user names and passwords, and notifications.
- **Company Profile** – Maintaining company profiles, company users, and the corporate address book.
- **Statements** – Customers can view summary and detailed statements on accounts, devices, and usage.
- **Reports** – Standard account, device and usage reporting functionality. Advanced reporting and report creation is available in a separate application (Siebel Billing Analytics).
- **Payments** – Companies can set up payment accounts for recurring and one-time payments, which historical payment activity for a configurable period of time.
- **CSR Management** – Siebel standalone application for CSR management. Includes searching accounts and invoking impersonate company user functionality.
- **System** – Siebel system management tasks required to administer Billing Manager.

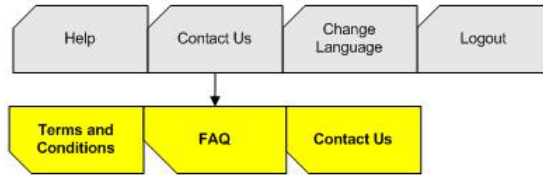
2.2 System Context Diagram

The following diagram shows the main Billing Manager application functions in the context of the entire system:

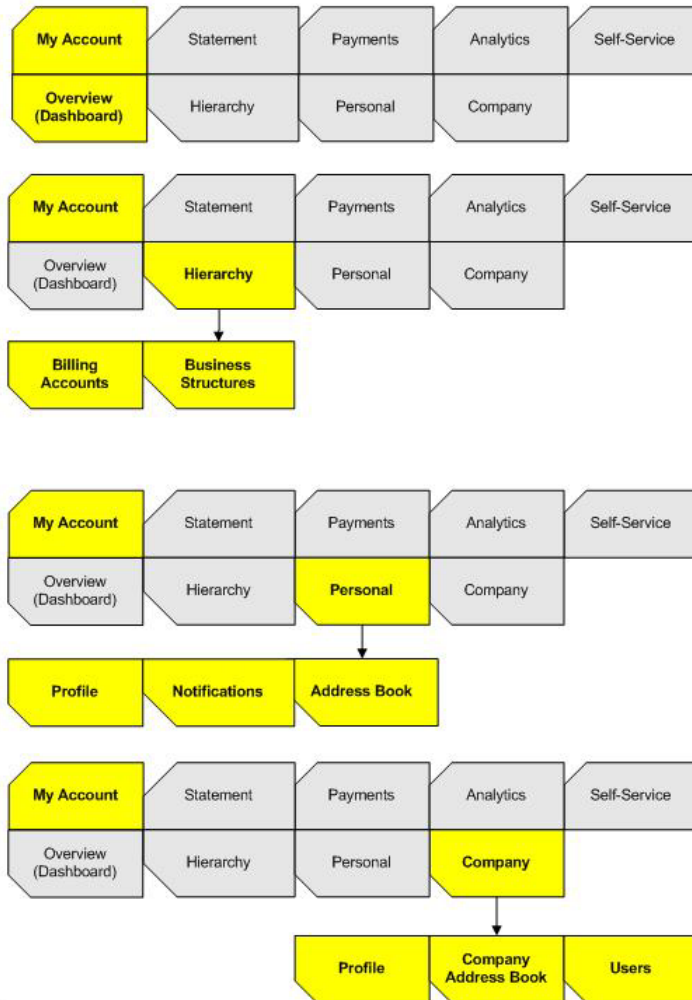


2.3 Menu Navigation

General Nav (Top Right Corner)



Main Nav

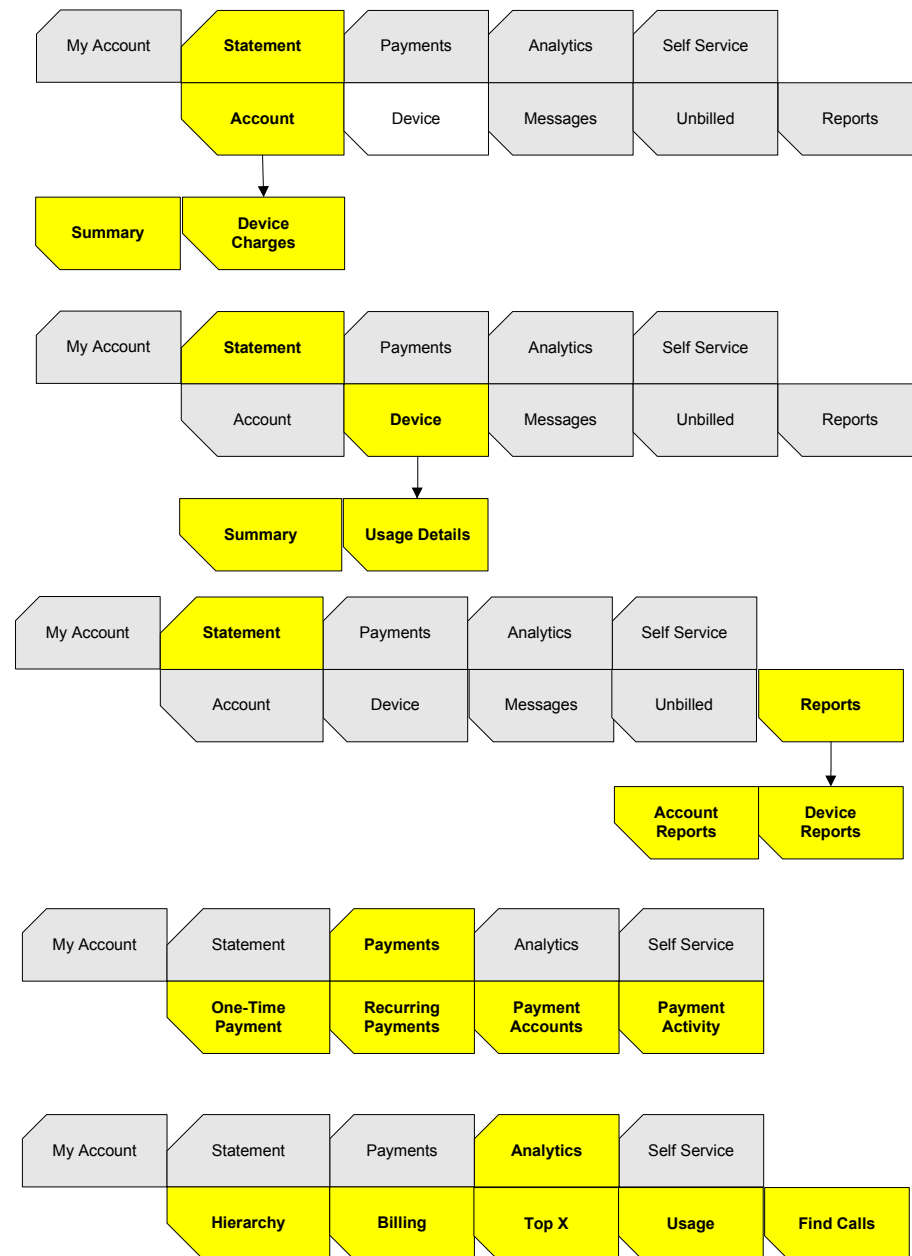


Key:

* Down arrow indicates 3rd level in the menu navigation

* Green Color indicates a placeholder for future products, but won't be initially implemented in the 4.5.1 Telco Suite foundation application

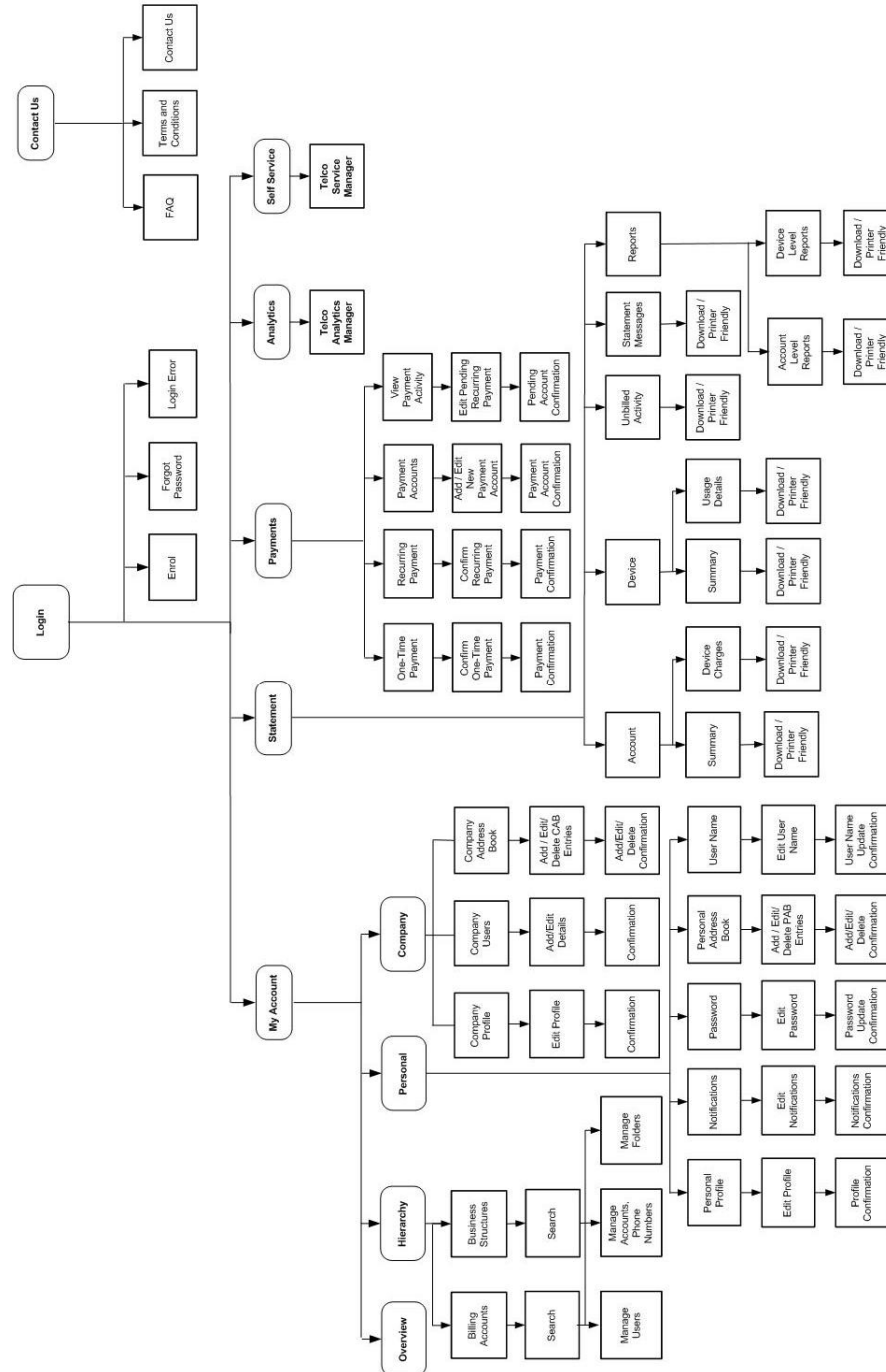
Main Nav (continued)



Key:

- * Down arrow indicates 3rd level in the menu navigation
- * Green Color indicates a placeholder for future products, but won't be initially implemented in the 4.5.1 Telco Suite foundation application

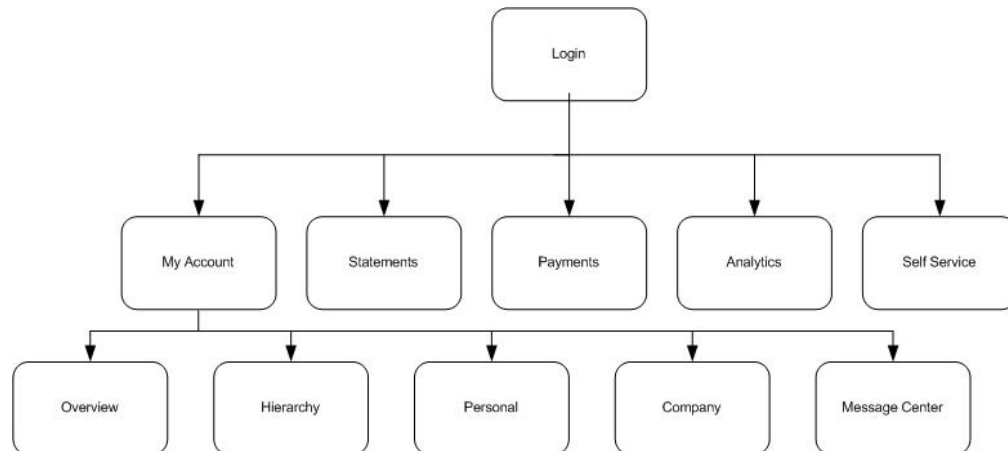
2.4 Site Map Overview



2.5 Site Map Detail

The Billing Manager uses a simple hierarchical navigation. The navigation flow diagrams show the top levels of navigation, which are implemented using a horizontal navigation bar with tabs for the top navigation level and sub-tabs for the next level of navigation, as well as the drilled-down functional areas.

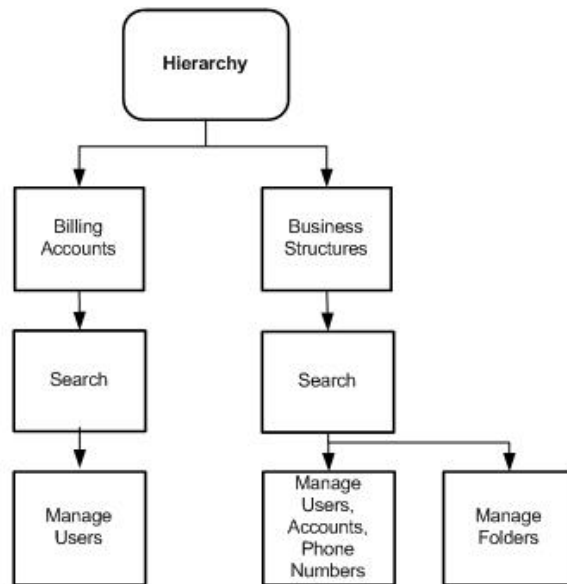
Top-Level



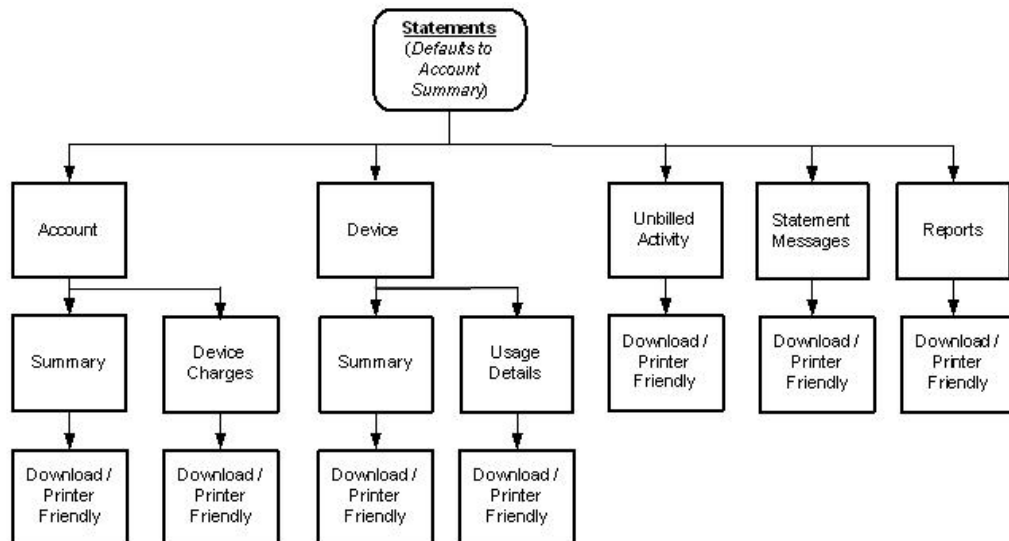
* Self-Service Manager sub-tabs not shown

The following diagrams show each functional area drill-down menus.

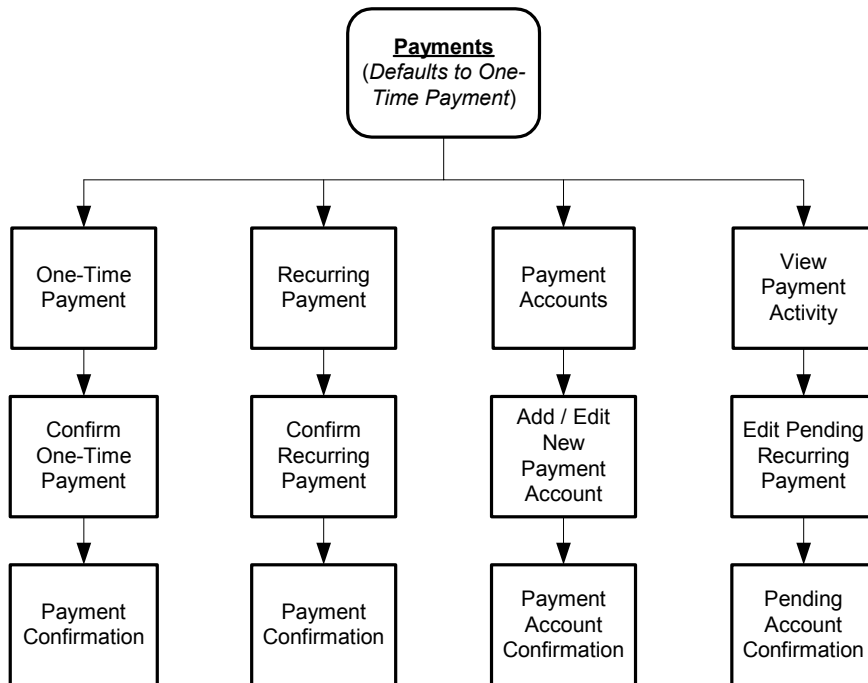
Hierarchy

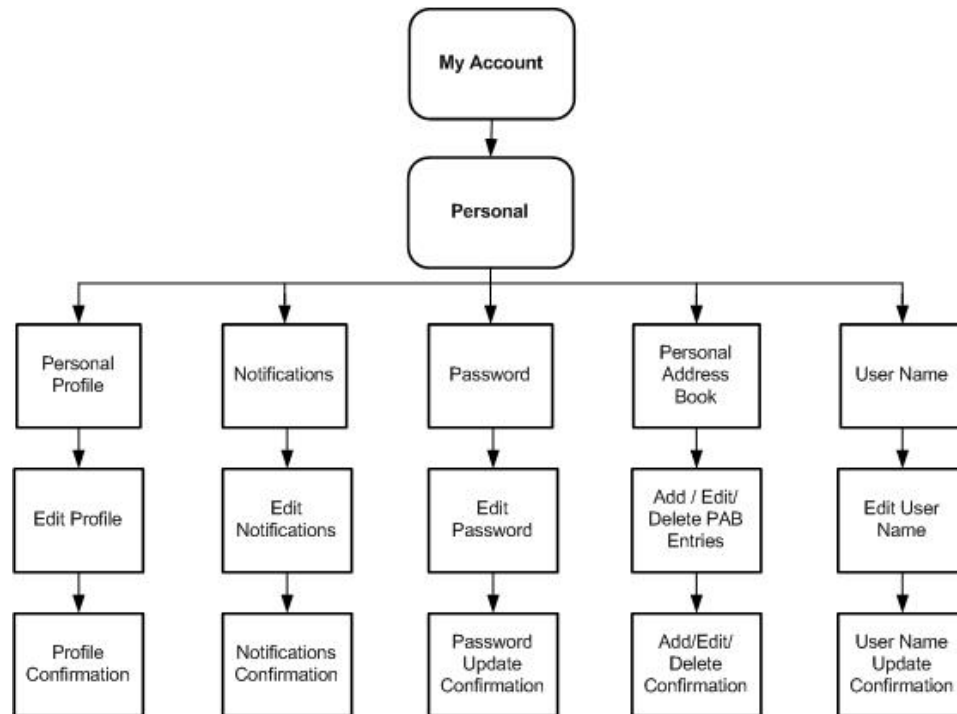


Statements

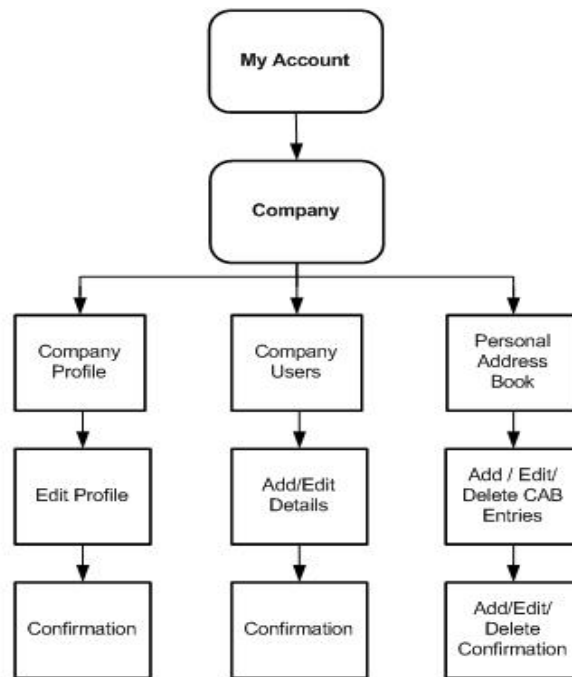


Payments



Personal Profile

Company Profile



CSR

The CSR site map is accessed from the separate CSR application for service provider internal users.

CSR Nav



3 Application Use Cases

3.1 About Application Use Cases

The following use cases describe the functional specification for the application. Each use case defines a set of activities that can be performed by an actor (e.g., User) to achieve a desired goal. It also describes the set of interactions between the actor and the system to be implemented.

A use case may describe interactions with external systems, which are systems that are outside the boundary of the application under development.

There may be many possible paths through a use case:

- **The Main Path** – Describes the successful completion of the use case without encountering any exceptional conditions. The main path describes the most common flow through the use case.
- **Alternate Paths** – Describe other related paths through the use case that are not considered to be a part of the common flow. These are labeled using numbers in square brackets; [A1], [A2], [A3]...

The use cases in this document form the basis for functional test cases, defining how the screens, as well as the system as a whole, should function from a user perspective.

3.2 Actors

ACTOR	ROLES	NOTES
Business User	Administrator	A business customer responsible for managing and administrating their organization and accounts.
Business User	View & Pay Only	A business customer using the B2B application to view their accounts and provide payment when necessary.
Business User	View Only	A business customer using the B2B application to view their accounts.
Internal User	CSR Administrator	A Customer Service Representative Administrator, who has all access privileges and permissions. Also, can manage other CSRs.
Internal User	CSR	A Customer Service Representative

3.3 Functionality Overview

The following table provides a complete list of the use cases that specify the functionality of the application:

Requirement Category	Description	Use Cases
General User Interface	General interface features used in the application.	Print Current View (0010) Back (0015) Context Change Module (0020) Right Hand Navigation (0030) Page Through Data in a Table (0040) Display Error Message (0050) Sort Data in a Table (0060) Search & Select Service Agreement (0070) Set Hierarchy Position (0080) Multiple DDN (1110) Change Language (1111)
Enrollment and Login	Enroll users and manage the login user session. The <i>Log In To Application</i> use case is a pre-condition for all customer use cases.	Login to Application (1000) Logout of Application (1100) Enroll Company Users (1200) Forgot Password (1400)
Billing Manager Overview	Business User views the Overview to view account and device information they have access to	Overview (1500)
Statement Presentment	Provide a place to perform functions related to presenting and accessing customer statements. Users can only view statement information for accounts and phone numbers to which they have been assigned access in a billing or non-billing hierarchy.	Account Summary (2000) Device Charges (2100) Device Summary (2200) Usage Details (2300) View Unbilled Activity (2400) View Statement Messages (2500) Print Invoice – PDF (2700) Download Account Data (2800) View Account Level Report (2900) View Device Level Report(2920)
Payment	Handle user payments.	Create One-Time Payment (3000) Manage Recurring Payments (3100)

Requirement Category	Description	Use Cases
		Manage Payment Accounts (3200) View Payment Activity (3300)
Hierarchy	Manage billing and non-billing hierarchies. Create non-billing hierarchies made up of folders which reflect companies' business structure and accounts and phone numbers assigned to folders. Assign users to specific nodes in billing and non-billing hierarchies in order to define to what accounts and phone numbers the user has access.	Manage Billing Accounts in Hierarchy (4000) Manage Billing Account Users in Hierarchy (4100) Manage Business Structures (4200) Manage Business Structure Users (4300) Manage Business Structure Folder Nodes (4400) Manage Business Structure Accounts (4500) Manage Business Structure Service Agreement (4600) Download Hierarchy (4700)
Personal Profile Management	Manage user account and profile information. Send e-mail notifications as appropriate to customer.	Manage Personal Profile (5000) Manage Password (5100) Manage Username (5200) Manage Personal Address Book (PAB) (5300) Manage Notifications (5400)
Company Profile	Manage company account and profile information.	Manage Corporate Address Book (5700) Manage Company Profile (5800) Manage Company Users (5900)
Customer Service (CSR)	The customer service use cases cover the functional requirements for allowing the service provider to effectively manage business users.	Search for Users (6200) Impersonate User (6900) Search Organization (6300) Manage Organization (6100) View Accounts for Organization (6500) Add Billing Accounts (6550) View Administrators for Organization (6600) Edit Administrator (6650) Manage Internal User (6700) Add Internal Users (6750) Modify Personal Profile (6850)
System Use Cases	System functions managed by an administrator.	Create Billing Accounts (7000) Process Recurring Payments (7100) System Email Notification (7500)

Requirement Category	Description	Use Cases
Help		Specific FAQs, Contact Us, Terms & Conditions

3.4 General User Interface

Some functions appear on many pages throughout the Billing Manager application.

The following use cases detail common functionality applied to one or more pages:

- Print Current View (0010)
- Back (0015)
- Context Change Module (0020)
- Right Hand Navigation (0030)
- Page Through Data in a Table (0040)
- Display Error Message (0050)
- Sort Data in a Table (0060)
- Search & Select Service Agreement (0070)
- Set Hierarchy Position (0080)
- Multiple DDN (1110)
- Change Language (1111)

Print Current View (0010)

Name:	Print Current View
Brief Description:	Business user prints the current view.
Actors:	Business user
	1. This use case begins when the User selects the Printer-Friendly operation on a given screen. 2. System opens a new window and displays a printer friendly version of the current view. [A1] 3. User clicks the Print link. 4. System displays a print dialog box to the User. 5. User selects the print settings in the print dialog and submits the print request. [A1] 6. User closes the printer friendly version and returns to the application. 7. Use case ends.
Alternate Paths:	[A1] User closes the printer friendly view and returns to the original view 1. System does not send anything to the printer and leaves the user viewing the application.

	[A2] User closes the print dialog 1. System does not send anything to the printer and leaves the user viewing the printer friendly page.
Standard Features:	1. The following screens will have the Print Friendly option: a. All Individual Reports b. Invoice Summary c. Call Details d. Payment Activity e. All Payment Confirmation Screens
Notes:	1. Printer Friendly pages will not have any of the navigation information. 2. The page that is sent to the printer will be in grayscale. 3. The information that is presently shown to the user will be printed.

Print View Example:

Service Detail for (508) 615-1516 as of Feb 24, 2004

>> Print

>> Close

Monthly Service Charges from 1/20/04- 2/19/04	
Item	Amount
Service Plan	Plan Talk & Text
Service Charges	29.99
Adjustments	-
Usage Charges	665.45
One Time Charges	-
Taxes & Surcharges	46.23
Total Charges	
741.67	

Available Service

Service Plan	Feature	Type	Whenever			Weekend
300 Text Messages	Free Txt Msg	Messages	300			-
Plan Talk & Text	Free Minutes	Minutes	200			-
	Use Them Or Lose Them	Minutes	-			Unlimited

Used Service

Service Plan	Type	Whenever	Peak	Offpeak	Weekend
Included Plan Minutes	Minutes	-	839	145	-
Telco to Telco	Minutes	-	20	-	-

Back (0015)

Name:	Back
Brief Description:	Describes the navigational experience when a back action is selected. Back buttons are only present on select screens. They enable the user to return to the previous screen to make changes and then proceed.

Main Path:	1. User selects a <i>back</i> action. 2. System returns User to the previous page [E1] 3. Data previously displayed on the page is displayed. 4. User optionally performs any function available on the screen 5. Use case ends.
Alternate Paths:	None
Exception Paths:	[E1] User encounters a system error: 1. System invokes Error Message use case.
Business Rules:	None
Notes:	The browser back action is not supported in the application

Context Change Module (0020)

Name:	Context Change Module
Brief Description:	The right navigation is dynamically updated with an Account selection field and date field with an optional Phone Number selection field based on the user's navigation in certain sections of the application.
Actor:	Any user
Main Path:	1. This use case begins when a user views a page that incorporates selecting of an account number and/or phone number and date. 2. System displays Account selection field, with Phone Number selection field dependent upon phone number details page being viewed. 3. User can select an account, date and/or a phone number in the right navigation that they have been assigned to in the hierarchy. <i>Note:</i> typing in the drop-down field will move the cursor to the first occurrence of the typed text. 4. User selects Display action. 5. System returns page results based on users selection criteria (Account or Phone number) 6. Selected account or phone number is persisted throughout the session or until it is next changed.
Alternate Paths:	[A1] Exceed {Dropdown Threshold} for number of accounts If the {Dropdown Threshold} is exceeded for this user, the CCM module does not contain the account drop down boxes. Instead, the current account context is displayed with a hyperlink to change the setting. <i>Rationale:</i> Prevent the user from the awkwardness of scrolling through a very long drop down list for large enterprise. Allow the user to more easily filter and gain access to other elements.

	1. User clicks the “change account” action 2. The Set Hierarchy Position screen is displayed 3. The user navigates a billing hierarchy or business structure to a particular node. The user can select: a. Folder This option changes the context of what is displayed in the CCM dropdown field. b. Account If the user was on an account level statement or report screen the user can not select a service agreement c. Service Agreement If the user was at the service agreement (device) level statement or report, the user can select an account or a service agreement. 4. User clicks on the “set position” action 5. Hierarchy Position context setting is updated in the top right corner of the screen. 6. The user is returned to the statement or report screen from which the user came. If a _____ is selected a. Folder Only the accounts within the selected folder are displayed in the CCM dropdown field. If the {dropdown threshold} is still exceeded, the user needs to perform the set position action again. <u>Note:</u> By selecting business structure folder, the user can narrow the scope of available account statements and service agreement report/statement detail to those contained in a user business structure node. b. Account The selected account is displayed in the CCM module and the relevant statement or report is displayed. c. Service Agreement The selected service agreement is displayed in a service agreement dropdown field (if the screen contains one). The account dropdown contains the account in which the service agreement is associated in the billing hierarchy (whether the service agreement was selected in a billing hierarchy or business structure). [A2] Exceed {Dropdown Threshold} for number of Service Agreements If the number of service agreements for which the user has access for the selected account exceeds the {Dropdown Threshold}, the service agreement drop-down box does not display. Instead the current service agreement is displayed in the same location with a hyper link to “change service agreement” 1. User clicks the “change service agreement” action 2. The set hierarchy position screen is displayed
--	---

	3. By either navigating the left pane or selecting an item from the right pane, the user selects a a. Service agreement or a b. Folder 4. User clicks on the “set position” action 5. Hierarchy Position context setting is updated in the top right corner of the screen. 6. The user is returned to the statement or report screen from which the user came. If a _____ is selected a. Folder Only the service agreements within the selected folder are displayed in the CCM dropdown field. If the {dropdown threshold} is still exceeded, the user needs to perform the set position action again. <u>Note:</u> By selecting business structure folder, the user can narrow the scope of available service agreement report/statement detail to those contained in a user business structure node.
Standard Features:	None
Business Rules:	System populates the dropdown for the date and phone number field based on the account selection. System uses the first phone number in the billing account to appear as a default selection value.
Configuration Points	The total items in the dropdown list for accounts and service agreements are configurable. The default value is 100.
Notes:	1. Context Changing Module is configured based on user navigation. 2. Please see Side Navigation Use Case for additional information.

User selects an account and date:

CellTec												
Business Structures: 1 Billing Accounts: 24 Wireless Numbers: 76												
User Information												
Username: agreeen Edit												
Password: ***** Edit												
Role: Administrator												
Highest Wireless Users												
<table><tr><th>Wireless No.</th><th>Last Bal.</th></tr><tr><td>545-803-9028</td><td>\$364.12</td></tr><tr><td>847-349-4100</td><td>\$245.90</td></tr><tr><td>447-483-9312</td><td>\$196.91</td></tr><tr><td>451-378-3743</td><td>\$159.82</td></tr><tr><td>397-894-2110</td><td>\$144.32</td></tr></table>	Wireless No.	Last Bal.	545-803-9028	\$364.12	847-349-4100	\$245.90	447-483-9312	\$196.91	451-378-3743	\$159.82	397-894-2110	\$144.32
Wireless No.	Last Bal.											
545-803-9028	\$364.12											
847-349-4100	\$245.90											
447-483-9312	\$196.91											
451-378-3743	\$159.82											
397-894-2110	\$144.32											
Quick Links												
→ View Last Statement												
→ FAQs												

Context Change Module:

My Account
Statements
Payments
Self-Service

Account
Device
Messages
Unbilled
Reports

- Display limit threshold exceeded. Please use the link to the right to change your hierarchy position or select an account.
- Display limit threshold exceeded. Please use the link below to change the selected service agreement.

[Download](#)
[Printer Friendly](#)

Device Summary

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: N/A

Account Number:
[Select Account](#)

Statement Date:
05/04/04

[DISPLAY](#)

Summary
Usage Details

Phone Number: [Select Service Agreement](#)

Summary for 397-894-2102

Total Charges For: 397-894-2102 **\$56.29**

Rate Plan	Period	Prorated Charge	Monthly Charge	Total Charge
CellTec 700	05/04-06/03		49.99	49.99
Includes:				
CALL WAITING				
CALL HOLD				
CLID PER CALL BLOCK				

Usage Charge Details

Total Usage Charges **\$0.00**

Optional Services

	Period	Prorated Charge	Monthly Charge	Total Charge
BASIC VOICEMAIL	05/04-06/03		0.00	0.00
CALL FORWARDING	05/04-06/03		0.00	0.00
ROAMING \$.69/MIN	05/04-06/03		0.00	0.00
CONNXXN CHARGE MAY APPLY	05/04-06/03		0.00	0.00
UNLIMITED MOBILE TO MOBILE	05/04-06/03		0.00	0.00
VOICE MAIL ALERT	05/04-06/03		0.00	0.00
CALLER ID N/C	05/04-06/03		0.00	0.00
NATIONWIDE TOLL FREE	05/04-06/03		0.00	0.00
DETAILED BILLING N/C	05/04-06/03		0.00	0.00
LONG DISTANCE ACCESS	05/04-06/03		0.00	0.00
NETWORK ACCESS	05/04-06/03		0.00	0.00
NUMERIC PAGING	05/04-06/03		0.00	0.00

Credits, Adjustments & Other Charges

FED UNIVERSAL SVC CHARGE	1.27
CONNECTION CHARGE	1.24
911 MONTHLY	0.58
REGULATORY COST RECOVERY FEE	0.56
TELCOM RELAY SERVICE SURCHARGE	0.00
Total Other Charges	\$3.65

Taxes

STATE SALES TAX	2.65
Total Taxes	\$2.65

CellTec

Business Structures: 3
Billing Accounts: 16
Wireless Numbers: 20

User Information

Username
agreen [Edit](#)

Password
***** [Edit](#)

Role
Administrator

Highest Wireless Users

Wireless No.	Last Bal.
397-894-2102	\$56.29
397-894-2105	\$56.29
397-894-2104	\$45.54
397-894-2114	\$44.21
397-894-2103	\$40.98

Quick Links

[View Last Statement](#)

[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Right Hand Navigation (0030)

Name:	Right Hand Navigation
Brief Description:	Each screen in the application will display a right hand navigation bar with relevant information to the user
Actor:	System
Main Path:	1. This use case begins when a user views a page of the application 2. System Displays up to 5 sections a. Context Change Module – [UC 0020] b. Company Information – company Name, Number of Accounts and Number of MTNs that the logged in user has access to. c. User Information – User Name (with a link to update), password (with a link to update) , and User Role d. Highest Service Agreements – Top 5 service agreements and the most recent statement charges. This will show the top 5 devices across all accounts to which the user has access. <i>Note:</i> This component will be suppressed if the number of service agreements to which the user has access exceeds the configured {large enterprise user} threshold value (as noted in the Large Hierarchy Configuration use case). . e. Information section – Static text to be determined f. Quick Links section – Initial links are view statement, and FAQ's 3. Use case ends.
Alternate Paths:	None
Standard Features:	None
Notes:	None

Navigation Bar:

Account Number: 61362310 												
Statement Date: 05/04/04 												
DISPLAY												
CellTec Business Structures: 1 Billing Accounts: 24 Wireless Numbers: 76												
User Information Username: agreeen Edit Password: ***** Edit Role: Administrator												
Highest Wireless Users <table><tr><th>Wireless No.</th><th>Last Bal.</th></tr><tr><td>545-803-9028</td><td>\$364.12</td></tr><tr><td>847-349-4100</td><td>\$245.90</td></tr><tr><td>447-483-9312</td><td>\$196.91</td></tr><tr><td>451-378-3743</td><td>\$159.82</td></tr><tr><td>397-894-2110</td><td>\$144.32</td></tr></table>	Wireless No.	Last Bal.	545-803-9028	\$364.12	847-349-4100	\$245.90	447-483-9312	\$196.91	451-378-3743	\$159.82	397-894-2110	\$144.32
Wireless No.	Last Bal.											
545-803-9028	\$364.12											
847-349-4100	\$245.90											
447-483-9312	\$196.91											
451-378-3743	\$159.82											
397-894-2110	\$144.32											
Quick Links → View Last Statement → FAQs												

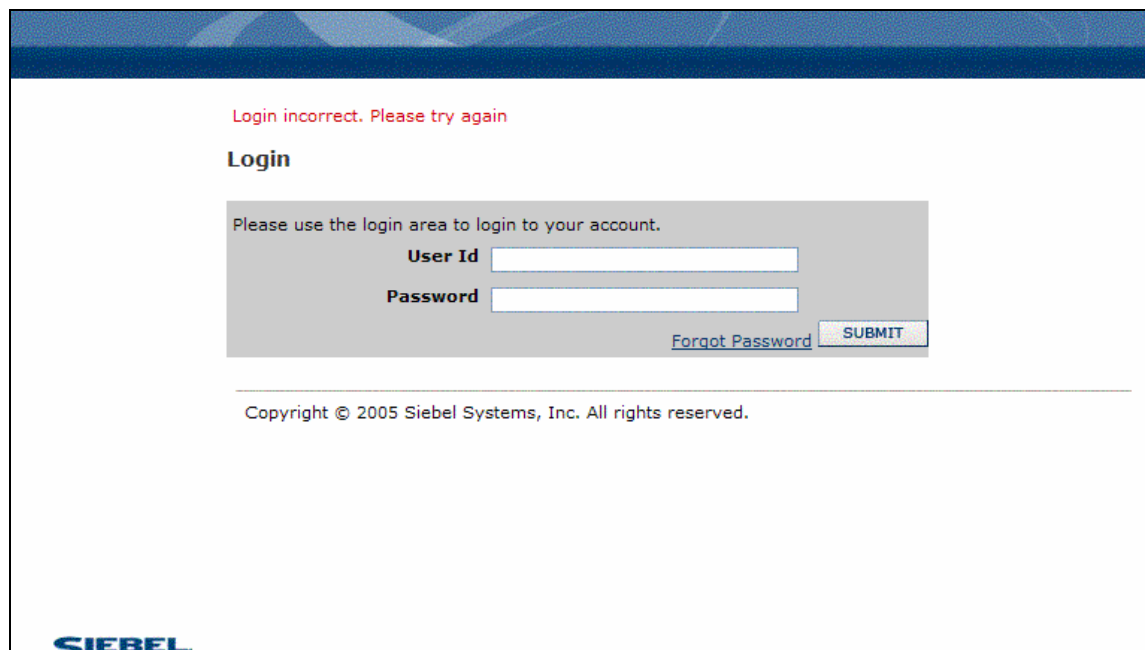
Page through data in a table (0040)

Name:	Page through data in a table
Brief Description:	Large amounts of data are divided into page sets and each page set is presented on a single view.
Main Path:	1. User selects single forward arrow. 2. System returns the next page of data. 3. User selects single backward arrow. 4. System returns the previous page of data. 5. User selects double forward arrow. 6. System returns the last page of data. 7. User selects double backward arrow. 8. System returns the first page of data. 9. Use case ends.
Alternate Paths:	[A1] User enters a number in the input box 1. System returns the data on the inputted page number. [A2] Select Items from Multiple Pages 1. If the data displayed in a screen that is being paged contains check-boxes, the selection of check-boxes should persist as the user moves back and forth between pages
Exception Paths:	[E1] User encounters a system error: 1. System invokes Error Message use case (UC 0050)
Business Rules:	[B1] For data set that is divided into two or more pages, page must display number of the current page and total number of pages, e.g., page 3 of 5. If the data set results to one page, page numbering is suppressed. [B2] Report Total line is always displayed at the bottom of the table on each page and is the total for the entire report (not the displayed page). [B3] The number of lines displayed on each page is configurable and will be set initially to 40. [B4] If the user enters a number greater than the number of pages in the report output the report displays the last page of the report.
Notes:	None

Display Error Message (0050)

Name:	Display Error Message
Brief Description:	System redisplay page with an error message.
Main Path:	1. User performs an action that cannot be completed. 2. System determines required error actions. 3. System reads error message text from a configuration file. 4. System re-displays page with error message (displayed in Red) below navigational bars. 5. Use case ends.
Alternate Paths:	[A2] None
Exception Paths:	None
Business Rules:	None
Notes:	None

Display Error Message Screen:



The screenshot shows a web browser window with a blue header. Below the header, a red error message reads: "Login incorrect. Please try again". Underneath this, the word "Login" is displayed. A gray login box contains the text "Please use the login area to login to your account." followed by two input fields labeled "User Id" and "Password". To the right of the "Password" field is a "SUBMIT" button. Below the login box is a link that says "Forgot Password". At the bottom of the page, there is a copyright notice: "Copyright © 2005 Siebel Systems, Inc. All rights reserved." and the Siebel logo in the bottom left corner.

Sort Data in a Table (0060)

Name:	Sort data in a table
Brief Description:	User sorts the data in a specific table.
Main Path:	1. User selects a sorting link (a column header that supports sorting). 2. System sorts the data in the table by the selected column in ascending order. 3. User selects the same sorting link. 4. System sorts the data in the table by the selected column in descending order. 5. User selects a different sorting link. 6. System sorts the data in the table by the newly selected column in ascending order. 7. Use case ends.
Alternate Paths:	None
Exception Paths:	[E1] User encounters a system error: 1. System invokes Error Message use case.
Business Rules:	[B1] If the data set is large causing paging to be enabled, the sort will occur over the entire data set. [B2] When a column on the second page or beyond of a report with multiple pages is sorted, the sorted report returned will always be on the first page, regardless of what page the sorting was invoked on by the user.
Notes:	All tables that display details will have ability to sort on column headings.

Search & Select Service Agreement (0070)

Name:	Search & Select Service Agreement
Brief Description:	This generalized use case describes how the list of service agreements are displayed for selection at the beginning of all CSM use case and how the user can filter this list and select one or more service agreements. For all SSM use cases that have a workflow, this is step/screen 1.
Actor:	Administrator, CSR
Main Path:	1. Filtered service agreements On the first screen of each CSM use case, a list of service agreements is listed in order to enable the user to select one or more service agreement on which to perform a service transaction. a. Hierarchy: If the user previously selected a hierarchy position from the hierarchy screen, then only service agreement's under that selected hierarchy position will be displayed. b. Each CSM use case can utilize additional filters, such as only showing service agreements of status suspend for the "Resume Service" use case. 2. Select Search By Category User optionally selects a search category from the "Search By" drop down field and selects the Go action. a. Phone Number b. Subscriber Last Name c. Rate Plan Group d. Device Type e. Status 3. Search Value Field Refreshed System refreshes the page and displays "search value" field. This field should appear as either a drop down or text field. 4. Enter Search Value User selects or enters "search value" and selects search action. a. Phone Number [text field] b. Subscriber Last Name [text field] c. Rate Plan Group [dropdown field] This dropdown works a little differently than the other dropdowns because there can be more than one value dropdown box to further narrow the search criteria. ▪ User selects a rate plan group from the dropdown field ▪ User either: ○ Accepts the default "Rate Plan Group" search by criteria option and selects search to display all service agreements of the selected rate plan group. ○ Selects the "Individual Rate Plan" search by criteria option and selects search to display a drop down box containing only the rate plan names from the previously selected rate plan group. User selects a specific rate plan name and search to display all service agreements of the selected rate plan name. d. Device Type [dropdown] e. Status [dropdown]

	5. Display service agreement's All service agreement's matching the previous filter criteria (main path step one) and service agreement's whose search value contains the text entered (or selected) in the "search by value" field are displayed. <i>Note:</i> For text fields, the match logic is "starts with" or "exact match". Drop down fields use "exact match" logic. Columns displayed include: a. Subscriber Name [primary sort] b. Phone Number c. Rate Plan d. Device e. Status 6. User selects a service agreement and selects one (or more for bulk) service agreement(s) and the continue action. 7. Use case ends.
Alternate Paths:	[A1] Visually differentiate service agreement's with outstanding transactions If any service agreements have any of the following service requests with an incomplete status (any status other than successfully completed or failed), the service agreements will be visually differentiated (grey) and will not have active check boxes to prevent the user from being able to select them. ▪ Add/Delete Features ▪ Change Device ▪ Change Phone Number ▪ Port Number ▪ Activate service ▪ Suspend service ▪ Resume Service ▪ Deactivate Service [A4] Visually differentiated old service agreements If any of the service agreement's have been successfully changed to new service agreement's, these old service agreement records will be visually differentiated (grey) and will not have active check boxes to prevent the user from being able to select them. [A5] Bulk selection from multiple pages Rationale: The user needs to be able to select service agreements from multiple pages and at any time see a list of those service agreements selected. The screen flow is identical to individual selection described in the main path except: 1. User selects more than one service agreement from more than one page. 2. At any point the user selects the continue button in step 2 to see the selected service agreements. 3. User can either a. Select the remove action to remove any of the selected service agreements. This action should have the same impact as going back to the first screen, finding the service

	agreement on one of the pages, un-checking it, and selecting continue to return to step 2. b. Choose the back action to return to step 1 and continue selecting/unselecting service agreements. When the user returns to step 1, all the previously selected service agreements should still be displayed. c. Perform the actions required to complete step 2. [A6] Remove one of multiple service agreements Rationale: When viewing the list of selected service agreements from step 2, the user should be able to easily remove a record from the list without having to return the first selection screen and page through multiple screens to find the service agreement. When viewing the list of selected service agreements on the second screen, the user selects the remove action and accepts the confirmation to remove the service agreement. If no service agreements remain selected, the user is returned to step 1 to selected service agreements. [A7] Remove all service agreements Rationale: Enable the user to remove all selected service agreements with one action. This alternate path is implemented by selecting the cancel action which returns the user to step 1 with no service agreements selected. [A8] Sort displayed service agreements Rationale: Enable the user to view service agreements with a common attribute different than the search by category. By clicking a column label, the user alternates between ascending and descending sorts. [A10] User continues without selecting a service agreement. System displays an error message and prompts to select a service agreement to perform any Self-Service action. [A11] Select all service agreements for the search. Rationale: Enables the user to select all service agreements with one action.
Exception Paths:	[E1] System displays “Search result not found” message. 1. System prompts to select valid search criteria.
Configuration Points:	Service agreements displayed in the selection screen is based on the users default hierarchy scope and the filter (configurable) for each Self-Service transaction.
Business Rules:	[B1] System makes an external call to the database, retrieves user details and displays ten records per page (or whatever number is configured for this use case). System also provides ability to sort the search results based column header labels.

	[B2] System persists the user's hierarchy scope throughout the session.
Notes:	System supports paging function. The number of user records displayed on each page is initially set to 10. System enables and displays paging icon if the search result has user records greater than 10.

Select Service Agreement Screen:



Select Service Agreement

Company: CellTec
User: Anne Green

Hierarchy: Billing Accounts
Position: [Billing Accounts](#)

Search for and select service agreements to change.

Rate Plan Features Change Number Change Device Port Number

Search Criteria

Search By:

[Multiple Selections](#)

Page 1 of 7

Name	Phone Number	Rate Plan	Device	Status
☐ Ashcroft, Mary	847-349-4115	NATDIRECT700	BLACKBERRY7280	Active
☐ Baker, Amy	847-349-4118	INTERNATIONAL500	NOKIA5800	Active
☐ Baker, Amy	847-349-4101	INTERNATIONAL400	MOTOROLA80	Active
☐ Baker, Carren	397-894-2101	INTERNATIONAL600	MOTOROLA80	Active
☒ Baker, Jim	683-327-3947	INTERNATIONAL700	BLACKBERRY7280	Active
☒ Baker, John	847-349-4113	NATDIRECT600	BLACKBERRY7280	Active
☒ Baker, Ted	474-847-4733	INTERNATIONAL600	BLACKBERRY7280	Active
☒ Baker, William	397-894-2107	INTERNATIONAL600	MOTOROLA80	Active
☒ Banks, Tyron	397-894-2114	NATDIRECT250	MOTOROLA80	Active
☒ Brown, Amy	559-384-7384	NATDIRECT450	NOKIA5800	Active

Page 1 of 7

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Set Hierarchy Position (0080)

Name:	Set Hierarchy Position
Brief Description:	This use case describes the requirements to navigate and search the billing hierarchy or business structure and ultimately select a folder, account or service agreement to be viewed in a statement or report screen. <i>Rationale:</i> Selecting this position sets the scope of what accounts and/or service agreements are displayed for selection during eBill Presentment and reporting. A user can also get to this screen if the display thresholds are exceeded for the number of accounts or service agreements that can be practically displayed in the CCM (change control module) drop-down fields.
Actors:	Admin, Manager

Entry Points	1. CCM (Context Changing Module) 2. Hierarchy and hierarchy position hyperlink on the top right of the any of the pages within the Self-Service application.
Main Path:	1. Initial Display The billing hierarchy is displayed (in accordance to the Left Pane Limit threshold as noted in 4.5.2.). If the hierarchy position has been already selected within this session, that node is displayed as selected. If none has been selected, then the first level of the billing hierarchy is expanded. 2. Expand Tree a. User expands nodes in order to navigate down into different branches of the tree. The hierarchy will be rendered with the Left Pane Limit business rule as noted in 4.5.2. b. When expanding folders in left pane, subfolders, accounts and service agreements will be shown. c. User selects a new position in the hierarchy. [A2] d. System displays the selected node details in the node properties window. 3. Set Position a. User continues to navigate the tree, selects a folder, account, or service agreement and selects Set Position action. [B2] b. System persists this hierarchy name and position throughout the user's session, displaying the new selection at the top of every screen. The implication of this persistence is that when the user views their billing data the same hierarchy filter will be applied to the invoice content. 4. Return to Statement or Report Screen After setting the position, the user is returned to the screen the user was on before initiating this use case (likely a statement or report screen)
Alternate Paths:	[A1] User selects Cancel action: 1. User is returned to the screen the user was on before initiating this use case. The hierarchy position context is not changed. [A2] Search This functionality should be similar to what is deployed in the manage hierarchy screens. 1. User selects search criteria (account, phone number), enters search value, and selects search action. 2. Search results are displayed 3. User selects a folder, an account, or a phone number and selects the "set position" action. 4. System performs remaining steps according to the main path

	[A3] Right Pane Threshold Exceeded If the user selects a folder in the left pane and the {Display List Threshold} in the right pane is exceeded, only the threshold limit is displayed. To avoid confusion the following warning message is displayed in red at the bottom of the right pane at all times. “Threshold exceeded. X (of y) records displayed” <i>Note:</i> This warning message is generic and the same business logic and message can be applied to all business structure right panes (folders, accounts, service agreements).
Exception Paths:	[E2] User encounters a system error: 1. System invokes Error Message use case.
Business Rules:	1. Any unassigned accounts or contracts are attached on the top of the hierarchy. 2. Hierarchy Access Control: Users can only view hierarchies to which they have been assigned and positions at or below the positions to which they have been assigned.
Notes:	If an Admin User has not set a hierarchy position when they first view their eBilling data they will be presented with the first account to which they have access. The CCM module will provide the user with a link to Set Hierarchy Position for them to alter the account(s) they are viewing.

Manage Billing Accounts Screen:

Manage Billing Accounts

Company: Company-3k
User: AminUser SamuelWilson

Hierarchy: Billing Accounts
Position: [Billing Accounts](#)

Billing Accounts **Business Structures**

Hierarchy

Billing Accounts

Filter: [Wireless Number](#)
Text: **SEARCH**

Billing Accounts

- [80000000](#)
- [80000001](#)
- [80000002](#)
- [80000003](#)
- [80000004](#)
- [80000005](#)
- [80000006](#)
- [80000007](#)
- [80000008](#)
- [80000009](#)
- [80000010](#)
- [80000011](#)
- [80000012](#)
- [80000013](#)
- [80000014](#)

Billing Accounts

Details **Folders** **Accounts** **Wireless Numbers**

Name:
Billing Accounts

Location:

Description:

Contents:
3 [Folders](#)
1657 [Accounts](#)
0 [Wireless Numbers](#)

SET POSITION

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Billing Hierarchy – Set Position Screen:

The screenshot displays the 'Manage Billing Accounts' interface. At the top, a navigation bar includes tabs for 'My Account', 'Statement', 'Payments', and 'Self-Service'. Below this, a secondary bar shows 'Overview', 'Hierarchy' (selected), 'Manage Accounts', 'Manage Service', and 'Order Status'. The main header area shows 'Manage Billing Accounts' with user information: 'Company: Company-3k', 'User: AminUser SamuelWilson', 'Hierarchy: Billing Accounts', and 'Position: Billing Accounts'.

The interface is divided into two main sections. The left section, titled 'Billing Accounts', features a 'Filter' dropdown set to 'Wireless Number' and a 'Text' input field with a 'SEARCH' button. Below these is a tree view of 'Billing Accounts' showing a hierarchy of folders, each labeled with a numeric ID (e.g., 80000000, 80000001, etc.). The right section, also titled 'Billing Accounts', has tabs for 'Details', 'Folders', 'Accounts', and 'Wireless Numbers'. The 'Wireless Numbers' tab is active, showing a list of numeric IDs (80000000 through 80000019) and a 'REFRESH' button. A pagination indicator at the bottom of this list shows 'page 1 of 100'. Below the list, it states '100 (of 419) records returned.'

The screenshot displays the 'Manage Business Structure - Details' page in a Siebel application. The top navigation bar includes tabs for 'My Account', 'Statement', 'Payments', and 'Self-Service'. Below this, a secondary bar shows 'Overview', 'Hierarchy', 'Manage Accounts', 'Manage Service', and 'Order Status'. The main header area identifies the user as 'Company: Company-3k' and 'User: AminUser SamuelWilson', with a 'Hierarchy: Billing Accounts' and 'Position: Billing Accounts'.

The left sidebar contains a 'Business Structures' section with a filter set to 'Wireless Number' and a search bar. Below the search bar is a tree view showing a hierarchy starting with 'Subbu' and three sub-items: '80000000', '80000001', and '80000002'. A 'GO' button is next to the 'Subbu' selection.

The main content area is titled 'Subbu' and has tabs for 'Details', 'Folders', 'Accounts', and 'Wireless Numbers'. The 'Details' tab is active, showing the following information:

- Name:** Subbu
- Location:**
- Description:**
- Contents:**
 - 3 [Folders](#)
 - 1657 [Accounts](#)
 - 0 [Wireless Numbers](#)

A 'SET POSITION' button is located at the bottom right of the details panel.

At the bottom of the page, a copyright notice reads: 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.'

Business Structure – Set Position Screen:

Manage Business Structure - Details

Company: Company-3k
User: AminUser SamuelWilson
Hierarchy: Billing Accounts
Position: [Billing Accounts](#)

Billing Accounts **Business Structures**

Hierarchy

Business Structures

Filter:

Text:

Subbu

Details Folders Accounts **Wireless Numbers**

View:
 Filter:
 Text:

page 1 of 100

80000003
 80000004
 80000005
 80000009
 80000010
 80000011
 80000012
 80000013
 80000014
 80000015
 80000016
 80000017
 80000018
 80000019
 80000020
 80000021
 80000022
 80000023

100 (of 419) records returned.

Multiple DDN (1110)

Name:	Multiple DDN support
Brief Description:	This generalized use case describes how a Self-Service implementation can utilize billing data that comes from different file feeds of different format. By enhancing the capability for any UI screen to reference an abstract DDN which is translated into a realized DDN based on some lookup specific to the client implementation, a single view can be used to display similar data from different feeds (different billing systems) or even to display different data from different feeds. Any screen that utilizes a DDN will be impacted by this new approach to referencing DDNs. The following screens can utilize this new functionality to pull data from different files with different formats. - All Statement Screens - All Report Screens

	iii. One-Time Payment Screens If more than one account is listed on this screen, multiple DDN functionality can be used to pull the amount due for each account from different files with different formats and DDN's. iv. Payment Jobs All the payment jobs that need to access accounts' due dates and amounts due have the ability to reference an abstract DDN which is translated into a realized DDN.
Actor:	System
Main Path:	There are two mutually exclusive techniques that can be implemented by a service provider to utilize multiple DDN functionality. The main path describes Account Level Stream Mapping and [A1] describes the other Customer Level technique. Account Level Stream Mapping is used for customers with several data streams; each formatted differently, each from a different billing system. In this case a customer specific algorithm determines the data stream that contains a particular account. The algorithm is usually either: 1. A database lookup from account number to stream indicator, or 2. An algorithm that parses an account number to find the appropriate stream. (e.g. any account starting with "xyz" utilizes the wireline summary DDN)
Alternate Paths:	[A1] Customer Level Stream Mapping In some cases, all the accounts associated with a particular customer will be contained in a single bill stream. In this case, some customer specific algorithm determines the data stream associated with all the accounts for that particular customer. The algorithm is usually based upon: - a). A database lookup, or - b). Geographic data (like zip code) [A2] Default DDN If the database lookup or parsing algorithm does not identify a specific DDN, the default DDN for the implementation is used. [A3] User Accessing Multiple Accounts If the UI is structured so that an individual user can select from multiple accounts, then each account selected could reference a different DDN.
Exception Path:	None
Standard Features:	None
Configuration	None

Points:	
Business Rules:	CBM should provide a mechanism to map an account to a DDN through either lookup or algorithm.
Notes:	In order to both test and demonstrate this functionality, the foundation application data source should be updated to have multiple DDN. Configure multiple DDNs in the Command Center and the config file to use either account level or customer level mapping.

Change Language (1111)

Name:	Change Language
Brief Description:	CBM application with internationalization support
Actor:	User
Pre-Condition:	It is required that the server as well as the client browser supports the language.
Main Path:	- The application allows the user to select the user's language preferences using the following options: - User selects to change language through the application. - Use language or locale preferences available in the web browser. [A1] - User selects change language hyperlink. - System displays a pop-up box with the list of supported languages in a dropdown. - User selects their preference from the list of supported languages and submits. - System refreshes and displays the application in the selected language. - The subsequent pages of the application will be displayed in the language until the user logs out. - Use case ends.
Alternate Paths:	[A1] Default to browser Setting - When a user logs into the Self-Service application, the language preference set in the user's browser dictates which language the application displays. - Browsers let the user create a list of languages as part of their preferences. - User selects their preferences from the supported language or locale preferences available in the web browser. - If the language set in the browser is not supported in the Self-Service application, the Self-Service default language is used (default to us_EN (US English)).

Exception Path:	None
Standard Features:	None
Configuration Points:	None
Business Rules:	Based on the user language preference, application looks up for the resource bundle with key/value pairs
Notes:	Internationalization support and changes applies to all the use cases listed in CBM 4.5.3 RTM and PRD.

User is presented with a page in English:

Login - en
Please use the login area to login to your account. - en

Login to your Account - en

User Name - en:

Password - en:

[Forgot your password? Click Here. - en](#)

if you are a new user, - en [Enroll Now - en](#)

Equivalent page in Spanish:

Login - es
Please use the login area to login to your account. - es

Login to your Account - es

User Name - es:

Password - es:

[Forgot your password? Click Here. - es](#)

if you are a new user, - es [Enroll Now - es](#)

Window allowing user to choose a language:

Select your language - en

Language - en 

[Click here to close this window - en](#)

3.5 Enrollment and Authentication Use Cases

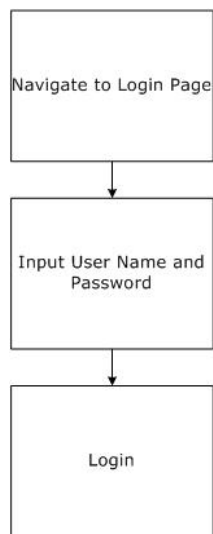
The enrollment and login use cases enable the following functionality:

- Login (1000)
- Logout (1100)
- Enroll Company Users (1200)
- Forgot Password (1400)

Login (1000)

Name:	Login to application
Brief Description:	Business User logs in to the application.
Actor:	Business User
Trigger	1. User navigates to the login page
Main Path:	1. System displays Login Screen displaying a form for entering user name and password. 2. User enters login information. 3. User submits data. 4. System validates data. [A1] 5. System displays the My Account Dashboard. 6. Use case ends.
Alternate Paths:	[A1] System determines that customer credentials are invalid: 1. System displays a message “Login incorrect: Please try again” [A2] User selects forgot password 1. Forgot Password use case initiated [A3] User selects Self-Enroll New User
Standard Features:	Forgot Password Link
Configuration Points	1. The system can be configured to force users to change their password at first login. 2. Additional fields can be added to the profile management page based on client requirements.
Notes:	None

Login to Application:



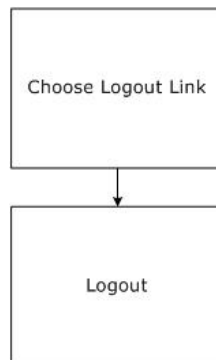
Login Screen:

The screenshot shows the Siebel Login screen. At the top is a dark blue header bar. Below it, the word "Login" is centered. A light gray rectangular box contains the text "Please use the login area to login to your account." followed by two input fields: "User Id" and "Password". To the right of the "Password" field is a "Forgot Password" link and a "SUBMIT" button. Below the gray box, a horizontal line separates the login area from the footer, which contains the text "Copyright © 2005 Siebel Systems, Inc. All rights reserved." and the Siebel logo in the bottom left corner.

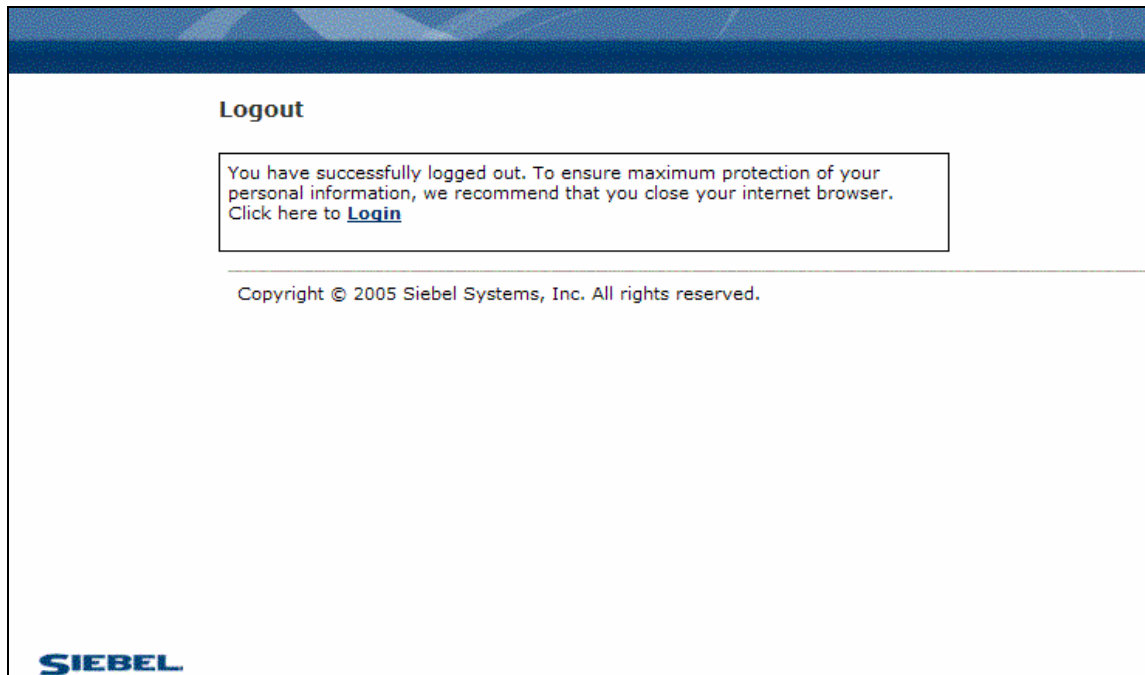
Logout (1100)

Name:	Logout of application
Brief Description:	Business User logs out.
Actor:	Business User
Trigger	1. User invokes the logout operation from the navigation menu
Main Path:	1. System ends the user's session 2. System displays a logout message and prompts the user to login to the application. 3. Use case ends.
Alternate Paths:	[A1] User is inactive on the site for 15 (user defined) minutes 1. System ends session
Standard Features:	Session timeout
Configuration Points:	Time period is configurable.
Notes:	None

Logout of Application:



Logout Screen:



Enroll Company Users (1200)

Name:	Enroll Company Users
Brief Description:	The process of enrolling a company user.
Actor:	Administrator
Trigger:	User clicks on the Administrator tab, clicks on Company users tab.
Preconditions	User logged in as administrator.
Main Path:	1. This use case begins when the User wished to enroll a company user and selects the Enroll Company User operation. 2. System requests User to provide the organization's details such as: a. First Name b. Last Name c. Email Address d. User Name e. Password f. Confirm Password g. Role 3. User enters this information and saves the form. 4. System displays a confirmation page with the new User details. 5. Use case ends.
Alternate Paths:	[A1] Invalid entry System displays message informing the User of the problem and allows them to correct it. [A2] User name already exists System displays message informing the User of the problem and allows them to correct it. [A3] Email Confirmation 1. After validating the enrolment is correct, the system sends an email to the user who was just enrolled.
Standard Features:	Form Validation
Configuration Points	1. Additional fields can be added to the profile management page based on client requirements.
Notes:	None

Enroll Company Users Screen:



Add User

Company Name: CellTec Hierarchy Name: N/A
User Name: Anne Green Position Name: N/A

Overview Hierarchy Personal **Company**

Profile Company Address Book Users

*indicates required field.
Please enter new user profile information below.

*First Name:

*Last Name:

*Email Address:

*User Name:

*Password:

*Confirm Password:

*Role: ▼

Security Question: ?

Security Answer:

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreeen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

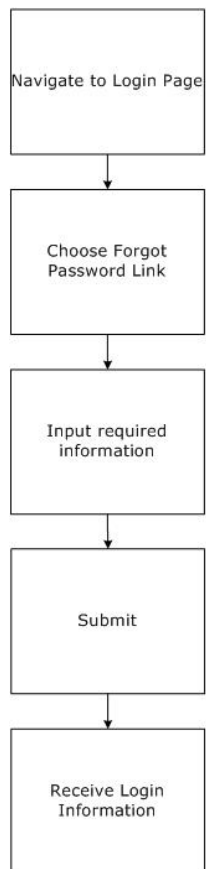
Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Forgot Password (1400)

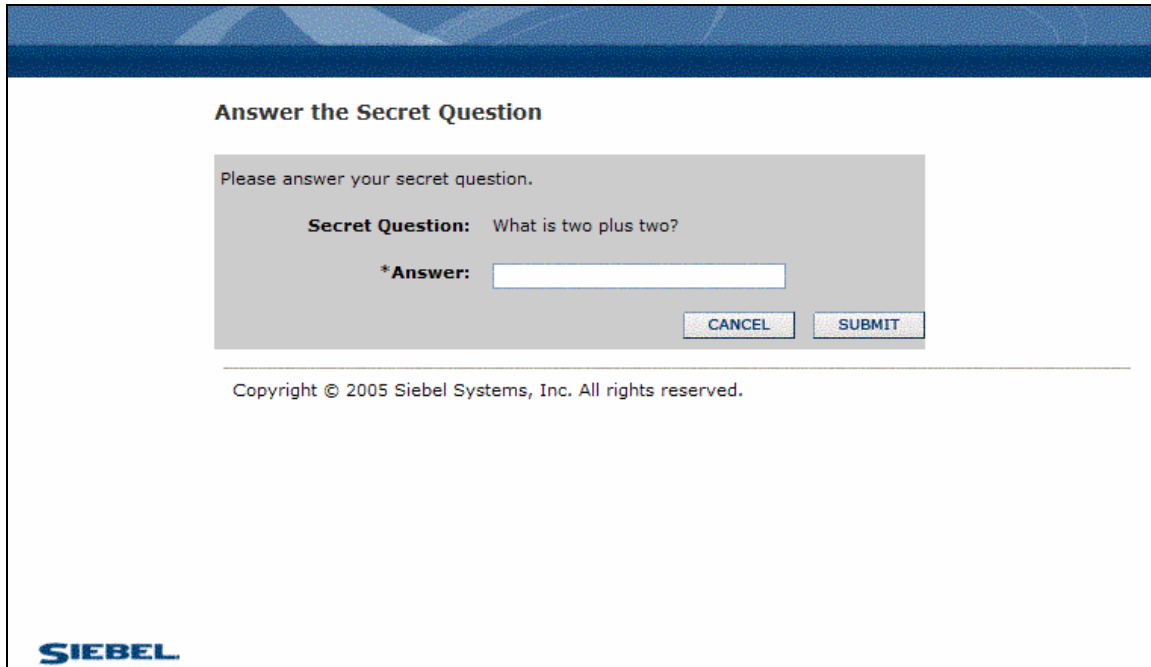
Name:	Forgot password
Brief Description:	Business user forgets password and systems presents a password reminder.
Actor:	Business User
Trigger	User selects forgot password action from the login screen
Main Path:	1. System displays a page requesting the user to enter their username. 2. User provides username and submits. 3. System confirms the username exists. [A1] 4. System displays page requesting the user to answer the secret question associated with the username and number. 5. User answers the secret question and submits [A2] 6. System validates the secret question answer to be correct and displays Password Reset page containing: a. New password b. New password confirmation 7. User provides new password and saves. 8. System records new password and logs user in. 9. Use case ends.
Alternate Paths:	[A1] Username does not exist 1. System displays error message stating the username is not correct. [A2] System is unable to validate the secret question 1. System displays error message stating "This is no the answer we have on file, please try again" 2. User is given a system defined number of times to answer correctly.
Standard Features:	Form validation Cancel action
Notes:	None
Questions:	

Retrieve Forgotten Password:



Forgot Password Screen:

The screenshot shows the 'Forgot Password' screen in the Siebel application. The screen has a dark blue header bar. Below the header, the title 'Forgot Password' is displayed. A gray rectangular box contains the instruction 'Enter user name and select submit to be prompted for your secret question.' Below this instruction, the label 'User Name' is followed by a text input field. To the right of the input field are two buttons: 'CANCEL' and 'SUBMIT'. Below the gray box, a horizontal line separates the main content from the footer. The footer contains the copyright notice 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.' and the Siebel logo in the bottom left corner.

Secret Question Prompt:

Answer the Secret Question

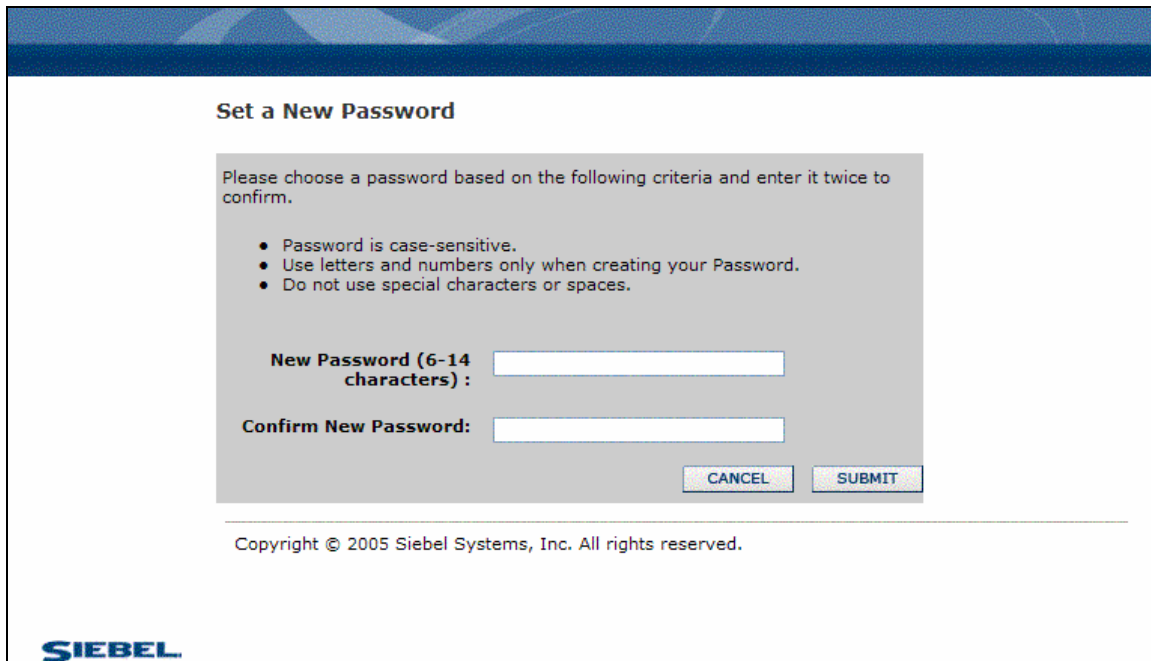
Please answer your secret question.

Secret Question: What is two plus two?

***Answer:**

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Reset Password Screen:

Set a New Password

Please choose a password based on the following criteria and enter it twice to confirm.

- Password is case-sensitive.
- Use letters and numbers only when creating your Password.
- Do not use special characters or spaces.

New Password (6-14 characters):

Confirm New Password:

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

3.6 Overview Use Case

Overview Page (1500)

Name:	Overview page
Brief Description:	Business User views the dashboard that contains Large Hierarchies (Companies with large number of accounts or service agreements)
Actor	Large Enterprise User
Trigger	1. This is the landing page displayed to the user after logging into the application. 2. This screen is displayed when the user selects the “My Account” \ “Overview” menu selection
Main Path	1. The landing page is modified as described below. a. The expand collapse function has been changed to a left-right presentation similar to the Hierarchy administration screens. Note: The application will provide the option to display different Overview Pages based on the Large Enterprise User threshold being exceeded. b. The default billing hierarchy does not appear in the expanded view if the large enterprise threshold is invoked. c. The highest wireless users report is not available for the large enterprise users [A10] 2. User navigates the left pane according to the Manage Billing Hierarchy and Manage Business Structure main paths. 3. System invokes the appropriate Use Case (see alternate paths). 4. Use case ends.
Alternate Paths	[A1] Search a Billing Account or Business Structure Hierarchy 1. User enters search criteria. • System returns search results, if any [A2] View Statement 1. User expands hierarchy tree until an account is displayed on the right pane. 2. User selects “Last Statement” action 3. System invokes View Statement Summary [A3] View Call Usage Detail 1. User expands hierarchy tree until a phone number is displayed on the right pane. 2. User selects “Call Usage Detail” action 3. System invokes view Usage Details Use Case. [A4] View unbilled 1. User expands hierarchy tree until a phone number is displayed on the right pane.

2. User selects “View Unbilled” action
3. System invokes view Unbilled Summary for Device Use Case

[A5] Manage Users

1. User expands hierarchy tree until an account is displayed.
2. User selects “Manage Users” action
3. System invokes the Manage Company Users (UC 5900)

[A6] View Company Profile

1. User clicks on the company name hyperlink in the “company name” section
2. System invokes, Manage Company Profile (UC 5800)

[A7] View User Profile

1. User clicks on the user name hyperlink under personal profile
2. System displays the Personal Profile screen (UC 5000)

[A8] Change password

1. User selects the “change password action
2. System invokes, Manage Password (UC 5100)

[A9] Email Notifications

1. User selects “email opt in” action
2. System displays Manage Notification (UC 5400)

[A10] User selects a phone number from the highest service agreement module

1. System invokes, Device Summary (UC 2200)

[A11] View New Rate Plans

1. User selects specific rate play hyperlink in the “New Rate Plans” section.
2. Separate browser window displays service provider marketing information about the selected rate plan.

[A12] User selects quick link option

System invokes the corresponding CBM use cases.

[A13] Expanding Tree Exceeds {Display Threshold Hierarchy Tree}

If the user expands the hierarchy tree and the {Display Threshold –Hierarchy Tree} threshold is reached, only the threshold limit is displayed and the user receives the following warning message:

“Display limit threshold exceeded. Only x of y records displayed. Please use the search feature at the top of the screen to search for a specific tree node.”

[A14] Landing page for a user with access to a single billing account.

System displays the ‘Account Summary’ page (UC 2000) for users who has access to a single billing account.

[A15] Landing page for a user with access to a single subscription

System displays the ‘Device Summary’ page (UC 2200) for users who has access to a single subscription (phone)

Standard Features:	1. Hierarchy 2. Search
Business Rules	Please reference the display thresholds noted in 4.5.2 that need to be applied to this Use Case.
Configuration Points:	System provides the ability to hide old phone numbers on the overview page using the following work-around option: Modify overview page query to check all available statement dates for a particular object (account or service agreement) and check to see if there are any dates that are within one month from the current date. If there aren't any, assume that there was no bill for the latest month and, hence, can ignore the particular object.
Notes	1. All nodes of the hierarchy will be collapsed upon entry into the application. 2. Accounts and mobile numbers are modeled separately in business structures. 3. For the foundation app, system retrieves and displays the unbilled data from a data file or dummy data table. 4. Account numbers displayed should be sorted on billing accounts using 'String' sort.

Billing Manager Overview:

Overview

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: Billing Accounts

[Download](#)

Business Structures

Filter: Service Agreement
Text: [CLEAR](#) [SEARCH](#)

DEPARTMENT [GO](#) (4/4)

- Administration
- Client Services
- Research and Development
- Sales and Marketing (2/2)
 - Marketing
 - Sales

Sales

Filter: Service Agreement
Text: [REFRESH](#)

06122165	Last Statement
318-743-4734	\$-2.23 Unbilled
369-484-8934	\$36.49 Unbilled
369-948-3843	\$36.49 Unbilled
382-215-2803	\$36.94 Unbilled
382-473-4937	\$12.37 Unbilled
397-894-2100	\$56.29 Unbilled
397-894-2101	\$34.78 Unbilled

8 (of 8) records returned.

CellTec

Business Structures: 3
Billing Accounts: 24
Service Agreements: 76

User Information

Username: agreeen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Quick Links

- [View Last Statement](#)
- [FAQs](#)

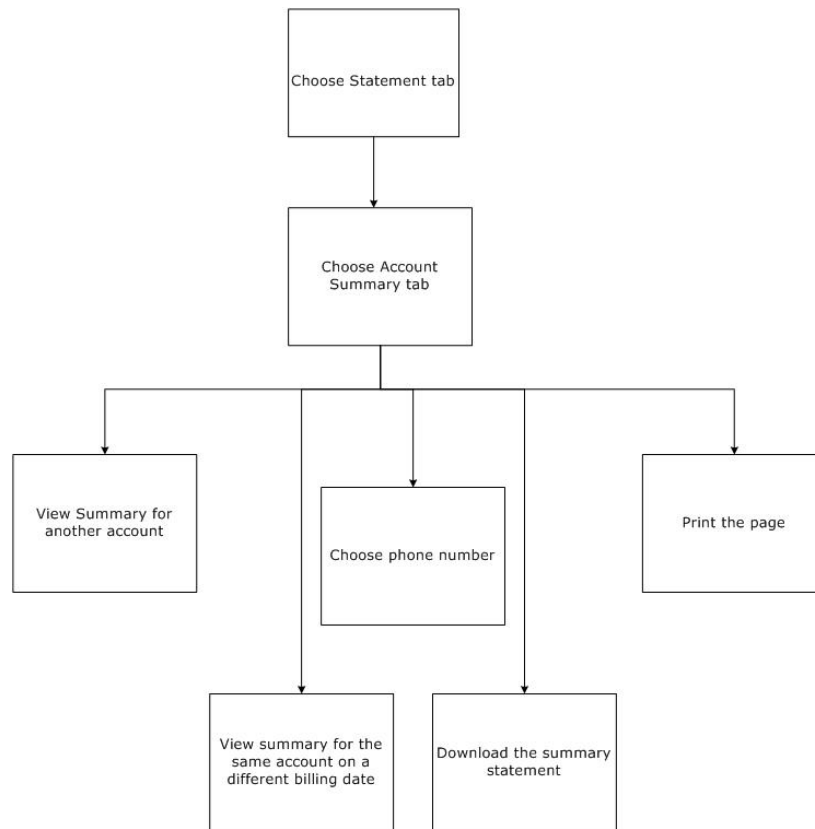
3.7 Statement Use Cases

The statement presentment use cases provide users with the following account summary and detail information:

- Account Summary (2000)
- Device Charges (2100)
- Device Summary (2200)
- Usage Details (2300)
- View Unbilled Activity (2400)
- View Statement Messages (2500)
- Print Invoice (PDF) (2700)
- Download Account Data (2800)
- View Account Level Report (2900)
- View Device Level Report (2920)

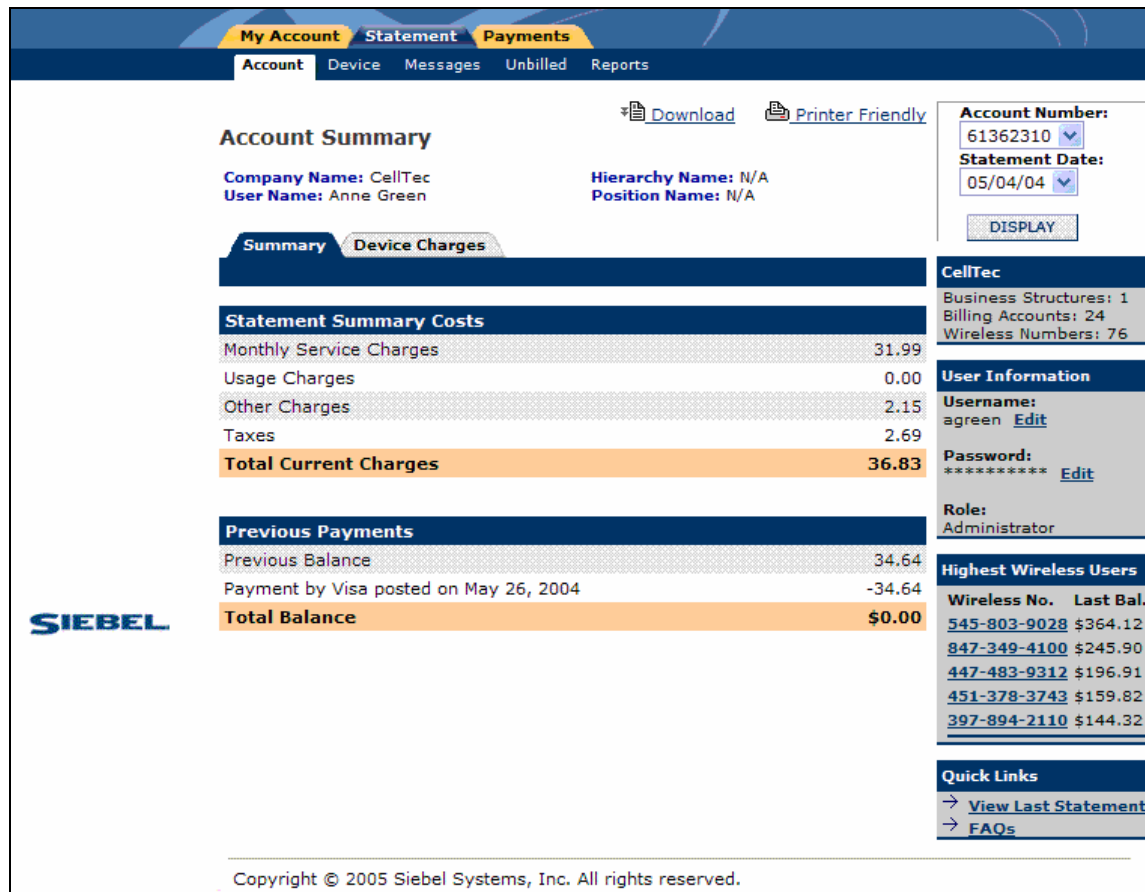
Account Summary (2000)

View Account Summary in Statement:



Name:	Account Summary
Brief Description:	Business User views the summary of an account.
Actors:	Business User
Trigger:	1. User selects the "Statements" \ "Account" \ "Summary" menu options 2. User selects the "Last Statement" option next to an account displayed on the "My Accounts" \ "Overview" page
Main Path:	1. This use case begins when the User wishes to view the Statement Summary and invokes the view statement operation. 2. System displays Statement Summary Screen with summary information for the statement. [A1] 3. Use case ends.

Alternate Paths:	[A1] User selects an alternate billing date. System displays the Statement Summary page for the selected billing date.
Standard Features:	Print Invoice (PDF)
Notes:	Download formats can vary Side Navigation – Context Change Module for Account

Account Summary Screen:


Account Summary

Company Name: CellTec Hierarchy Name: N/A
User Name: Anne Green Position Name: N/A

[Download](#) [Printer Friendly](#)

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

Summary **Device Charges**

Statement Summary Costs

Monthly Service Charges	31.99
Usage Charges	0.00
Other Charges	2.15
Taxes	2.69
Total Current Charges	36.83

Previous Payments

Previous Balance	34.64
Payment by Visa posted on May 26, 2004	-34.64
Total Balance	\$0.00

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Device Charges (2100)

Name:	Device Charges
Brief Description:	Business user views the list of phones and their summary charges.
Actors:	Business User
Triggers	1. User selects the “Statements” \ “Account” \ “Device Charges” menu options
Main Path:	- This use case begins when the user wishes to view the list of phones they have available and selects the View Phone List operation. - System displays a list of phones available within the invoice for the selected bill date with the following columns: - Phone Number - Summary Charges (columns can vary based on service provider bill data) - Option to view Phone Detail - Option to view Unbilled Activity - Use case ends.
Alternate Paths:	[A1] User selects to view a different statement date - System redisplay the phone list for the selected statement date. [A2] User selects to view Unbilled Activity - System invokes View Unbilled Activity Use Case.
Standard Features:	- Paging - Download - Sorting
Notes:	None
Questions:	

Device Charges Summary Screen:

My Account

Statement

Payments

Account

Device

Messages

Unbilled

Reports

Download

Printer Friendly

Account Number:

00486590

Statement Date:

05/04/04

DISPLAY

View Account Device Charges

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Summary

Device Charges

Summary Device Charges

Wireless Number	Monthly Service	Usage	Adjustments	Taxes	Other	Total
397-894-2100	49.99	0.00	3.65	2.65	0.00	56.29
397-894-2101	29.99	0.00	3.16	1.63	0.00	34.78
397-894-2105	49.99	0.00	3.65	2.65	0.00	56.29
397-894-2114	39.99	0.00	2.14	2.08	0.00	44.21
397-894-2102	49.99	0.00	3.65	2.65	0.00	56.29
397-894-2103	19.99	15.75	3.31	1.93	0.00	40.98
397-894-2104	39.99	0.00	3.41	2.14	0.00	45.54
397-894-2106	19.99	0.00	2.91	1.11	0.00	24.01
397-894-2114	19.99	0.00	1.64	1.05	0.00	22.68
397-894-2115	19.99	0.00	1.64	1.05	0.00	22.68
397-894-2107	29.99	0.00	1.89	1.57	0.00	33.45
397-894-2116	19.99	0.00	1.64	1.05	0.00	22.68
397-894-2108	19.99	7.00	3.09	1.48	0.00	31.56
397-894-2109	19.99	0.00	2.91	1.11	0.00	24.01
397-894-2110	19.99	111.30	5.90	7.13	0.00	144.32
397-894-2111	19.99	0.00	2.91	1.11	0.00	24.01
397-894-2112	29.99	0.00	3.16	1.63	0.00	34.78
397-894-2113	29.99	0.00	3.16	1.63	0.00	34.78
Total	529.82	134.05	53.82	35.65	0.00	753.34

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Print Friendly Version:

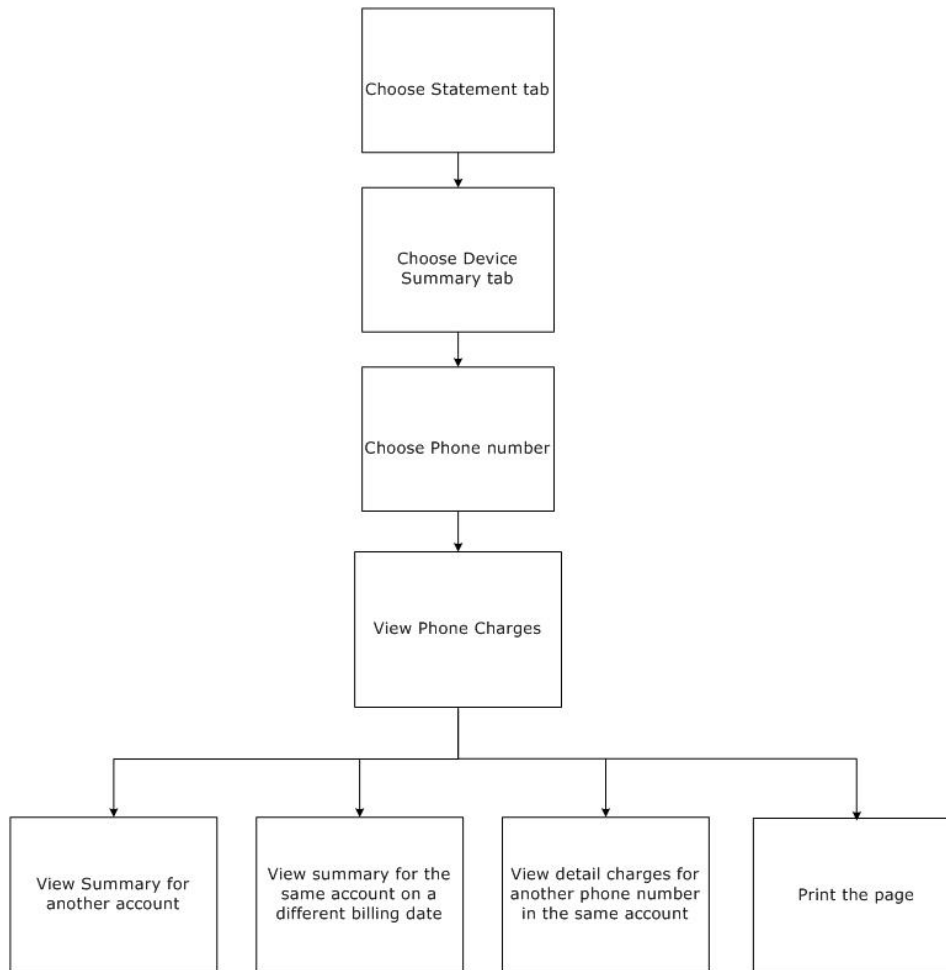
CLOSE WINDOW

Account Number: 00486590 Statement Date: 05/04/04

Summary Device Charges						
Wireless Number	Monthly Service	Usage	Adjustments	Taxes	Other	Total
397-894-2100	49.99	0.00	3.65	2.65	0.00	56.29
397-894-2101	29.99	0.00	3.16	1.63	0.00	34.78
397-894-2105	49.99	0.00	3.65	2.65	0.00	56.29
397-894-2114	39.99	0.00	2.14	2.08	0.00	44.21
397-894-2102	49.99	0.00	3.65	2.65	0.00	56.29
397-894-2103	19.99	15.75	3.31	1.93	0.00	40.98
397-894-2104	39.99	0.00	3.41	2.14	0.00	45.54
397-894-2106	19.99	0.00	2.91	1.11	0.00	24.01
397-894-2114	19.99	0.00	1.64	1.05	0.00	22.68
397-894-2115	19.99	0.00	1.64	1.05	0.00	22.68
397-894-2107	29.99	0.00	1.89	1.57	0.00	33.45
397-894-2116	19.99	0.00	1.64	1.05	0.00	22.68
397-894-2108	19.99	7.00	3.09	1.48	0.00	31.56
397-894-2109	19.99	0.00	2.91	1.11	0.00	24.01
397-894-2110	19.99	111.30	5.90	7.13	0.00	144.32
397-894-2111	19.99	0.00	2.91	1.11	0.00	24.01
397-894-2112	29.99	0.00	3.16	1.63	0.00	34.78
397-894-2113	29.99	0.00	3.16	1.63	0.00	34.78
Total	529.82	134.05	53.82	35.65	0.00	753.34

Device Summary (2200)

View Device Summary in Statement:



Name:	Device Summary
Brief Description:	Business User views summary charges for an individual phone number.
Primary Actor:	Business User
Triggers	1. User selects the “Statements” \ “Device” \ “Summary” menu options
Main Path:	1. This use case begins when the User wishes to view the summary charges for a phone number. 2. System displays charges for a specific phone number. 3. Use case ends.
Alternate Paths:	[A1] User selects an alternate billing date 1. System redisplay the Device Charges page for the selected

	billing date.
Standard Features:	Print Friendly
Notes:	Side Navigation for Account, Statement Date and Device Number

View Device Summary:

My Account

Statement

Payments

Account

Device

Messages

Unbilled

Reports

[Download](#)
[Printer Friendly](#)

Device Summary

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number:
00486590

Statement Date:
05/04/04

DISPLAY

Summary
Usage Details

Phone Number: 397-894-2100

Summary for 397-894-2100
Total Charges For: 397-894-2100 \$56.29

Rate Plan

	Period	Prorated Charge	Monthly Charge	Total Charge
CellTec 700 Plus	05/04-06/03		49.99	49.99

Includes:
CALL WAITING
CALL HOLD
CLID PER CALL BLOCK

Usage Charge Details
Total Usage Charges \$0.00

Optional Services

	Period	Prorated Charge	Monthly Charge	Total Charge
BASIC VOICEMAIL	05/04-06/03		0.00	0.00
CALL FORWARDING	05/04-06/03		0.00	0.00
ROAMING \$.69/MIN	05/04-06/03		0.00	0.00
CONNXXN CHARGE MAY APPLY	05/04-06/03		0.00	0.00
VOICE MAIL ALERT	05/04-06/03		0.00	0.00
CALLER ID N/C	05/04-06/03		0.00	0.00
NATIONWIDE TOLL FREE	05/04-06/03		0.00	0.00
DETAILED BILLING N/C	05/04-06/03		0.00	0.00
LONG DISTANCE ACCESS	05/04-06/03		0.00	0.00
NETWORK ACCESS	05/04-06/03		0.00	0.00
NUMERIC PAGING	05/04-06/03		0.00	0.00

Credits, Adjustments & Other Charges

FED UNIVERSAL SVC CHARGE	1.27
CONNECTION CHARGE	1.24
911 MONTHLY	0.58
REGULATORY COST RECOVERY FEE	0.56
TELCOM RELAY SERVICE SURCHARGE	0.00
Total Other Charges	\$3.65

Taxes

STATE SALES TAX	2.65
Total Taxes	\$2.65

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

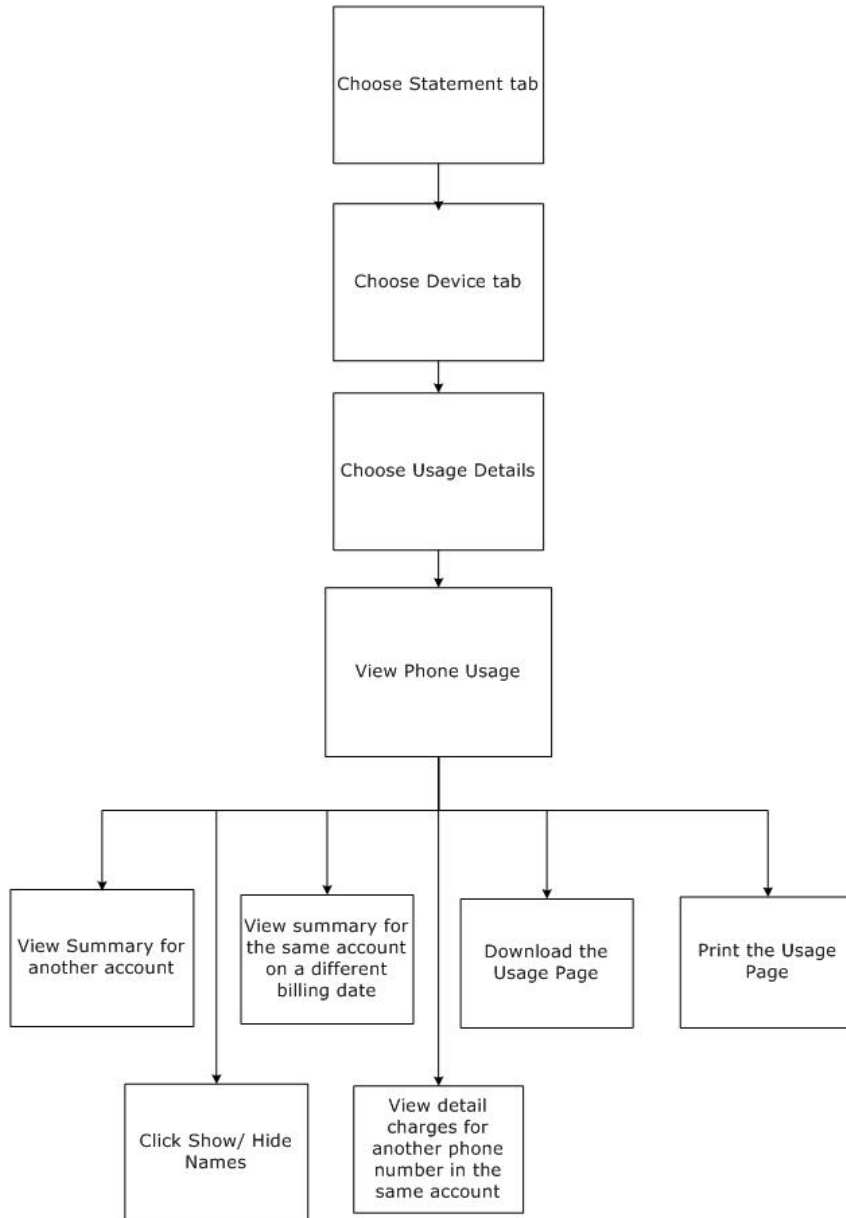
Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Usage Details (2300)

View Device Usage Details:



Name:	Usage Details
Brief Description:	Business User views the detail associated with a single phone number.
Actors:	Business User
Triggers	1. User selects the “Statements” \ “Device” \ “Usage Details” menu options 2. User selects the “Call Usage Detail” option next to phone number displayed on the “My Accounts” \ “Overview” page
Main Path:	1. This use case begins when the User selects the view call detail operation for a specific phone number. 2. System displays the Statement Detail information for the selected phone number. 3. Use case ends.
Alternate Paths:	[A1] Customer selects an alternate billing date. 1. System displays the Statement Detail page for the selected billing date. [A2] Show Detail View 1. User Selects the Go to Detail / Summary View action to switch between showing additional columns or not. [A3] Show/Hide Names 1. User selects the show/hide names action to switch between displaying phone numbers and names from the Personal or Corporate Address Book [A4] Edit Personal Address Book 1. User selects “Edit Personal Address Book” action to modify any PAB field except for the phone number which defaults to the selected call detail record number.
Standard Features:	1. CSV Download 2. Paging 3. Personal Address Book 4. Printer Friendly 5. Sorting
Notes:	None

Usage Details Screen:

My Account
Statement
Payments

Account
Device
Messages
Unbilled
Reports

View Device Usage Details

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number:

00486590

Statement Date:

05/04/04

DISPLAY

Summary

Usage Details

Phone Number:

397-894-2100

GO

Page 1 of 6 ▶▶

Details for 397-894-2100

SHOW/HIDE NAMES

Date , Time	Number Called	Call To	Rate Code	Rate Period	Call Type	Min	Billed Amount
05/04, 08:39AM	testddd	COLUMBIA SC	C700	Weekdays	Unrated	2	0.00
05/04, 08:41AM	Chris	COLUMBIA SC	C700	Weekdays	Unrated	12	0.00
05/04, 09:56AM	397-894-2107	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/04, 10:45AM	803-737-2222	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/04, 10:46AM	803-285-4368	LANCASTER SC	C700	Weekdays	Unrated	12	0.00
05/04, 11:33AM	704-451-8989	VOICEMAIL L	C700	Weekdays	Voicemail	2	0.00
05/04, 12:05PM	803-935-7412	COLUMBIA SC	C700	Weekdays	Unrated	2	0.00
05/04, 12:07PM	803-935-7502	COLUMBIA SC	C700	Weekdays	Unrated	2	0.00
05/04, 12:28PM	704-451-8989	VOICEMAIL L	C700	Weekdays	Voicemail	1	0.00
05/04, 12:47PM	397-894-2107	COLUMBIA SC	C700	Weekdays	Unrated	14	0.00
05/04, 01:01PM	803-446-1821	INCOMING CL	C700	Weekdays	Incoming call	5	0.00
05/04, 01:22PM	803-738-7300	INCOMING CL	C700	Weekdays	Incoming call	3	0.00
05/04, 02:38PM	704-451-8989	VOICEMAIL L	C700	Weekdays	Voicemail	1	0.00
05/04, 02:39PM	803-737-2222	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/04, 03:33PM	803-446-1821	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/04, 03:49PM	803-737-2222	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/04, 03:50PM	803-935-7502	COLUMBIA SC	C700	Weekdays	Unrated	4	0.00
05/04, 03:53PM	803-434-4090	COLUMBIA SC	C700	Weekdays	Unrated	4	0.00
05/04, 03:57PM	803-446-1821	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/05, 08:43AM	803-434-8232	INCOMING CL	C700	Weekdays	Incoming call	1	0.00
05/05, 09:07AM	803-434-8232	INCOMING CL	C700	Weekdays	Incoming call	1	0.00
05/05, 09:26AM	803-434-8232	INCOMING CL	C700	Weekdays	Incoming call	4	0.00
05/05, 09:41AM	803-772-1795	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/05, 09:42AM	803-434-8232	INCOMING CL	C700	Weekdays	Incoming call	1	0.00
05/05, 09:43AM	803-935-7502	COLUMBIA SC	C700	Weekdays	Unrated	4	0.00
05/05, 09:48AM	803-935-7525	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/05, 09:50AM	803-935-7527	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/05, 10:36AM	803-935-7250	COLUMBIA SC	C700	Weekdays	Unrated	4	0.00
05/05, 10:40AM	704-451-8989	VOICEMAIL L	C700	Weekdays	Voicemail	2	0.00
05/05, 12:47PM	864-938-3422	CLINTON SC	C700	Weekdays	Unrated	2	0.00
05/05, 12:51PM	803-935-6881	COLUMBIA SC	C700	Weekdays	Unrated	5	0.00
05/05, 01:56PM	803-935-7412	COLUMBIA SC	C700	Weekdays	Unrated	1	0.00
05/05, 02:02PM	864-938-3422	CLINTON SC	C700	Weekdays	Unrated	1	0.00
05/05, 02:04PM	803-935-6892	COLUMBIA SC	C700	Weekdays	Unrated	2	0.00
05/05, 02:06PM	397-894-2107	COLUMBIA SC	C700	Weekdays	Unrated	3	0.00
05/05, 02:36PM	803-935-7304	COLUMBIA SC	C700	Weekdays	Unrated	7	0.00
Totals						661	0.00

Page 1 of 6 ▶▶

Rate Code: C700=CellTec 700 Plus

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

View Unbilled Activity (2400)

Name:	View Unbilled Activity
Brief Description:	Business user views activity that has been generated since their most recent billing statement.
Triggers	1. User selects the “Statements” \ “Unbilled” menu options 2. User selects the “View Unbilled” option next to phone number displayed on the “My Accounts” \ “Overview” page
Actors:	Business User
Main Path:	1. This use case begins when the user selects the View Unbilled Activity operation. 2. System displays the Unbilled Activity page including the following information: a. Summary of Unbilled Activity [A1] b. Detail generated since the most recent billing statement.[A2] 3. Use case ends.
Alternate Paths:	[A1] User has access to more than one device and selects to view a different device. 1. System redisplay the Unbilled Activity page. [A2] System is unable to retrieve Unbilled Activity 1. System will display a message informing the user that the unbilled data is unavailable at this time.
Standard Features:	1. Paging 2. Personal Address Book 3. Printer Friendly 4. Sorting
Notes:	All data on this page is generated and provided by the billing system in real-time. However, in order to demonstrate the foundation application, sample “unbilled data” should be included in the sample data set. Tip: Use account number 10756456 to view unbilled activity data.

Screen Displays Unbilled Activity:

My Account

Statement

Payments

AccountDeviceMessagesUnbilledReports

Download

Printer Friendly

Account Number:

61362310

Statement Date:

05/04/04

DISPLAY

View Unbilled Usage

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Wireless Number:

318-473-2174

GO

Search for Device Number:

SEARCH

Summary

Peak Minutes42

Weekend Minutes0

Total Minutes:42

Call Details

SHOW/HIDE NAMES

Date, Time	Called Number	Destination	Call Type	Min
2004-10-10 00:00	123-457-1111		local	42

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreeen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

[FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

View Statement Messages (2500)

Name:	View Bill Messages
Brief Description:	Business User views the bill messages that are shown on their statement.
Actors:	Business User
Triggers	1. User selects the “Statements” \ “Statement Messages” menu options
Main Path:	1. This use case begins when the user wants to view the bill messages that are associated to a chosen statement. 2. System displays the bill messages that are associated to the selected statement. [A1] 3. Use case ends.
Alternate Paths:	[A1] User has access to more than one statement and selects to view a different statement's messages 1. System redisplay the Bill Messages screen.
Standard Features:	None
Notes:	1. All data on this page is generated and provided by the billing file and all formatting will be shown in accordance with that file. 2. Source for bill messages data is from the billing statement.

View Bill Messages:

Messages

Company Name: CellTec Hierarchy Name: N/A
 User Name: Anne Green Position Name: N/A

Account Number: 61362310 Statement Date: 05/04/04

Service Provider Message

[Service Providers Text Here]

Account Number: 61362310 Statement Date: 05/04/04

DISPLAY

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Print Invoice - PDF (2700)

Name:	Print Invoice
Brief Description:	Business User prints a selected invoice in PDF format.
Actors:	Business User
Triggers	1. User selects the “download PDF” action on any screen where PDF is available.
Main Path:	1. This use case begins when the User selects the Print Invoice operation from the navigation menu. 2. System opens a new window and displays a PDF version of the selected invoice. 3. User saves or prints the invoice using Adobe Acrobat functionality [A1] 4. Use case ends.
Alternate Paths:	[A1] User closes the PDF version of the invoice 1. System shows the original web application to the user.
Standard Features:	1. The following screens will have the PDF option: a. Invoice b. Tax Invoice (if applicable)
Notes:	1. The PDF can be saved or printed via the Adobe Acrobat interface and will not have any of the navigation information specific to the web application. 2. For business users this would only be invoice summary and not the entire invoice on the fly. Generating an entire business invoice would have performance issues and may need to be created in batch if necessary. 3. PDF size threshold is dependent on customer data and is often decided based on client data sample and proposed architecture.

User Downloads Invoice in PDF Format to Print:

My Account Statements Payments

Account Device Messages Unbilled Reports

Download Format: PDF Printer Friendly

Account Summary

Company Name: CellTec Hierarchy Name: Billing Accounts
User Name: Anne Green

Account Number: 00486590
Statement Date: 05/04/04

CellTec
Business Structures: 4
Billing Accounts: 24
Wireless Numbers: 77

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

Statement Summary Costs

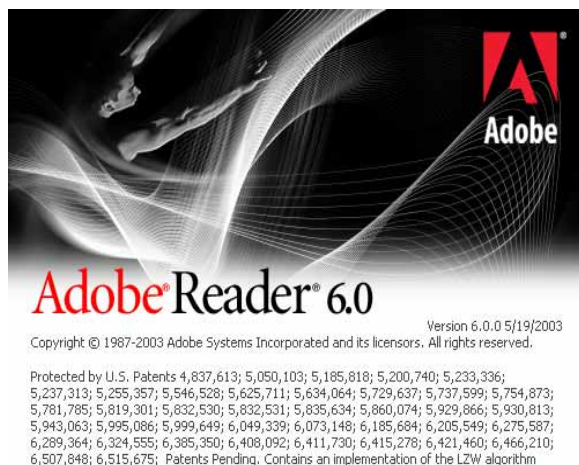
Monthly Service Charges	529.82
Usage Charges	134.05
Other Charges	53.82
Taxes	35.65
Total Current Charges	753.34

Previous Payments

Previous Balance	1,474.64
Payment by Check posted on May 07, 2004	-718.14
Total Past Due Balance	\$756.50

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.



Download Account Data (2800)

Name:	Download Account Data
Brief Description:	A Business User downloads account data.
Actors:	Business User
Triggers	1. User selects the “download” action on any screen where download is available.
Main Path:	1. This use case begins when User wishes to download account data and selects the download function. 2. System requests user to select data type. 3. User selects the appropriate data type. 4. Systems display the standard file save or open dialog box. User enters file name and folder to save file. 5. Records displayed on the screen are saved to the specified file 6. Use case ends.
Alternate Paths:	None
Standard Features:	1. XML data format 2. CSV data format 3. Cancel action
Notes:	1. Downloads are available within: a. All Individual Reports b. Call Detail c. Account Summary 2. Side Navigation CCM for Account and Phone Number search.

Download Account Data Screen:

View Account Reports

Download Format: CSV GO [Printer Friendly](#)

Account Number: 61362310
Statement Date: 05/04/04
DISPLAY

Company Name: CellTec
User Name: Anne Green
Hierarchy Name: N/A
Position Name: N/A

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Select Report: Top 20 longest calls DISPLAY

Top 20 Longest Calls

Date	Time	Calling Number	Mins	Usage
05/13	08:11AM	318-473-2	11	.00
05/09	07:07PM	318-473-2	7	.00
05/13	04:08PM	318-473-2	3	.00
05/22	12:19PM	318-473-2	3	.00
05/30	02:47PM	318-473-2	3	.00
05/13	11:10AM	318-473-2	2	.00
05/13	04:16PM	318-473-2	2	.00
05/22	12:10PM	318-473-2	2	.00
05/05	04:46PM	318-473-2	1	.00
05/07	12:46PM	318-473-2	1	.00
05/09	07:06PM	318-473-2	1	.00
05/11	10:18AM	318-473-2	1	.00
05/11	11:28AM	318-473-2	1	.00
05/20	09:47AM	318-473-2	1	.00
05/21	01:17PM	318-473-2	1	.00
05/22	12:09PM	318-473-2	1	.00
05/22	12:17PM	318-473-2	1	.00
05/22	12:24PM	318-473-2174	1	.00
05/22	12:31PM	318-473-2174	1	.00
05/24	11:29AM	318-473-2174	1	.00

SHOW/HIDE NAMES

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

View Account Level Report (2900)

Name:	View Account Level Report
Brief Description:	Business User views a report for a specific account.
Actors:	Business User
Main Path:	1. This use case begins when the User selects an account level report to view. 2. System displays the report. [A1-A2] 3. User changes the statement date. 4. System redisplay the previously selected report for the newly selected statement date. 5. User selects a different report and selects display action. [A3-A9] 6. System redisplay the selected report for the previously selected statement date. 7. Use case ends.
Alternate Paths:	[A1] User has access to multiple accounts and selects a different account. System redisplay the previously selected report for the newly selected account. [A2] There is no report data available for the selected report/statement date. System displays a message stating that there is no data available. [A3] Batch Report System generates and displays account level reports in batch. <i>Rationale:</i> Reports that would normally involve long user latency can be run in batch at night and only the report results are presented when the user selects the report. [A4] Show/Hide Names For those reports with a PAB hyperlink (see screen shots), the user will have the ability to toggle between displaying the called phone number or the alias in the PAB/CAB. [A5] Report: 20 longest calls account report. Need to display the phone number making the call ("A number") [A6] Report: 20 most expensive calls Need to display the phone number making the call ("A number") [A7] Report: 20 most called numbers report [A8] Report: 20 most expensive called numbers report [A9] Report: 20 most called destinations report [A10] Report: 'Cost summary by call type' report [A11] Report: 'Cost summary by month' report [A12] Report: 'Cost summary by time period' report

Standard Features:	1. CSV & XML Download options 2. Print Friendly
Notes:	Additional formats such as PDF can be created through customization if needed.

Display 20 Most Expensive Calls Report:

[My Account](#)
[Statement](#)
[Payments](#)

[Account](#)
[Device](#)
[Messages](#)
[Unbilled](#)
[Reports](#)

[Download](#)
[Printer Friendly](#)

View Account Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number: 61362310
Statement Date: 05/04/04

[Account Reports](#)
[Device Reports](#)

To view a report, select from the following options and click Display.

Select Report: Top 20 most expensive calls

Top 20 Most Expensive Calls

Date	Time	Calling Number	Number Called	Destination	Type	Mins	Usage
05/05	04:46PM	318-473-2174	803-782-7779	COLUMBIA SC	Unrated	1	.00
05/07	12:46PM	318-473-2174	704-451-8989	VOICEMAIL L	Voicemail	1	.00
05/09	07:06PM	318-473-2174	803-604-1019	BATESBURG SC	Unrated	1	.00
05/09	07:07PM	318-473-2174	615-790-9650	FRANKLIN TN	Unrated	7	.00
05/11	10:18AM	318-473-2174	803-256-6302	COLUMBIA SC	Unrated	1	.00
05/11	11:28AM	318-473-2174	803-787-7429	COLUMBIA SC	Unrated	1	.00
05/13	08:11AM	318-473-2174	843-768-9323	CHARLESTO SC	Unrated	11	.00
05/13	11:10AM	318-473-2174	843-364-4382	CHARLESTO SC	Unrated	2	.00
05/13	04:08PM	318-473-2174	318-473-2174	INCOMING CL	Incoming call	3	.00
05/13	04:16PM	318-473-2174	318-473-2174	INCOMING CL	Incoming call	2	.00
05/20	09:47AM	318-473-2174	803-359-0046	INCOMING CL	Incoming call	1	.00
05/21	01:17PM	318-473-2174	704-451-8989	VOICEMAIL L	Voicemail	1	.00
05/22	12:09PM	318-473-2174	704-451-8989	VOICEMAIL L	Voicemail	1	.00
05/22	12:10PM	318-473-2174	803-926-7549	COLUMBIA SC	Unrated	2	.00
05/22	12:17PM	318-473-2174	803-926-7549	COLUMBIA SC	Unrated	1	.00
05/22	12:19PM	318-473-2174	803-799-1244	COLUMBIA SC	Unrated	3	.00
05/22	12:24PM	318-473-2174	803-926-7549	COLUMBIA SC	Unrated	1	.00
05/22	12:31PM	318-473-2174	803-926-7549	COLUMBIA SC	Unrated	1	.00
05/24	11:29AM	318-473-2174	803-787-7429	COLUMBIA SC	Unrated	1	.00
05/24	04:25PM	318-473-2174	864-503-0545	SPARTANBG SC	Unrated	1	.00
Summary of Top 20 Most Expensive Calls						43	.00

Summary of Statement Totals

Total Count	Total Duration	Total Amount
26	51	.00

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display 20 Longest Calls Report:

My Account

Statements

Payments

Account

Device

Messages

Unbilled

Reports

View Account Reports

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Billing Accounts

Download

Printer Friendly

Account Number:

00486590

Statement Date:

05/04/04

DISPLAY

Account Reports

Device Reports

To view a report, select from the following options and click Display..

Display the selected report:

Top 20 longest calls

DISPLAY

Top 20 Longest Calls

SHOW/HIDE NAMES

Date	Time	Calling Number		Number Called	Destination	Type	Mins	Usage
05/15	07:52AM	397-894-2107		803-252-8824	COLUMBIA SC	Unrated	101	.00
06/03	09:57PM	397-894-2103		704-451-7665	INCOMING CL	Incoming call	33	11.55
05/15	01:12AM	397-894-2105		803-794-9719	INCOMING CL	Incoming call	22	.00
06/02	07:42PM	397-894-2103		843-332-1673	HARTSVILL SC	Rated	22	.70
05/14	05:20PM	397-894-2105		803-252-2253	COLUMBIA SC	Unrated	21	.00
05/10	10:03AM	397-894-2102		803-935-7500	INCOMING CL	Incoming call	20	.00
06/01	09:57AM	397-894-2106		803-425-6695	CAMDEN SC	Unrated	20	.00
05/25	02:30PM	397-894-2100		843-664-2635	FLORENCE SC	Unrated	19	.00
05/09	11:54PM	397-894-2105		720-587-9978	INCOMING CL	Incoming call	19	.00
05/13	06:00PM	397-894-2107		864-833-6550	CLINTON SC	Unrated	19	.00
05/28	01:38AM	397-894-2110		803-935-7492	INCOMING CL	Incoming call	18	6.30
05/25	06:04PM	397-894-2100		397-894-2104	INCOMING CL	Incoming call	17	.00
05/25	06:04PM	397-894-2104		397-894-2100	COLUMBIA SC	Unrated	17	.00
05/17	01:33PM	397-894-2100		803-935-6772	COLUMBIA SC	Unrated	16	.00
05/28	12:53PM	397-894-2100		803-935-6772	COLUMBIA SC	Unrated	16	.00
05/28	05:54PM	397-894-2105		803-798-0371	COLUMBIA SC	Unrated	16	.00
05/28	12:33PM	397-894-2107		864-833-6550	CLINTON SC	Unrated	16	.00
05/30	05:05AM	397-894-2112		803-935-7500	INCOMING CL	Incoming call	15	.00
05/04	12:47PM	397-894-2100		397-894-2107	COLUMBIA SC	Unrated	14	.00
05/05	04:54AM	397-894-2105		864-787-1274	INCOMING CL	Incoming call	14	.00

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display the 20 Most Called Numbers Report:



My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

[Download](#) [Printer Friendly](#)

View Account Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Select Report: Top 20 most called numbers [DISPLAY](#)

Top 20 Most Called Numbers				SHOW/HIDE NAMES
Number Called	Total Count	Total Duration	Total Amount	
803-926-7549	4	5	.00	
803-787-7429	4	4	.00	
704-451-8989	3	3	.00	
318-473-2174	2	5	.00	
803-782-7442	1	1	.00	
803-799-1244	1	3	.00	
615-790-9650	1	7	.00	
843-768-9323	1	11	.00	
803-782-7779	1	1	.00	
803-790-9172	1	1	.00	
803-691-8811	1	1	.00	
864-503-0545	1	1	.00	
803-359-0046	1	1	.00	
843-364-4382	1	2	.00	
803-256-6302	1	1	.00	
803-748-3027	1	3	.00	
803-604-1019	1	1	.00	

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display the 20 Most Expensive Called Numbers:



My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

[Download](#) [Printer Friendly](#)

View Account Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Select Report: Top 20 most expensive numbers called [DISPLAY](#)

Top 20 Most Expensive Numbers Called				SHOW/HIDE NAMES
	Number Called	Total Count	Total Duration	Total Amount
	803-748-3027	1	3	.00
	803-256-6302	1	1	.00
	803-691-8811	1	1	.00
	704-451-8989	3	3	.00
	803-787-7429	4	4	.00
	615-790-9650	1	7	.00
	803-790-9172	1	1	.00
	843-364-4382	1	2	.00
	803-926-7549	4	5	.00
	803-782-7442	1	1	.00
	864-503-0545	1	1	.00
	803-799-1244	1	3	.00
	803-359-0046	1	1	.00
	318-473-2174	2	5	.00
	803-782-7779	1	1	.00
	803-604-1019	1	1	.00
	843-768-9323	1	11	.00

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreeen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display 20 Most Called Destinations:



My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

[Download](#) [Printer Friendly](#)

View Account Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Select Report: Top 20 most called destinations
[DISPLAY](#)

Called Destination	Total Count	Total Duration	Total Amount
COLUMBIA SC	14	19	.00
INCOMING CL	4	7	.00
VOICEMAIL L	3	3	.00
CHARLESTO SC	2	13	.00
FRANKLIN TN	1	7	.00
SPARTANBG SC	1	1	.00
BATESBURG SC	1	1	.00

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Cost Summary by Call Type Report:



My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

View Account Reports [Download](#) [Printer Friendly](#)

Company Name: CellTec **Hierarchy Name:** N/A
User Name: Anne Green **Position Name:** N/A

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Select Report: Cost summary by call type [DISPLAY](#)

Cost Summary by Call Type

Call Type	Total Count	Total Duration	Total Amount
Incoming call	4	7	.00
Unrated	19	41	.00
Voicemail	3	3	.00

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Cost Summary by Month:

My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

[Download](#) [Printer Friendly](#)

View Account Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Select Report: Cost summary by month
[DISPLAY](#)

Cost Summary by Month

Month	Total Count	Total Duration	Total Amount
Jun	3	3	.00
May	23	48	.00

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Cost Summary by Time Period:

My Account Statement Payments

Account Device Messages Unbilled Reports

View Account Reports

Download Printer Friendly

Account Number:
61362310
Statement Date:
05/04/04
DISPLAY

Company Name: CellTec
User Name: Anne Green
Hierarchy Name: N/A
Position Name: N/A

Account Reports Device Reports

To view a report, select from the following options and click Display.

Select Report: Cost summary by time period DISPLAY

Cost Summary by Time Period

Call Type	12-8	8-9	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-12	Amt
Incoming call	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Unrated	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Voicemail	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Total	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

View Device Report (2920)

Name:	View Device Level Report
Brief Description:	Business User views a report for a specific device within their account.
Actors:	Business User
Main Path:	1. This use case begins when the user selects a device report to view. 2. System displays the report. [A1] 3. User changes the statement date. 4. System redisplay the previously selected report for the newly selected statement date. 5. User selects a different report and selects display action. [A2-A13] 6. System redisplay the selected report for the previously selected statement date. 7. Use case ends.
Alternate Paths:	[A1] There is no report data available for the selected report/statement date. 1. System displays a message stating that there is no data available. [A2] Report: Top 10 most expensive calls [A3] Report: 'Minutes by Destination' report [A4] Report: 'Minutes by Rate Period' report [A5] Report: 'Minutes by Call Type' report [A6] Report: 'Charges by Destination' report [A7] Report: 'Charges by Rate Period' report [A8] Report: 'Charges by Call Type' report [A9] Report: 'Calls by Destination' report [A10] Report: 'Calls by Rate Period' report [A11] Report: 'Call by Call Type' report [A12] Report: 'Calls by Called Number' report [A13] Report: 'Charges by Called Number' report [A14] Report: 'Minutes by Called Number' report [A15] Report: Top 10 longest call
Standard Features:	1. CSV & XML Download options 2. Print Friendly 3. Cancel action
Notes:	Additional formats such as PDF can be created through customization if needed.

Display Top 10 Most Expensive Calls:

My Account

Statement

Payments

Account

Device

Messages

Unbilled

Reports

Download

Printer Friendly

View Device Reports

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Account Reports

Device Reports

To view a report, select from the following options and click Display.

Phone Number: 318-473-2174

Select Report: Top 10 Most Expensive Calls

DISPLAY

Top Ten Most Expensive Calls

Top Ten Numbers	Destination	Charges
803-782-7779	COLUMBIA SC	0.00
704-451-8989	VOICEMAIL L	0.00
803-604-1019	BATESBURG SC	0.00
615-790-9650	FRANKLIN TN	0.00
803-256-6302	COLUMBIA SC	0.00
803-787-7429	COLUMBIA SC	0.00
843-768-9323	CHARLESTO SC	0.00
843-364-4382	CHARLESTO SC	0.00
318-473-2174	INCOMING CL	0.00
318-473-2174	INCOMING CL	0.00

Account Number: 61362310

Statement Date: 05/04/04

DISPLAY

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreen

Edit

Password: *****

Edit

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

→ View Last Statement

→ FAQs

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Minutes by Destination Report:

My Account **Statements** **Payments** **Self-Service**

Account Device Messages Unbilled **Reports**

View Device Reports [Download](#) [Printer Friendly](#)

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: N/A

Account Number: 00486590
Statement Date: 05/04/04
[DISPLAY](#)

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 77

User Information
Username: agreeen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

To view a report, select from the following options and click Display.

Phone Number: 397-894-2100

Display the selected report.: Minutes by Destination [DISPLAY](#)

SIEBEL

Minutes By Destination

Destination	Minutes
CLINTON SC	38
COLUMBIA SC	432
EASTOVER SC	5
FLORENCE SC	31
INCOMING CL	118
LANCASTER SC	12
LAURENS SC	3
NO AUGUST SC	4
SUMMERVL SC	6
VOICEMAIL L	12
Total	661

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Minutes by Rate Period:

My AccountStatementsPaymentsSelf-Service

AccountDeviceMessagesUnbilledReports

DownloadPrinter Friendly

View Device Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: N/A

Account Number: 00486590
Statement Date: 05/04/04
DISPLAY

Account ReportsDevice Reports

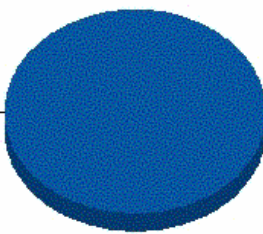
To view a report, select from the following options and click Display.

Phone Number: 397-894-2100

Display the selected report.: Minutes by Rate Period
DISPLAY

SIEBEL

100 %



Weekdays

Minutes by Rate Period	
Rate Period	Minutes
Weekdays	661
Total	661

CellTec

Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 77

User Information

Username: agreen Edit

Password: ***** Edit

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Minutes by Call Type:

My Account **Statements** **Payments** **Self-Service**

Account Device Messages Unbilled **Reports**

View Device Reports [Download](#) [Printer Friendly](#)

Company Name: CellTec **Hierarchy Name:** Billing Accounts
User Name: Anne Green **Position Name:** N/A

Account Number: 00486590
Statement Date: 05/04/04
[DISPLAY](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Phone Number: 397-894-2100

Display the selected report.: Minutes by Call Type [DISPLAY](#)

SIEBEL

■ Incoming ca
 ■ Voicemail
 ■ Unrated

Minutes By Call Type	
Usage Type	Minutes
Unrated	531
Voicemail	12
Incoming call	118
Total	661

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

CellTec
 Business Structures: 1
 Billing Accounts: 24
 Wireless Numbers: 77

User Information
Username
 agreen [Edit](#)
Password
 ***** [Edit](#)
Role
 Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Display Top 10 Longest Calls:

My Account

Statements

Payments

Account

Device

Messages

Unbilled

Reports

Download

Printer Friendly

Account Number:

00486590

Statement Date:

05/04/04

DISPLAY

View Device Reports

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Account Reports

Device Reports

To view a report, select from the following options and click Display.

Phone Number.

397-894-2100

Display the selected report.:

Top 10 Most Longest Calls

DISPLAY

Top Ten Longest Calls

Top Ten Numbers	Destination	Minutes
843-664-2635	FLORENCE SC	19
397-894-2104	INCOMING CL	17
803-935-6772	COLUMBIA SC	16
803-935-6772	COLUMBIA SC	16
397-894-2107	COLUMBIA SC	14
803-935-6772	COLUMBIA SC	13
803-898-9688	COLUMBIA SC	12
803-285-4368	LANCASTER SC	12
843-664-2635	FLORENCE SC	12
803-898-2723	COLUMBIA SC	11

CellTec

Business Structures: 4

Billing Accounts: 24

Wireless Numbers: 77

User Information

Username

agreen [Edit](#)

Password

***** [Edit](#)

Role

Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

→ [View Last Statement](#)

→ [FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Charges by Destination:

My AccountStatementPayments

AccountDeviceMessagesUnbilledReports

DownloadPrinter Friendly

View Device Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account ReportsDevice Reports

To view a report, select from the following options and click Display.

Phone Number: 318-473-2174

Select Report: Charges by Destination

DISPLAY

Usage By Destination

Destination	Charges
BATESBURG SC	\$0.00
CHARLESTO SC	\$0.00
COLUMBIA SC	\$0.00
FRANKLIN TN	\$0.00
INCOMING CL	\$0.00
SPARTANBG SC	\$0.00
VOICEMAIL L	\$0.00
Total	\$0.00

Account Number: 61362310

Statement Date: 05/04/04

DISPLAY

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreeen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)



Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Charges by Rate Period:



My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

[Download](#) [Printer Friendly](#)

View Device Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number: 00486590
Statement Date: 05/04/04
[DISPLAY](#)

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreean [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Phone Number: 397-894-2100

Select Report: Charges by Rate Period [DISPLAY](#)

Usage By Rate Period

Rate Period	Charges
Weekdays	\$0.00
Total	\$0.00

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Charges by Call Type:

My AccountStatementPayments

AccountDeviceMessagesUnbilledReports

DownloadPrinter Friendly

View Device Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account ReportsDevice Reports

To view a report, select from the following options and click Display.

Phone Number: 318-473-2174

Select Report: Charges by Call Type

DISPLAY

Charges By Call Type

Usage Type	Charges
Incoming call	\$0.00
Unrated	\$0.00
Voicemail	\$0.00
Total	\$0.00

Account Number: 61362310

Statement Date: 05/04/04

DISPLAY

CellTec

Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information

Username: agreen Edit

Password: ***** Edit

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

→ View Last Statement

→ FAQs

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Charges by Called Numbers:

My Account

Statement

Payments

Account

Device

Messages

Unbilled

Reports

Download

Printer Friendly

Account Number:

61362310

Statement Date:

05/04/04

DISPLAY

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Account Reports

Device Reports

To view a report, select from the following options and click Display.

Phone Number:

318-473-2174

Select Report:

Charges by Called Number

DISPLAY

Usage By Called Number

Called Number	Charges
318-473-2174	\$0.00
615-790-9650	\$0.00
704-451-8989	\$0.00
803-256-6302	\$0.00
803-359-0046	\$0.00
803-604-1019	\$0.00
803-691-8811	\$0.00
803-748-3027	\$0.00
803-782-7442	\$0.00
803-782-7779	\$0.00
803-787-7429	\$0.00
803-799-1244	\$0.00
803-926-7549	\$0.00
843-364-4382	\$0.00
843-768-9323	\$0.00
864-503-0545	\$0.00
Total	\$0.00

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreeen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Calls by Destination:

My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

View Device Reports [Download](#) [Printer Friendly](#)

Company Name: CellTec **Hierarchy Name:** N/A
User Name: Anne Green **Position Name:** N/A

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

CellTec
 Business Structures: 1
 Billing Accounts: 24
 Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Phone Number: 318-473-2174

Select Report: Calls by Destination [DISPLAY](#)

Total Calls

Destination

■ COLUMBIA SC ■ VOICEMAIL L ■ BATESBURG SC ■ FRANKLIN TN
 ■ CHARLESTO SC ■ INCOMING CL ■ SPARTANBG SC

Calls By Destination

Destination	Calls
BATESBURG SC	1
CHARLESTO SC	2
COLUMBIA SC	14
FRANKLIN TN	1
INCOMING CL	3
SPARTANBG SC	1
VOICEMAIL L	3
Total	25

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Calls by Rate Period:

My Account

Statement

Payments

Account

Device

Messages

Unbilled

Reports

Download

Printer Friendly

Account Number: 61362310

Statement Date: 05/04/04

DISPLAY

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

[FAQs](#)

View Device Reports

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Account Reports

Device Reports

To view a report, select from the following options and click Display.

Phone Number: 318-473-2174

Select Report: Calls by Rate Period

DISPLAY

SIEBEL

64%

36%

■ Weeknights and Weekends

■ Weekdays

Calls by Rate Period

Rate Period	Calls
Weekdays	16
Weeknights and Weekends	9
Total	25

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Calls by Call Type:

My Account **Statement** **Payments**

Account Device Messages Unbilled **Reports**

[Download](#) [Printer Friendly](#)

View Device Reports

Company Name: CellTec Hierarchy Name: N/A
User Name: Anne Green Position Name: N/A

Account Number: 61362310
Statement Date: 05/04/04
DISPLAY

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Phone Number: 318-473-2174

Select Report: Calls by Call Type **DISPLAY**

SIEBEL

Calls By Call Type

Usage Type	Calls
Incoming call	3
Unrated	19
Voicemail	3
Total	25

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Calls by Called Numbers:

My Account

Statement

Payments

Account

Device

Messages

Unbilled

Reports

Download

Printer Friendly

Account Number:

61362310

Statement Date:

05/04/04

DISPLAY

View Device Reports

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Account Reports

Device Reports

To view a report, select from the following options and click Display.

Phone Number:

318-473-2174

Select Report:

Calls by Called Number

DISPLAY

Calls By Called Number

Called Number	Calls
318-473-2174	2
615-790-9650	1
704-451-8989	3
803-256-6302	1
803-359-0046	1
803-604-1019	1
803-691-8811	1
803-748-3027	1
803-782-7442	1
803-782-7779	1
803-787-7429	4
803-799-1244	1
803-926-7549	4
843-364-4382	1
843-768-9323	1
864-503-0545	1
Total	25

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

[FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Display Minutes by Called Numbers:



View Device Reports

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Account Number: 61362310
Statement Date: 05/04/04
[DISPLAY](#)

[Download](#) [Printer Friendly](#)

Account Reports **Device Reports**

To view a report, select from the following options and click Display.

Phone Number: 318-473-2174

Select Report: Minutes by Called Number [DISPLAY](#)

Called Number	Minutes
318-473-2174	5
615-790-9650	7
704-451-8989	3
803-256-6302	1
803-359-0046	1
803-604-1019	1
803-691-8811	1
803-748-3027	3
803-782-7442	1
803-782-7779	1
803-787-7429	4
803-799-1244	3
803-926-7549	5
843-364-4382	2
843-768-9323	11
864-503-0545	1
Total	50

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

3.8 Payment Use Cases

A user can create a payment account (credit card or bank account) and then use that payment account to make a one-time payment or to setup a recurring payment. Users can only view or edit payment accounts and payment instructions which they previously created.

Payment use cases enable the following functionality:

- Create One-Time Payment (3000)
- Manage Recurring Payments (3100)
- Manage Payment Accounts (3200)
- View Payment Activity (3300)

Create One-Time Payment (3000)

Name:	Create One-Time Payment
Brief Description:	Business User completes a single online payment for one or more billing accounts. If the payment is for multiple billing accounts, the UI displays it as a single action with one MTID (master transaction ID), but actually submits the payment for each billing account as separate payments to the billing system to ease reconciliation.
Primary Actor:	Business User
Triggers	User selects the "Payments" \ "One Time Payment" menu options
Main Path:	<u>Display</u> 1. System retrieves list of available billing accounts based on user's assignments in the billing hierarchy and business structure hierarchies. 2. System (API) calls data store for balance due and due date and displays for each billing account. <u>Select & Confirm</u> 1. Select Payment Account (dropdown field of payment accounts previously created by the user [payment accounts created by other users are not displayed]) 2. Select Pay Date (text field with optional calendar popup) 3. Select Billing Accounts The Payment List threshold limit applies to this Use Case as noted in 4.5.2. The following fields are displayed: Billing Account, Amount Due, Due Date, and Pay Amount (defaults to amount due). Clicking any of the column headings (except pay amount) will sort the billing accounts on the value in that column. a. User selects each billing account on which to make a payment b. User optionally edits the pay amount. c. User selects the "add to list" action d. Selected billing accounts, pay amounts, and payment accounts are displayed in a separate table. 4. Confirm Selected Billing Accounts For each selected billing account the billing account number, pay amount, and payment account is displayed in a separate table. a. User removes any payments incorrectly added to the list b. User selects "Make Payment" action c. System displays confirmation request page with summary One-Time Payment data <u>Payment</u> 1. System calls ACH (ATM Verify) to verify payment account and receives successful response file [E2] 2. System displays a <i>Payment Confirmation</i> screen with the message of

	the form “Thank you for your payment. It is currently being processed. Please review the Payment Activity screen for an updated status in the next 24 hours.” [E3] 3. System splits each account into a separate payment transactions 4. System calls API to ensure the account is registered for payment, if not, indicator is updated in billing system 5. System creates a Master Transaction ID (MTID) as a primary key for all individual payment calls and stores the information. 6. System sends individual transaction(s) to the billing system by account (Save ACH API).
Alternate Path:	[A1] User selects New Payment Account 1. User is taken to the Payment Accounts page into the New Payment Account functionality. [A2] Select all 1. User selects to Pay all with this account (selects all and adds to list) and submits 2. A warning message is displayed, “Attention – you are selecting to pay all of your accounts with a One-Time Payment. If correct, please select Continue. If incorrect, please enter Cancel. NOTICE: At this time, accounts are limited to \$25,000 payments per day.” 3. User selects continue (or cancel to return to One-Time Payment screen). 4. System returns to Step 6 in the main path. [A3] Filter Billing Accounts <i>Rationale:</i> Enable user to filter the list of billing accounts displayed. 1. User selects “Filter By” criteria from a dropdown field a. Billing Account Number b. Due Amount and c. Due Date 2. From / To Range User enters a text value in the “From” and “To” fields to define the filter criteria value from which the billing accounts will be filtered. ◆ If both from and to are specified then the result is filtered so that the filtered field value is $\geq$ from and $\leq$ to ◆ If only from is specified then filtered field value is $\geq$ from ◆ If only to is specified then filtered field value is $\leq$ to ◆ If neither from nor to is specified then no filtering will happen even when a filter field is selected. 3. User selects filter action 4. System displays billing account based on the logic defined in step 2 above [E1] [A4] User enters amount greater than current amount due 1. The system limits the transaction to the total amount due [A5] User or System enters payment amount greater than \$25k 1. System displays confirmation request and highlights accounts that

	are more than \$25k (configurable). A message is displayed, "At this time, accounts are limited to \$25,000 payments per billing account per day. The affected accounts will apply a \$25,000 transaction limit." System limits transactions to \$25k per account. [A6] Duplicate Payment, Same Day 1. User attempts to make duplicate payment on an account that has already had an exact payment processed for that day. 2. System displays message, "The system cannot accept duplicate payments on the same day. Please try again tomorrow." [A7] System receives ACH failure 1. System displays payment failure message, "The ACH account could not be verified. Please review ACH payment account information and try again." [A8] System cannot submit payment / transaction fails 1. System does not perform transaction. [A9] Recurring Payment Window 1. If a recurring payment has previously been scheduled between the current date and the one-time payment date for any of the selected accounts, the user is presented with the following warning message: "Recurring payments are scheduled for the following accounts on the following dates. By confirming payment on this screen, a double payment could be made." {list accounts and dates below with a recurring payment between the current date and the one-time payment date} [A10] Select All 1. During step 3 of the main path, the user chooses the "Select All" action to select all payment accounts. User then selects "Add to List" action and continues with the main path. [A11] Retrieval Threshold Exceeded 1. If the user views a list of accounts and the {Retrieval Threshold} is exceeded, only the threshold limit is displayed and the user receives the following warning message: Display threshold exceeded. Only x of y records displayed. Please use the filtering feature on the right of the screen to search for a specific billing account."
Exception Path	[E1] User cancels transaction 1. System returns user to initial One-Time Payment screen. [E2] System cannot find billing account 1. System displays "Billing account not found" in the selection area
Standard Features:	1. Dynamic Subtotaling (page view only) 2. Total accounts per company < or = 999 3. Paging will include 15 billing accounts at a time (Configurable) 4. Confirmation summary totaling of payment transaction

	- Cancel action - Sorting
Configuration Points:	Max pay thresholds are configurable by company
Business Rules	- Pay Amount defaults to Current Balance - Users cannot pay more than the current balance due. - Payments at the account level are limited to \$25,000.00. If the amount is more than the limit, the max amount limit will be populated in the payment amount section. - Duplicate payments are not allowed for same day - same funding/payment account, payment amount and account number. Solution should address a user clicking submit in sub-seconds.
Notes:	- One-time Payments can take place immediately (no date). - Process/Failed payments will display on the Payment Status screen after payment has been processed by the billing system. - The minimum credit card payment amount is 1.00.

Create One-Time Payment Screen:

My Account

Statements

Payments

Self-Service

One-Time Payment

Recurring Payments

Payment Accounts

Payment Activity

One-Time Payment

Company Name: Company-3k

User Name: AminUser SamuelWilson

Hierarchy Name: Billing Accounts

Position Name: N/A

Step 1: Select Payment Account

Payment Account [New Payment Account](#)

Step 2: Select Pay Date

Pay Date (MM/dd/yyyy) 

Step 3: Filter Billing Account

* Filter By Account # [FILTER](#)

Step 4: Select Billing Accounts

Page of 20  

☐	Account Number	Amount Due	Due Date	Pay Amount
☐	80000000	55.83	06/03/04	55.83
☐	80000001	55.83	06/03/04	55.83
☐	80000002	55.83	06/03/04	55.83
☐	80000003	55.83	06/03/04	55.83
☐	80000004	55.83	06/03/04	55.83
☐	80000005	55.83	06/03/04	55.83
☐	80000006	55.83	06/03/04	55.83
☐	80000007	55.83	06/03/04	55.83
☐	80000008	55.83	06/03/04	55.83
☐	80000009	55.83	06/03/04	55.83
☐	80000010	55.83	06/03/04	55.83
☐	80000011	55.83	06/03/04	55.83
☐	80000012	55.83	06/03/04	55.83
☐	80000013	55.83	06/03/04	55.83
☐	80000014	55.83	06/03/04	55.83

[ADD TO LIST](#)

Step 5: Confirm Selected Billing Accounts

Account Number	Pay Amount
This is an empty table	

[REMOVE FROM LIST](#)

Step 6: Complete Payment

[CANCEL](#) [SUBMIT](#)

Company-3k

Business Structures: 1

Billing Accounts: 300

Wireless Numbers: 0

User Information

Username adminUser [Edit](#)

Password ***** [Edit](#)

Role Administrator

Quick Links

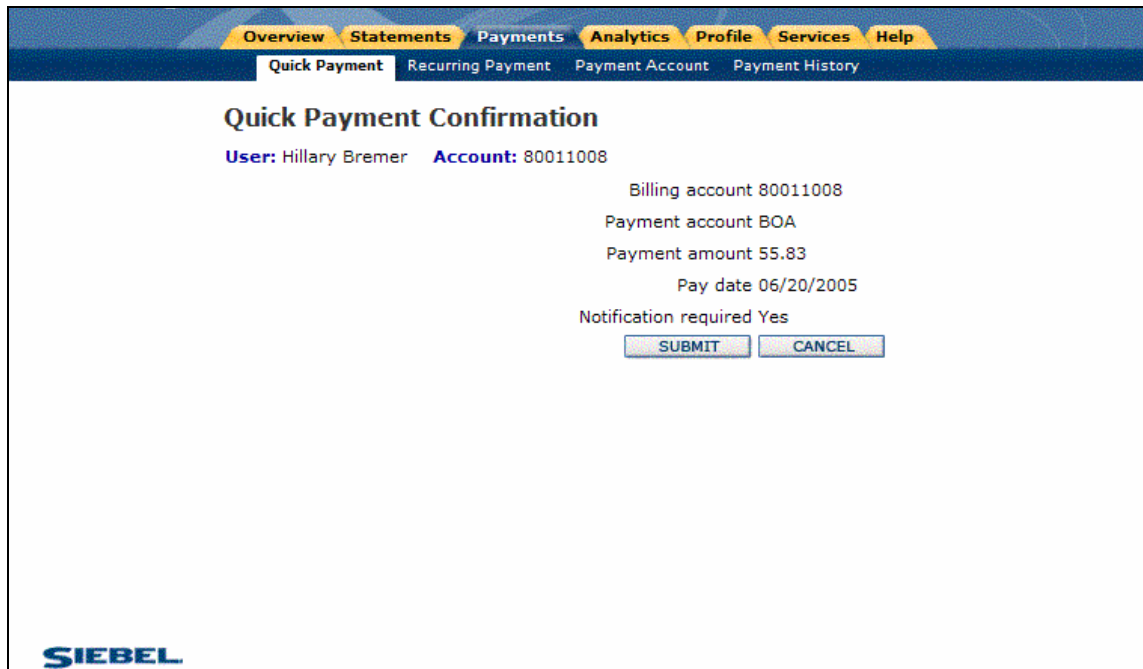
[View Last Statement](#)

[FAQs](#)



Copyright © 2005 Siebel Systems, Inc. All rights reserved.

One-Time Payment Status:



The screenshot shows the Siebel application interface for a 'Quick Payment Confirmation'. The top navigation bar includes tabs for Overview, Statements, Payments, Analytics, Profile, Services, and Help. Below this, a sub-navigation bar highlights 'Quick Payment' and includes links for 'Recurring Payment', 'Payment Account', and 'Payment History'. The main content area displays the title 'Quick Payment Confirmation' followed by user and account information: 'User: Hillary Bremer' and 'Account: 80011008'. A list of payment details is shown: 'Billing account 80011008', 'Payment account BOA', 'Payment amount 55.83', 'Pay date 06/20/2005', and 'Notification required Yes'. At the bottom of this section are two buttons: 'SUBMIT' and 'CANCEL'. The Siebel logo is located in the bottom left corner of the application window.

Quick Payment Confirmation

User: Hillary Bremer Account: 80011008

Billing account 80011008
Payment account BOA
Payment amount 55.83
Pay date 06/20/2005
Notification required Yes

SIEBEL

Manage Recurring Payments (3100)

Name:	Manage Recurring Payments
Brief Description:	Business user intends to pay charges automatically on a monthly basis and sets-up a recurring payment.
Actors:	Business user
Triggers	1. User selects Payments \ Recurring Payment menu option 2. User selects “Setup Automatic Payment” action from the My Account \ Overview (dashboard) page
Main Path:	<u>MAINTAIN RECURRING PAYMENT SCREEN</u> 1. The “Maintain Recurring Payment” page is displayed 2. Display Recurring Payments The recurring payments previously created by the user are displayed with the following column headings: a. Billing Account Number b. Amount Type (Total amount due, Total amount within X threshold, Fixed amount) c. Pay Interval (x days before due date, x day of the month [x is replaced with the value entered when the recurring payment was created]) d. Effective Period (Until canceled, X number of payments, Until x date) 3. User has the following options a. Delete selected recurring payment (for one billing account at a time) b. Edit selected recurring payment (for one billing account at a time) c. Setup recurring payment [continue with use case main path] 4. User selects the “New Recurring Payment” action <u>SETUP RECURRING PAYMENT SCREEN</u> 5. Select Payment Account (dropdown field of payment accounts previously created by the user [payment accounts created by other users are not displayed]) 6. Select Billing Accounts The Payment List threshold limit applies to this Use Case as noted in 4.5.2. The user selects the billing accounts to which the recurring payment will be applied.>> All billing accounts without existing recurring payments are displayed with checkboxes. 7. Select Pay Amount Options a. Total Amount Due [Default] b. Total Amount Within Threshold

	(user enters threshold amount and receives a notification if amount due exceeds threshold) c. Fixed Amount (user enters a fixed amount) 8. Payment Transfer Date User selects on an option below and enters a value for X a. X business days before due date b. On the X day of every month 9. Effective Period User defined the effective duration of the recurring payment, defining a value for X where specified. a. Until Canceled [Default] b. For X payments c. Until date X (text box and popup calendar) 10. User selects saves. 11. Confirmation Recurring Payment Confirmation page is displayed User can ◆ Modify the selected accounts ◆ Select cancel to return to the Maintain Recurring Payment screen without saving the recurring payment ◆ Select Confirm to save the recurring payment 12. After selecting confirm, the system validates information and stores the recurring payment details.[A2-A3] 13. System provides the User with a confirmation message and adds recurring payment to list of scheduled recurring payments. 14. Use case ends
--	--

Alternate Paths:**[A1] New Payment Account**

1. System takes user to Payment Accounts page and New Payment Account functionality

[A2] User enters a recurring payment that conflicts with an earlier scheduled recurring payment.

1. When the user selects the save action, the system displays a notification that a conflict exists with the new payment and a scheduled recurring payment and notifies the user that if the payment is scheduled, a double payment could occur.
2. User selects option to confirm or cancel payment.

[A3] User enters invalid information

1. System prompts the user to review the information and does not accept the transaction.

[A4] Search for Billing Account

Rationale: Enable user to filter the list of billing accounts displayed.

1. User selects "Filter By" criteria from a dropdown field
 - a. Billing Account Number
 - b. Last Statement Due Amount and
 - c. Last Statement Due Date
2. From / To Range
User enters a text value in the "From" and "To" fields to define the filter criteria value from which the billing accounts will be filtered.
 - ◆ If both from and to are specified then the result is filtered so that the filtered field value is $\geq$ from and $\leq$ to
 - ◆ If only from is specified then filtered field value is $\geq$ from
 - ◆ If only to is specified then filtered field value is $\leq$ to
 - ◆ If neither from nor to is specified then no filtering will happen even when a filter field is selected.
3. User selects filter action
4. System displays billing account based on the logic defined in step 2 above [E1]

[A5] View, edit scheduled recurring payments

This is identical to the main path except

1. Instead of displaying the billing accounts without recurring payments, only the billing accounts selected on the previous page are displayed.
2. If the recurring payments have different parameters selected, the parameters for the first selected billing account are displayed.

[A6] Delete scheduled recurring payments

1. User selects a billing account and the delete action.
2. System updates display with billing account removed.
3. User confirms.

[A7] Retrieval Threshold Exceeded

	1. If the user views a list of accounts and the {Retrieval Threshold} is exceeded, only the threshold limit is displayed and the user receives the following warning message: "Display threshold exceeded. Only x of y records displayed. Please use the filtering feature on the right of the screen to search for a specific billing account."
Standard Features:	1. Multiple payment accounts. 2. Email notification of payment event 3. Paging (will include 15 billing accounts at a time (Configurable)) 4. Sorting
Notes:	1. <i>View Payment Activity Limitation:</i> The current payment functionality is only able to display payments created by the current user. Preferred Solution: If configured with a company setting, any user with permission to view payment activity will be able to view any payment made against any billing account to which the user has access. (At this writing that was not possible) 2. Both bank and credit card accounts are permitted for recurring payments. 3. Payment Account and Cycle Date could come from Siebel or service provider data store. 4. All edits / updates are split into separate transactions as with recurring payment setup. 5. Digital signature can be configured to be last 4 of fed tax id and user's password. Service provider can confirm last four of the fed tax id against data store at the organization level and password from Internet Services to process payment. If digital signature and password do not match, error page is displayed. 6. The minimum credit card payment amount is 1.00.

Maintain Recurring Payments Screen:

My Account

Statements

Payments

One-Time Payment

Recurring Payments

Payment Accounts

Payment Activity

Manage Recurring Payments

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts

NEW RECURRING PAYMENT

Page 1 of 2

☐	Account Number	Amount Type	Pay Interval	Effective Period
☐	07655448	Total Amount Due	7 days before due	Until date 02/25/2006
☐	08654347	Total Amount Due with Threshold of 100	On the 10 day of month	Until Cancelled
☐	09677685	Total Amount Due with Threshold of 100	On the 10 day of month	Until Cancelled
☐	10756456	Total Amount Due	7 days before due	Until date 02/25/2006
☐	11599659	Total Amount Due with Threshold of 100	On the 10 day of month	Until Cancelled
☐	12876558	Total Amount Due with Threshold of 100	On the 10 day of month	Until Cancelled
☐	13875658	Total Amount Due	On the 20 day of month	Until Cancelled
☐	29006120	Total Amount Due	On the 1 day of month	Until Cancelled
☐	31569801	Total Amount Due	On the 20 day of month	Until Cancelled
☐	41251761	Total Amount Due with Threshold of 100	On the 10 day of month	Until Cancelled
☐	61362310	Total Amount Due with Threshold of 100	On the 10 day of month	Until Cancelled
☐	71385461	Total Amount Due	On the 20 day of month	Until Cancelled
☐	80011008	Total Amount Due	On the 1 day of month	Until Cancelled
☐	81441916	Total Amount Due	On the 1 day of month	Until Cancelled
☐	91459771	Total Amount Due	On the 20 day of month	Until Cancelled

DELETE

EDIT

CellTec

Business Structures: 4
 Billing Accounts: 24
 Wireless Numbers: 77

User Information

Username: agreeen [Edit](#)
 Password: ***** [Edit](#)
 Role: Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)
[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Setup a Recurring Payment Screen:

My Account

Statements

Payments

Self-Service

One-Time Payment

Recurring Payments

Payment Accounts

Payment Activity

Setup Recurring Payments

Company Name: Company-3k
User Name: AminUser SamuelWilson
Hierarchy Name: Billing Accounts
Position Name: N/A

Recurring Payment

Step 1: Complete Payment

*** Amount**
☒ Total amount
☐ Total amount with a threshold of
(you will be notified by e-mail if amount exceeds desired threshold)
☐ Fixed Amount of \$

*** Payment Transfer Date**
☒ business days before due date
☐ On day of every month

*** Effective Period**
☒ Until Cancelled
☐ For payments
☐ Until Date MM/dd/yyyy

Company-3k

Business Structures: 1
Billing Accounts: 300
Wireless Numbers: 0

User Information

Username
adminUser [Edit](#)

Password
***** [Edit](#)

Role
Administrator

Quick Links

→ [View Last Statement](#)

→ [FAQs](#)

Step 2: Select Payment Account

*** From Payment Account** [New Payment Account](#)

Step 3: Filter Billing Account

*** Filter By Account #** [FILTER](#)

Step 4: Select Billing Accounts

Page of 300 ▶

☐	Account Number
☐	80000000
☐	80000001
☐	80000002
☐	80000003
☐	80000004
☐	80000005
☐	80000006
☐	80000007
☐	80000008
☐	80000009
☐	80000010
☐	80000011
☐	80000012
☐	80000013
☐	80000014

[ADD TO LIST](#)

Step 5: Confirm Selected Billing Accounts

Account Number	
This is an empty table	

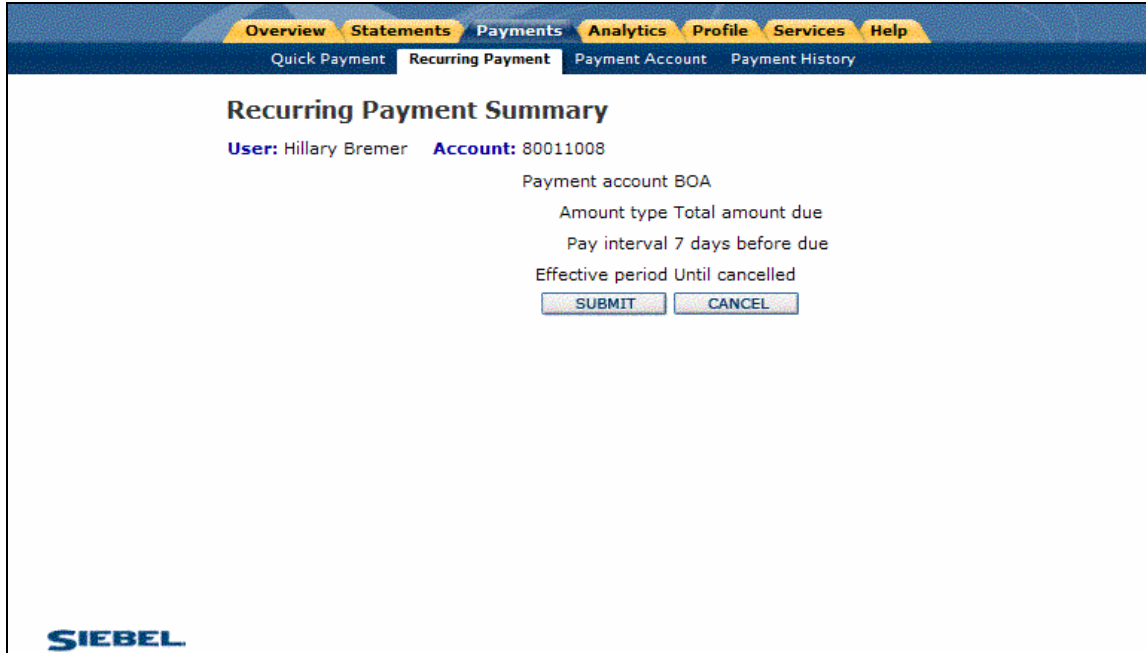
[REMOVE FROM LIST](#)

Step 6: Complete Payment

[CANCEL](#) [SAVE](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Recurring Payment Summary



Recurring Payment Summary

User: Hillary Bremer Account: 80011008

Payment account BOA

Amount type Total amount due

Pay interval 7 days before due

Effective period Until cancelled

SIEBEL



The Recurring Payment was set up successfully.

Recurring Payment

User: Hillary Bremer Account: 80011008

Recurring Payment Information			
Payment Account	AmountType	Pay Interval	Effective Period
BOA	Total Amount Due	7 days before due	Until Cancelled

SIEBEL

Edit Recurring Payment:

My AccountStatementsPayments

One-Time PaymentRecurring PaymentsPayment AccountsPayment Activity

Edit Recurring Payments

Company Name: CellTec Hierarchy Name: Billing Accounts
User Name: Anne Green

Recurring Payment

* From Payment Account

Corp Account

New Payment Account

Billing Accounts

☒ 91459771

Select All Deselect All

*Amount

☐ Total amount

☐ Total amount with a threshold of 0

(you will be notified by e-mail if amount exceeds desired threshold)

☒ Fixed Amount of \$50

*Payment Transfer Date

☐ 0 business days before due date

☒ On the 20 of every month

*Effective Period

☒ Until Cancelled

☐ For 0 payments

☐ Until Date MM/dd/yyyy

CANCEL

SAVE

CellTec

Business Structures: 4
Billing Accounts: 24
Wireless Numbers: 77

User Information

Username
agreen Edit

Password
***** Edit

Role
Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

[FAQs](#)

Edit Payment Confirmation Screen:

My Account

Statements

Payments

One-Time Payment

Recurring Payments

Payment Accounts

Payment Activity

Confirm Recurring Payment

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Billing Accounts

Recurring Payment

Payment Account Corp Account

Billing Accounts 91459771

Amount Type Fixed Amount of 50

Pay Interval on the 20 day of month

Effective Period Until Cancelled

CANCEL

CONFIRM

CellTec

Business Structures: 4

Billing Accounts: 24

Wireless Numbers: 77

User Information

Username agreen [Edit](#)

Password ***** [Edit](#)

Role Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[→ View Last Statement](#)

[→ FAQs](#)



Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Delete Recurring Payment Confirmation:

My Account

Statements

Payments

One-Time Payment

Recurring Payments

Payment Accounts

Payment Activity

Confirm Recurring Payment Deletion

Company Name: CellTec **Hierarchy Name:** Billing Accounts
User Name: Anne Green

Delete			
Account Number	Amount Type	Pay Interval	Effective Period
91459771	Fixed Amount of 50	On the 20 day of month	Until Cancelled

CANCELCONFIRM



CellTec

Business Structures: 4
Billing Accounts: 24
Wireless Numbers: 77

User Information

Username
agreen [Edit](#)

Password
***** [Edit](#)

Role
Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

→ [View Last Statement](#)

→ [FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Payment Accounts (3200)

Name:	Manage Payment Accounts
Brief Description:	Business user adds, edits, or deletes payment account information.
Actors:	Business user
Triggers	1. User selects Payments \ Accounts menu option 2. User selects "Add Payment Account" action from the "Create One-Time Payment" screen 3. User selects "Add Payment Account" action from the "Manage Recurring Payments" screen
Main Path:	(Main path describes adding a credit card account. Alternate paths address other types of accounts) 1. This use case begins when the user selects the Payment Accounts operation from the navigation menu. 2. System displays a list of existing payment accounts and the ability to add/edit/delete those accounts. 3. User selects to add a credit card account. [A1-A5] 4. System displays the form to add a credit card account that contains the following fields. a. Account Nickname b. Card Number c. Name on Card d. Card Type e. Expiration Date f. Card Verification Code g. Street Address (Line 1) h. Street Address (Line 2) i. City j. State k. Zip l. Country 5. User enters the information and saves the form. 6. System validates the information as being correct and updates the list of payment accounts.[A6] 7. Use case ends.
Alternate Paths:	[A1] New bank account. 1. System displays screen to add a bank account that contains the following information. a. Account Nickname b. Bank Name

	c. Account Number d. Routing Number e. Diagram of a check identifying the location of the bank account and routing number. 2. User enters the information and saves the form. 3. System validates the information as being correct and updates the list of payment accounts. [A2] Edit account. 1. System displays the edit account screen containing credit card or bank account editable fields showing the current information for the specified account. 2. User enters the information and saves the form. 3. System validates the information as being correct and updates the list of payment accounts. [A3] Delete account link. 1. System displays a Yes/No alert to ensure the user wants to delete the account. 2. System displays a confirmation screen. 3. System deletes the account and redisplay the screen. 4. Any recurring payments using the deleted payment account will be deleted. [A4] System is unable to validate the information. System displays error message to user informing them of the specific issue.
Standard Features:	1. Form validation 2. Bank or Credit Card
Notes:	1. <i>Payment Account Access Limitation:</i> Users are only able to view payment accounts which they created. This applies to viewing/editing payment accounts in this use case as well as selecting them in the one-time and recurring payment use cases. <i>Preferred Solution:</i> If configured with a company setting, any user who has permission to perform a function in a payment screen should have access to all payment accounts created by any user. (At this writing that was not possible)

Manage Payment Account Screen:

My Account

Statement

Payments

One-Time Payment

Recurring Payments

Payment Accounts

Payment Activity

Manage Payment Accounts

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Add New Account
Add a new payment account, or edit or delete an existing payment account.

NEW CREDIT CARD ACCOUNT
NEW BANK ACCOUNT

Current Payment Accounts

Description	Account Type	Account No.	Actions	
ING	Bank Account	XXXXXX0098	Edit	Delete
my bank	Bank Account	XXXXXXXX8910	Edit	Delete
Alumni Visa	Credit Card	XXXXXXXXXXXX5510	Edit	Delete
test2	Bank Account	XXXXXX0098	Edit	Delete

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username:
agreen [Edit](#)
Password:
***** [Edit](#)
Role:
Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)



Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Add a Credit Card Account:

My Account

Statement

Payments

One-Time Payment

Recurring Payments

Payment Accounts

Payment Activity

Add Credit Card Account

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Nick Name

Card Number

Name on Card

Account Type

Expiration Date Format

Expiration Date

Card Verification Code

Street

City

State

ZIP code

Country

Mastercard

MM/yyyy

CANCEL

SAVE

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreen

[Edit](#)

Password: *****

[Edit](#)

Role: Administrator

Highest Wireless Users

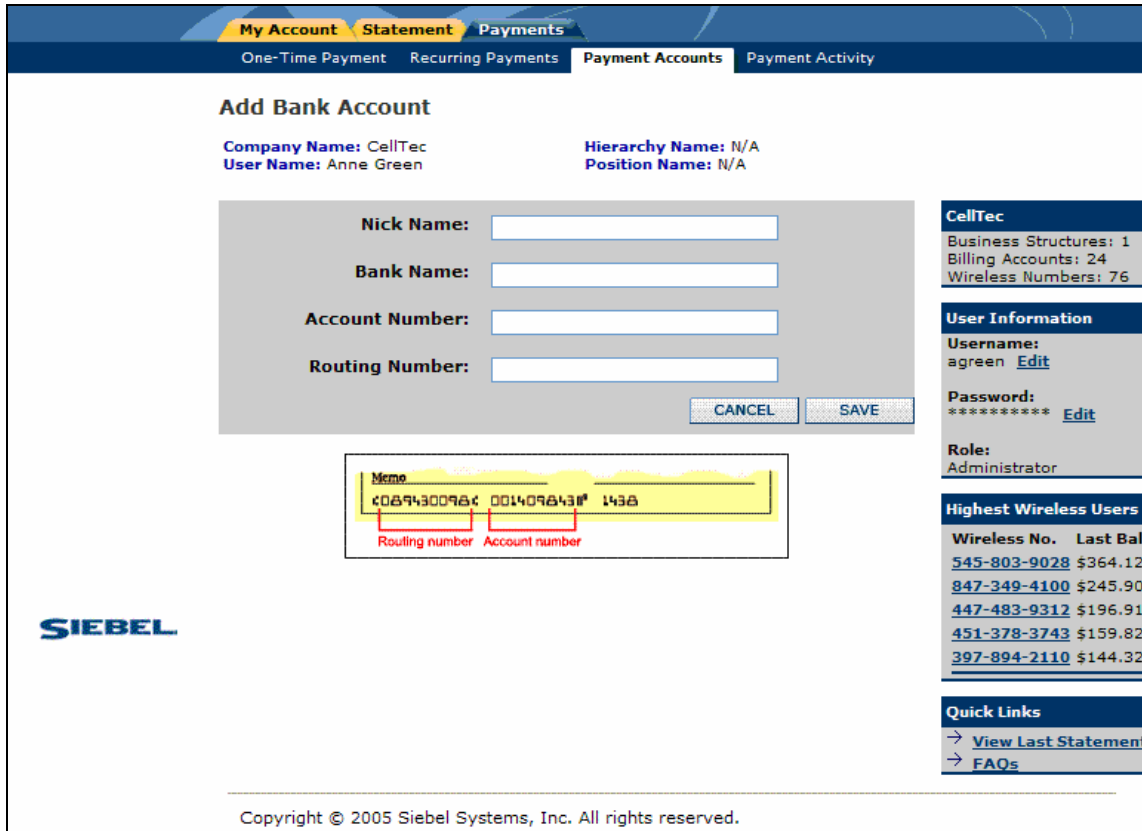
Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

→ [View Last Statement](#)

→ [FAQs](#)



Add a Bank Account:

Add Bank Account

Company Name: CellTec Hierarchy Name: N/A
User Name: Anne Green Position Name: N/A

Nick Name:

Bank Name:

Account Number:

Routing Number:

Memo: 00894300984 00140964311 1438
Routing number Account number

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[View Last Statement](#)
[FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

View Payment Activity (3300)

Name:	View Payment Activity
Brief Description:	Business user views a list of all online payments made by the user. Pending payments can be edited or cancelled.
Actors:	Business user
Main Path:	1. This use case begins when the User wishes to view payment activity and selects the Payment Activity operation. 2. System displays Payment Activity Screen that shows the scheduled (pending) payments and historic payment information including the current status. 3. Use case ends.
Alternate Paths:	[A1] Cancel pending payment. 1. System requests user to confirm and informs them that this operation will cancel the pending one-time or recurring payment schedule they have selected. [A2] Edit pending payment 1. System displays the payment details with the editable fields.

	2. User edits the information and submits the form. [A3] If MTID has multiple accounts, system displays a link to View Accounts.
Standard Features:	1. Cancel action 2. Paging 3. Sorting
Notes:	1. A recurring payment is a schedule of payments to be made. Once recurring payments are processed they become pending payments. 2. Edit Payment Instruction Limitation: Only the user who created a recurring or one-time payment can edit or delete it. This means that system intervention (OOTB, CSRs aren't given permission to modify any payment instructions) would be required if the creating user was no longer with the company nor able to share his login/password. <i>Preferred Solution:</i> If configured with a company setting, any user with a role with permission to edit payments and hierarchy access to the billing account to which the payment is against would be able to edit the payment instruction. (At this writing that was not possible)

Payment Activity Screen:

My Account
Statements
Payments

One-Time Payment
Recurring Payments
Payment Accounts
Payment Activity

Payment Activity

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

List of payments

Page 1 of 2 >

Transaction No.	Billing Accounts	Pay Date	Amount	Source	Status	Action
1107554948336	00486590	06/14/2005	1,509.84	①	scheduled	edit cancel
1113938304221	10756456	05/06/2005	235.42	①	scheduled	edit cancel
1113938116547	11599659	04/29/2005	49.92	①	scheduled	edit cancel
1114805371848	08654347	04/29/2005	206.83	①	failed_authorize	
1114805898366	05128140	04/29/2005	501.72	①	failed_authorize	
1114805296796	05696543	04/29/2005	15.11	①	failed_authorize	
1114181787839	07655448	04/29/2005	41.93	①	scheduled	edit cancel
1114805917259	05128140	04/29/2005	501.72	①	failed_authorize	
1114192205398	GROUP	04/28/2005	496.04	①	mixed	view details
1114192550935	GROUP	04/23/2005	20.87	①	scheduled	view details
1114109862959	14464399	04/21/2005	3.82	①	failed_authorize	
1114110031411	00486590	04/21/2005	2,509.84	①	failed_authorize	
1113938761093	GROUP	04/19/2005	2,390.69	①	failed_authorize	view details
1113601190431	00486590	04/15/2005	1,509.84	①	failed_authorize	
1113601457948	00486590	04/15/2005	1,509.84	①	failed_authorize	

① Instant Payment
① Schedule Payment

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Group Payment Activity:

My Account Statements Payments						
One-Time Payment Recurring Payments Payment Accounts Payment Activity						
Payment Activity Company Name: CellTec User Name: Anne Green Hierarchy Name: N/A Position Name: N/A						
List of payments for Transaction Number: 1114192205398						
List of payments for Transaction Number.	Billing Accounts	Pay Date	Amount	Source	Status	List of payments for Transaction Number Action
1114192205415	10756456	04/28/2005	235.42	⌚	scheduled	Edit Delete
1114192205668	11599659	04/28/2005	49.92	⌚	cancelled	
1114192205697	12876558	04/28/2005	210.70	⌚	scheduled	Edit Delete
Back to Payment Activity						
Copyright © 2005 Siebel Systems, Inc. All rights reserved.						

3.9 Hierarchy Use Cases

The hierarchy use cases allow administrators to grant users access to statement information by assigning them to specific billing accounts or devices. Users can also be assigned to folders, which give them access to all accounts and devices in the tree structure below their assigned folders.

Billing Account Hierarchies are created automatically during the billing feed and can not be modified except by assigning and assigning users. Therefore only the 'Details' and 'Users' tabs display in the right pane.

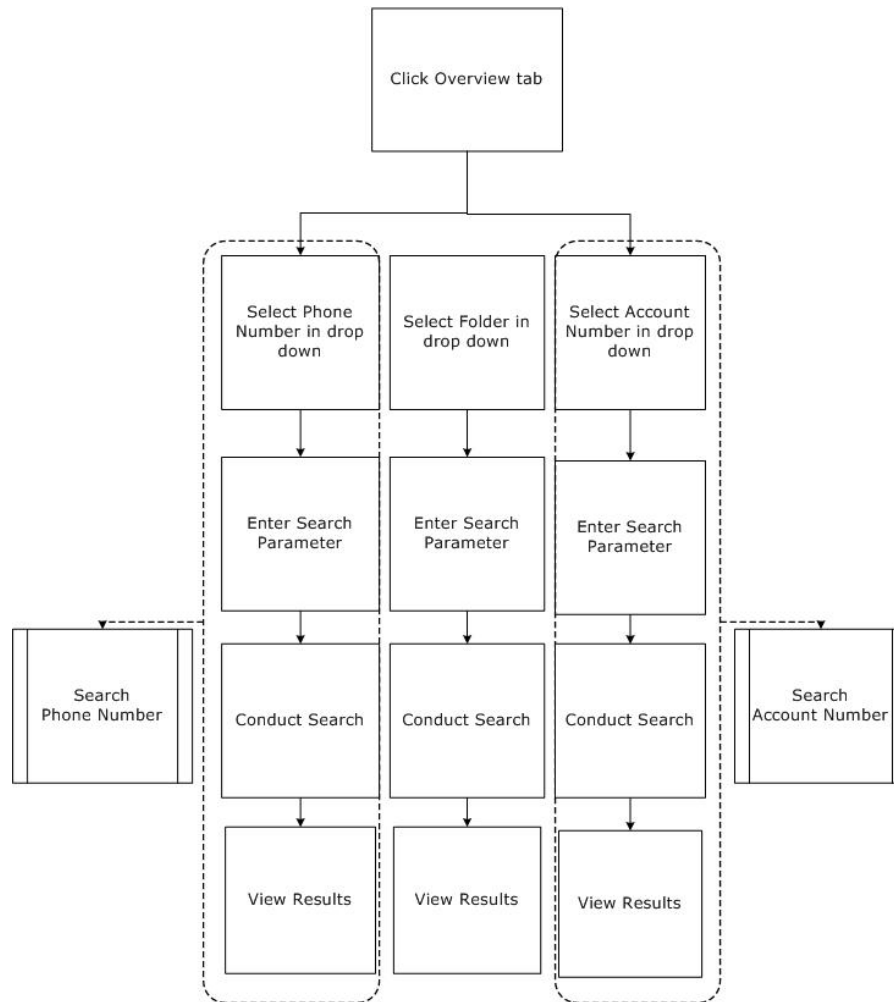
Billing Structure Hierarchies are manually created by a company administrator to resemble the different ways in which they view their organization (department, location, cost center, etc.). The administrator creates folders in a tree structure and then assigns accounts and devices to the folders. As is the case with Billing Account Hierarchies, users can be assigned to folders, accounts, and devices. If an account or device is selected in the left pane, only the 'details' and 'users' tabs display in the right pane (as is the case for billing hierarchies). If a folder is selected in the left pane the 'folders', 'accounts', and 'devices' tabs are displayed in the right pane in addition to the 'details' and 'users' tabs.

The following use cases describe the Hierarchy functionality:

- Manage Billing Accounts in Hierarchy (4000)
- Manage Billing Account Users in Hierarchy (4100)
- Manage Business Structures (4200)
- Manage Business Structure Users (4300)
- Manage Business Structure Folder Nodes (4400)
- Manage Business Structure Accounts (4500)
- Manage Business Structure Service Agreement (4600)
- Download Hierarchy (4700)

Manage Billing Accounts (4000)

Search Billing Hierarchy or Business Structure for Accounts or Devices:

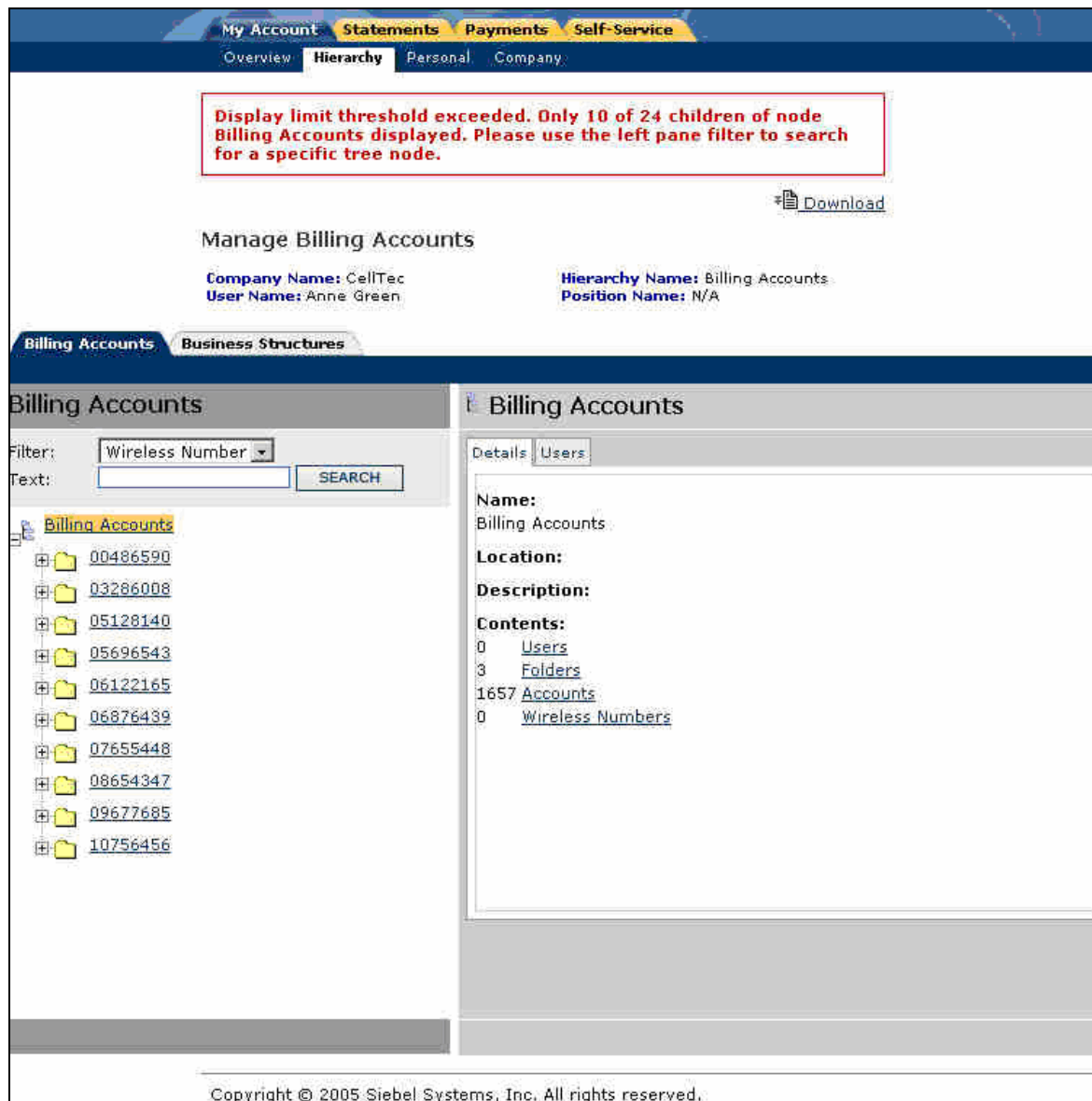


Name:	Manage Billing Accounts in Hierarchy
Brief Description:	The process of searching for folders, billing accounts, and devices from the billing hierarchy. The objective of this use case is to select a folder, account, or service agreement and then to assign/unassign users in the next use case.
Actors:	Administrator User
Trigger:	User clicks on the Hierarchy tab then clicks on Billing Accounts tab.
Pre-Condition:	1. User must have access to more than one viewable item (billing account or

	subscription). 2. User must have access to a Business Structure with at least one folder to conduct a Folder search.
Main Path:	1. This use case begins when the Administrator wishes to search accounts from the billing hierarchy. 2. System displays a page showing the existing billing hierarchy. The billing hierarchy presented also displays search options: a) User selects to search for an account or device in the billing hierarchy.[A3-A4] 3. User enters search criteria value and submits, options include a. Folder name b. Account Number c. Device 4. System displays search results. The user can navigate the tree structure by expanding and collapsing tree nodes. When expanding a node, any sibling node already expanded will be collapsed. Any parent node will remain expanded. When a user selects a node in the tree structure that node becomes the focus and it appears as a label at the top of the right pane to indicate any action taken with the buttons at the bottom of the screen will be performed on that node in the hierarchy. <i>Note:</i> The user can also change the focus by clicking on a hyperlinked folder, account, or service agreement in the respective right pane tab. 5. Use case ends.
Alternate Paths:	[A1] System cannot find business object. System displays message informing the User of the problem and allows them to correct it. [A2] Accounts Exceed {Display Threshold Hierarchy Tree} If the number of accounts to which the user has access exceeds the {Display Threshold Hierarchy Tree} configuration setting, than the default view for this screen does not expand the root tree node. [A3] Search Hierarchy Tree Execute same alternate path as described in use case 4200, “Manage Business Structure”, alternate path [A6] “Search Hierarchy Tree”. [A4] Expanding Tree Exceeds {Display Threshold Hierarchy Tree} If the user expands the left pane hierarchy tree and the {Display Threshold Hierarchy Tree} threshold is reached, only the threshold limit is displayed. To avoid confusion the following warning message is displayed at all times that a subset of the total number of records are displayed on the screen. “Display limit threshold exceeded. Only x of y records displayed. Please use the search feature at the top of the screen to search for a specific tree node.” If the user later performs a search, the above warning message will be

	replaced by the one described in [A3] “search hierarchy tree”. Note: When a user expands a node in the tree, any sibling node previously expanded is collapsed. Any parent node is left expanded. The {Display Threshold Hierarchy Tree} configuration setting applies to the cumulative total of hierarchy tree nodes left expanded.
Standard Features:	1. Form validation 2. Account creation validation 3. Download Hierarchy (UC 4700)

Manage Billing Accounts - Details:



My Account Statements Payments Self-Service

Overview Hierarchy Personal Company

Display limit threshold exceeded. Only 10 of 24 children of node Billing Accounts displayed. Please use the left pane filter to search for a specific tree node.

Download

Manage Billing Accounts

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: N/A

Billing Accounts Business Structures

Billing Accounts

Filter: Wireless Number
Text:

- Billing Accounts
 - 00486590
 - 03286008
 - 05128140
 - 05696543
 - 06122165
 - 06876439
 - 07655448
 - 08654347
 - 09677685
 - 10756456

Billing Accounts

Details Users

Name:
Billing Accounts

Location:

Description:

Contents:

- 0 [Users](#)
- 3 [Folders](#)
- 1657 [Accounts](#)
- 0 [Wireless Numbers](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Billing Account – Unassign Users:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

Download

Billing Accounts - Users

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Billing Accounts

Billing Accounts

Business Structures

Search Options

Billing Accounts

Wireless Number

SEARCH

Billing Accounts

Billing Accounts

00486590

03286008

05128140

05696543

06122165

06876439

07655448

08654347

09677685

10756456

11599659

12876558

13875658

14464399

29006120

31569801

41251761

Details

Users

View: Assigned

Filter: First Name

Filter:

REFRESH

☐ Rachel Abraham

☐ Mark Bateman

☐ Anne Green

☐ Greg Farnsworth

☐ Edward Victory

☐ Louis Louie

UNASSIGN

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Billing Account – Assign Users:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

Download

Billing Accounts - Users

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Billing Accounts

Billing Accounts

Business Structures

Search Options

Billing Accounts

Wireless Number

SEARCH

Billing Accounts

Billing Accounts

00486590

03286008

05128140

05696543

06122165

06876439

07655448

08654347

09677685

10756456

11599659

12876558

13875658

14464399

29006120

31569801

41251761

Billing Accounts

Details

Users

View: Unassigned

Filter: First Name

Filter:

REFRESH

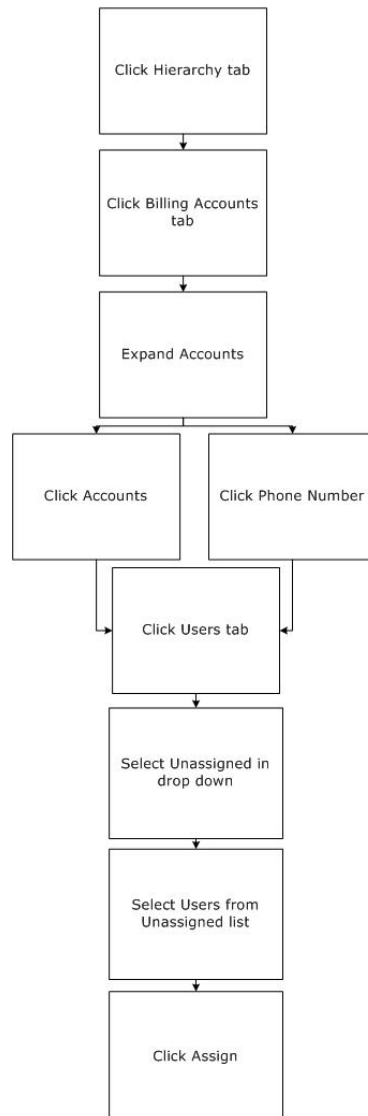
☐ Harry Trueblood
 ☐ Quentin Latifah
 ☐ Ichabod Crane
 ☐ Chris Carter
 ☐ John Smith
 ☐ Oliver Zapata
 ☐ Test User
 ☐ Susan Waters
 ☐ Karen Valentine
 ☐ Peter Peterson
 ☐ Tom Adams
 ☐ Dave Reichert

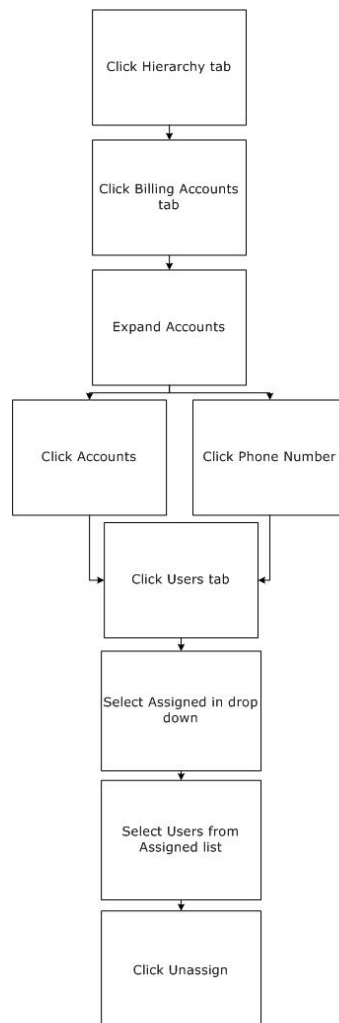
ASSIGN

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Billing Account Users (4100)

Assign Users Access to View Account or Individual Phone Information in Billing Accounts:

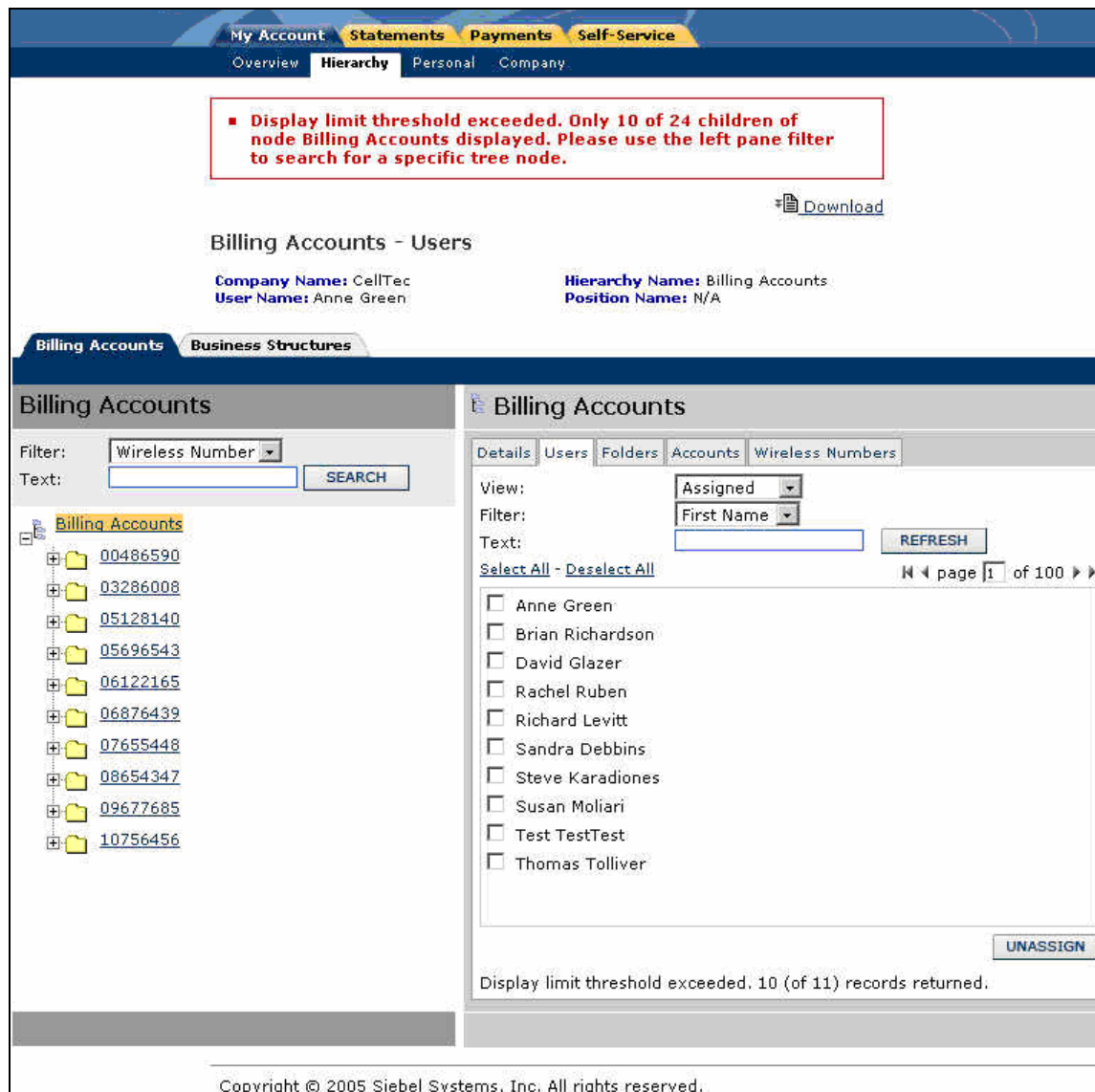


Unassign Users Access to View Account or Individual Phone Information in Billing Accounts:

Name:	Manage Billing Account Users in a Hierarchy
Brief Description:	The process of searching for, assigning or unassigning users to the billing hierarchy folders, accounts, and devices. This use case is identical to the Manage Business Structures Use Case
Actors:	Administrator User
Trigger:	User clicks on the Hierarchy tab, clicks on Billing Accounts tab, then expands Accounts.
Preconditions	User has selected a Billing Account or Subscription in the Billing Structure, or User has selected a Billing Account, Subscription, or Folder in a Business Structure under the Business Structure subtab
Main Path:	See Manage Business Structure Use Case.

	All actions are identical and the screens are nearly identical except that the screen titles differ (“Manager Billing Account” vs. “Manage Business Structure” and the right pane only displays a “details” and “users” tab.
Alternate Paths:	[A1] Assign User 1. {see “Manage Business Structure Users” use case} [A2] Un-assign User 2. {see “Manage Business Structure Users” use case} [A3] If no users exist in system, then the user has the option to enroll a new user. [A4] Right Pane Threshold Exceeded If the user selects a folder in the left pane and the {Display List Threshold} in the right pane is exceeded, only the threshold limit is displayed. To avoid confusion the following warning message is displayed in red at the bottom of the right pane at all times. “Threshold exceeded. X (of y) records displayed” <i>Note:</i> This warning message is generic and the same business logic and message can be applied to all business structure right panes (folders, accounts, service agreements). [A5] Paging When Display List Threshold is less than the Retrieval Threshold If the service provider sets the {retrieval threshold} higher than the {display list threshold}, the user will not receive a warning message until the {retrieval threshold} is exceeded. Once the {Display List Threshold} is exceeded, paging will be implemented. <i>Rationale:</i> Limit the frequency that a user receives a message that not all records were displayed.
Standard Features:	Form validation Download Hierarchy (UC 4700)
Notes:	None
Questions:	

Manage Billing Account – Users:



My Account | **Statements** | **Payments** | **Self-Service**

Overview | **Hierarchy** | Personal | Company

■ **Display limit threshold exceeded. Only 10 of 24 children of node Billing Accounts displayed. Please use the left pane filter to search for a specific tree node.**

[Download](#)

Billing Accounts - Users

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: N/A

Billing Accounts | **Business Structures**

Billing Accounts

Filter: SEARCH

Text:

Billing Accounts

- 00486590
- 03286008
- 05128140
- 05696543
- 06122165
- 06876439
- 07655448
- 08654347
- 09677685
- 10756456

Billing Accounts

Details | **Users** | Folders | Accounts | Wireless Numbers

View:

Filter:

Text:

REFRESH

Select All - Deselect All

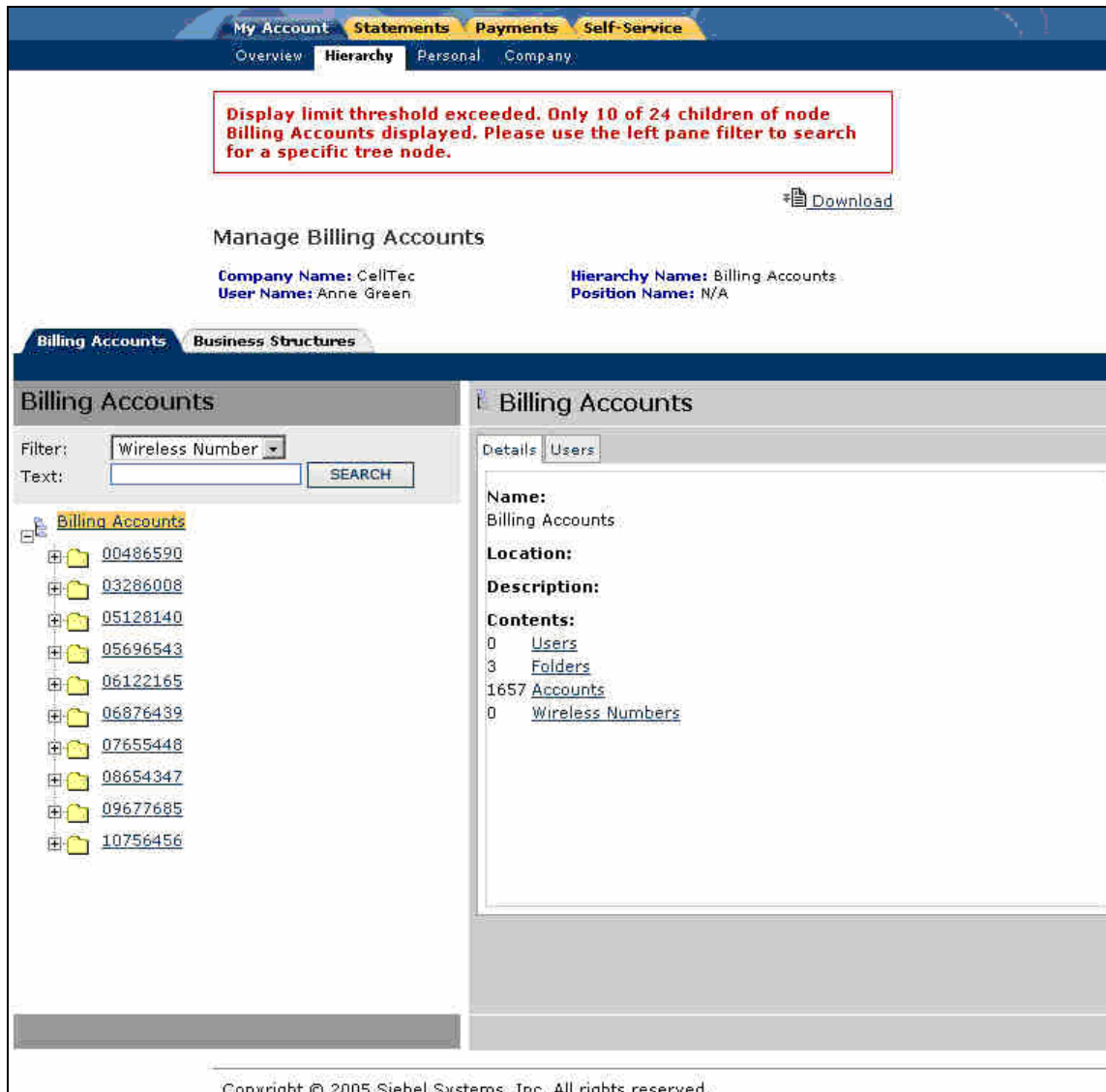
page 1 of 100

- ☐ Anne Green
- ☐ Brian Richardson
- ☐ David Glazer
- ☐ Rachel Ruben
- ☐ Richard Levitt
- ☐ Sandra Debbins
- ☐ Steve Karadiones
- ☐ Susan Moliari
- ☐ Test TestTest
- ☐ Thomas Tolliver

UNASSIGN

Display limit threshold exceeded. 10 (of 11) records returned.

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Billing Account – Details:

My Account Statements Payments Self-Service

Overview Hierarchy Personal Company

Display limit threshold exceeded. Only 10 of 24 children of node Billing Accounts displayed. Please use the left pane filter to search for a specific tree node.

Download

Manage Billing Accounts

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Billing Accounts
Position Name: N/A

Billing Accounts Business Structures

Billing Accounts

Filter: Wireless Number
Text: SEARCH

Billing Accounts

- 00486590
- 03286008
- 05128140
- 05696543
- 06122165
- 06876439
- 07655448
- 08654347
- 09677685
- 10756456

Details Users

Name:
Billing Accounts

Location:

Description:

Contents:
0 Users
3 Folders
1657 Accounts
0 Wireless Numbers

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Billing Account - Assign Users in Hierarchy:

The screenshot shows the Siebel Billing Manager application interface. At the top, there are tabs for 'My Account', 'Statements', and 'Payments'. Below these are sub-tabs for 'Overview', 'Hierarchy', 'Personal', and 'Company'. The main heading is 'Billing Accounts - Users'. Below this, it shows 'Company Name: CellTec' and 'User Name: Anne Green'. There is a 'Download' link. The page is divided into two main sections: 'Billing Accounts' on the left and '05128140' on the right. The 'Billing Accounts' section shows a tree view of billing accounts, including '00486590', '03286008', '05128140', and several others. The '05128140' section shows a 'Details' tab and a 'Users' tab. The 'Users' tab displays a list of users with checkboxes for selection. The list includes: Harry Trueblood, Quentin Latifah, Ichabod Crane, Chris Carter, John Smith, Oliver Zapata, Test User, Susan Waters, Karen Valentine, Peter Peterson, Tom Adams, and Dave Reichert. There are 'View', 'Filter', and 'Filter:' fields at the top of the user list, and a 'REFRESH' button. An 'ASSIGN' button is at the bottom right of the user list.

Billing Accounts - Users

Company Name: CellTec
User Name: Anne Green

Billing Accounts **Business Structures**

Search Options

Billing Accounts Wireless Number SEARCH

Billing Accounts

05128140

Details Users

View: Unassigned
Filter: First Name
Filter: REFRESH

☐ Harry Trueblood
☐ Quentin Latifah
☐ Ichabod Crane
☐ Chris Carter
☐ John Smith
☐ Oliver Zapata
☐ Test User
☐ Susan Waters
☐ Karen Valentine
☐ Peter Peterson
☐ Tom Adams
☐ Dave Reichert

ASSIGN

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Billing Account - Unassign Users in Hierarchy:

My Account

Statements

Payments

OverviewHierarchyPersonalCompany

Download

Billing Accounts - Users

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Billing Accounts

Billing Accounts

Business Structures

Search Options

Billing Accounts

Wireless Number

SEARCH

Billing Accounts

05128140

DetailsUsers

View: Assigned

Filter: First Name

Filter:

REFRESH

No user found. [Add a new user](#)

UNASSIGN

Billing Accounts

00486590

03286008

05128140

05128140

451-378-3743

451-472-4956

451-938-2734

05696543

06122165

06876439

07655448

08654347

09677685

10756456

11599659

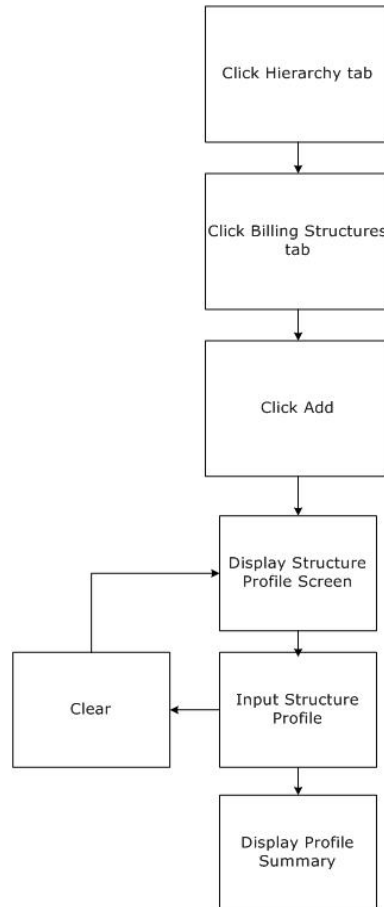
12876558

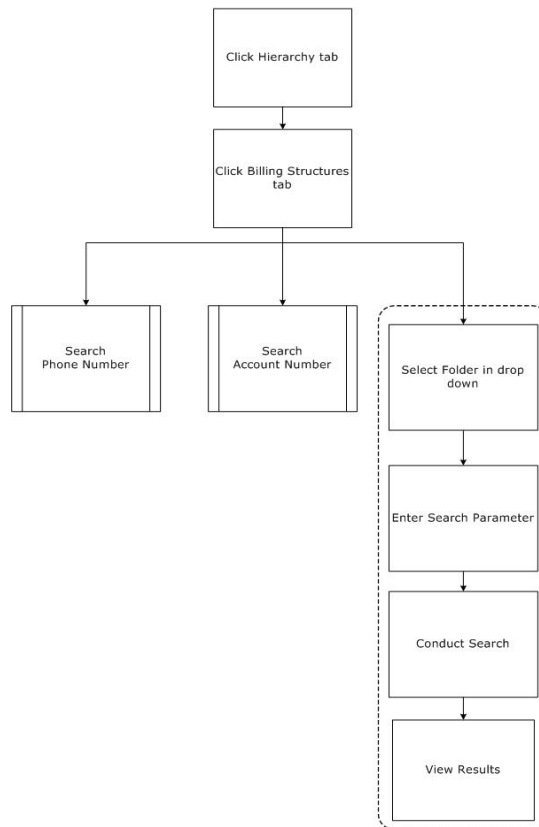
13875658

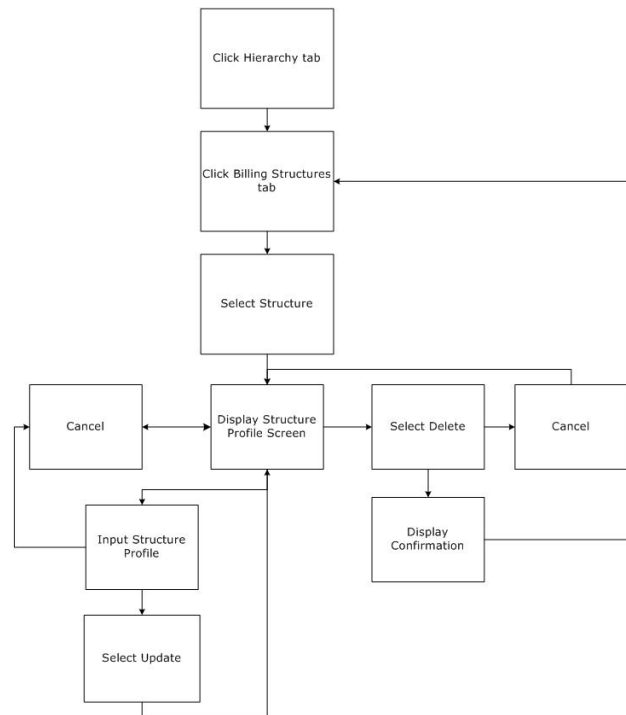
Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Business Structures (4200)

Create New Structure:



Search for Accounts, Folders, or Device:

Modify Existing Structure:

Name:	Manage Business Structures
Brief Description:	The process of searching for folders, billing accounts, and devices from the business structures.
Primary Actor	Administrator User
Trigger:	User clicks on the Hierarchy tab, clicks on Billing Structures tab
Preconditions	Organization and Accounts exist.
Main Path:	1. System displays a page showing the existing business structures along with a method to add a new business structure. [A1 - A2] 2. User selects to create a new business structure. 3. System prompts the user to enter attribute(s) for the business structure including: a. Display Name b. Description 4. User enters a name and attribute(s) for the business structure and submits. 5. System validates information to be correct.[A3] The user can navigate the tree structure by expanding and collapsing tree nodes. When expanding a node, any sibling node already expanded will be collapsed. Any parent node will remain expanded.

	When a user selects a node in the tree structure that node becomes the focus and it appears as a label at the top of the right pane to indicate any action taken with the buttons at the bottom of the screen will be performed on that node in the hierarchy. <i>Note:</i> The user can also change the focus by clicking on a hyperlinked folder, account, or service agreement in the respective right pane tab.
Alternate Paths:	[A1] Edit Business Structure 1. User selects to edit the attributes of an existing business structure 2. User selects the name of the business structure. 3. System displays in the right pane the attributes currently associated to the selected business structure. 4. User modifies one or more attributes of the business structure and selects update. 5. System validates information to be correct. 6. System displays confirmation that the business structure has been modified. [A2] Delete business structure. 1. User selects the name of the business structure. 2. System displays in the right pane the attributes currently associated to the selected business structure. 3. User selects delete action. 4. User confirms delete action. 5. System removes the selected business structure and displays a confirmation. [A3] System determines one or more items are missing or invalid. 1. System displays message informing the User of the problem and allows them to correct it. [A4] Create new Business Structure(s) 1. System displays a page showing the existing business structures along with a method to add a new business structure. [A1 - A2] 2. User selects to create a new business structure. 3. System prompts the user to enter attribute(s) for the business structure including: a. Display Name b. Description 4. User enters a name and attribute(s) for the business structure and submits. System validates information to be correct.[A3] [A5] System cannot find business object. System displays message informing the User of the problem and allows them to correct it.

[A6] Search Hierarchy Tree

The user can search for specific nodes in the hierarchy and display the results in a tree structure in the left pane.

Rationale: Quickly find an item in a large hierarchy or display a specific subset of the hierarchy if a display threshold prevents the entire hierarchy from being displayed.

Detailed Steps:

1. Search Parameter

User selects from a drop-down field the object for which to search within the business structure, options include:

- i. Folders
- ii. Accounts
- iii. Service Agreement

2. Search Criteria

User enters search text for the parameter selected above.

Note: the user can enter “*” wild card characters.

3. Display results

The results are displayed in the left pane in a tree structure.

If Folder Search:

- a. Return all folders matching the search criteria (search result).
- b. Display the search result folders within their parent (and grandparents...) folders so that they are logically grouped. Do not display sibling folders of the search result folders unless they are parents of other search result folders.
- c. Return all folders, service agreements, and accounts that are contained below the search result folders (not above).

If Account Search:

- a. Return all accounts matching the search criteria.
- b. Display the returned accounts within their parent (and grandparents...) folders so that they are logically grouped.
- c. Do not return any service agreements also in the displayed folders.

4. If Service Agreement Search

- a. Return all service agreements matching the search criteria.
- b. Display the returned service agreements within their parent (and grandparents...) folders so that they are logically grouped.
- c. Do not return any accounts also in the displayed folders

5. Search Result Initially Displays Folders Only

Whether the user enters a folder, account, or service agreement search parameter, the left pane hierarchy tree initially will only display folders one level down from the root. The user needs to select or expand the folders to navigate the search results. If a folder expansion results in the {display hierarchy tree threshold}

	being exceeded, the user is presented with a warning message that not all records can be displayed and they may need to narrow the search criteria or view child nodes in the right pane. 6. Main Path Once the filtered left pane displays, the user navigates the tree structure in the same manner as the main path. 7. Clear Search User selects the “clear search” action to clear the search and display the entire hierarchy tree structure. Note, that initially only the first level below the root node is displayed and the display is limited to the {Display Threshold Hierarchy Tree} <u>Alternate Path Notes:</u> 1. Unassigned Service Agreements and accounts: Because the hierarchy search limits which folders, accounts, and service agreements are displayed in the left pane it therefore limits what is displayed in the right pane. However, if the user selects the “unassigned” radio button in the right pane, all unassigned accounts or service agreements are displayed regardless of the hierarchy search criteria. 2. Assign Service Agreement or Account: If after performing a left pane hierarchy search, the user selects a folder and assigns an account or service agreement to the selected folder, the account or service agreement will not be displayed in the hierarchy if it does not match the hierarchy search criteria. The user would need to clear the search criteria to see the account or service agreement just assigned. [A6] Expanding Tree Exceeds {Display Threshold Hierarchy Tree} If the user expands the left pane hierarchy tree and the {Display Threshold Hierarchy Tree} threshold is reached, only the threshold limit is displayed. To avoid confusion the following warning message is displayed at all times that a subset of the total number of records are displayed on the screen. Display limit threshold exceeded. Only x of y records displayed. Please use the left pane filter to search for a specific tree node.” Note: that when a user expands a node in the tree, any sibling node previously expanded is collapsed. Any parent node is left expanded. The {Display Threshold Hierarchy Tree} configuration setting applies to the cumulative total of hierarchy tree nodes left expanded.
Exception Path:	None
Standard Features:	Form Validation Download Hierarchy (UC 4700)
Business Rules:	Please reference the display thresholds noted in 4.5.2 that need to be applied to this Use Case.
Notes:	This use case is restricted to users at the root level of an organization

Add Business Structure:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

Download

Business Structures - Add Business Structure

Company Name: CellTec

Hierarchy Name: N/A

User Name: Anne Green

Billing Accounts

Business Structures

Select Folders, Accounts or Wireless Numbers in structure below to modify details, authorize users, add, delete folders, assign, unassign accounts and wireless numbers.

Search Options

tbttest

Wireless Number

SEARCH

Business Structures

+

tbttest

+

test

+

testing

Create a new Business Structure.

Name:

Description:

CLEAR

CREATE

Create a new Business Structure

NEW

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Edit Business Structure:

My AccountStatementsPayments

OverviewHierarchyPersonalCompany

Download

Business Structures - Edit Business Structure

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: tbmtest

Billing AccountsBusiness Structures

Search Options

tbmtestWireless Number

SEARCH

Business Structures

+ tbmtest

+ test

+ testing

NEW

tbmtest

Name: tbmtest

Description:

CANCEL

UPDATE

DELETE

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Business Structure Details:

My Account Statements Payments Self-Service

Overview Hierarchy Personal Company

Download

Manage Business Structure - Details

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: Test
Position Name: N/A

Billing Accounts Business Structures

Business Structures

Filter: Wireless Number
Text: SEARCH

Test GO

Test

Details Users Folders Accounts Wireless Numbers

Name:
Test

Location:

Description:

Contents:

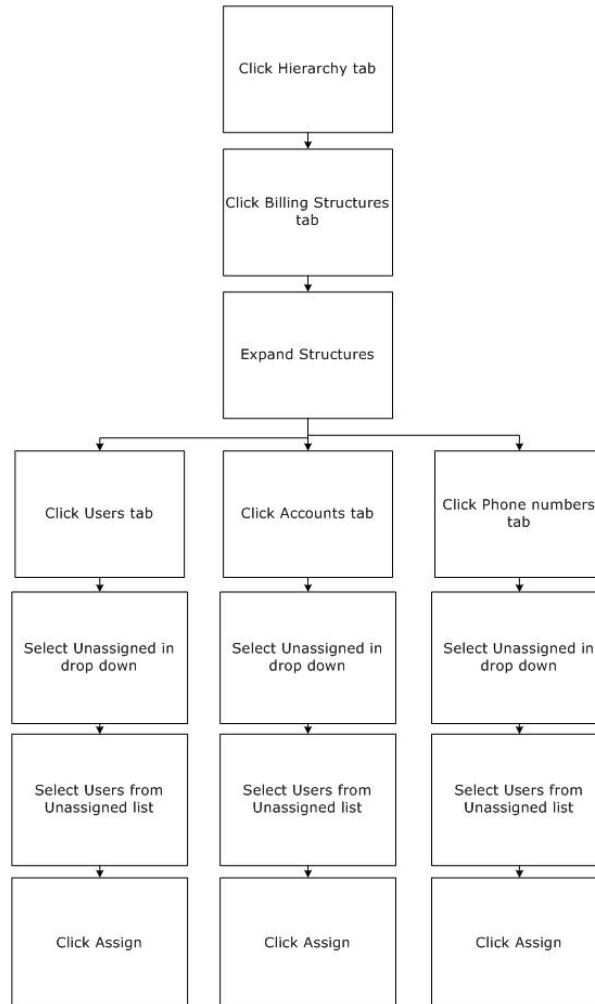
- 0 [Users](#)
- 3 [Folders](#)
- 1657 [Accounts](#)
- 0 [Wireless Numbers](#)

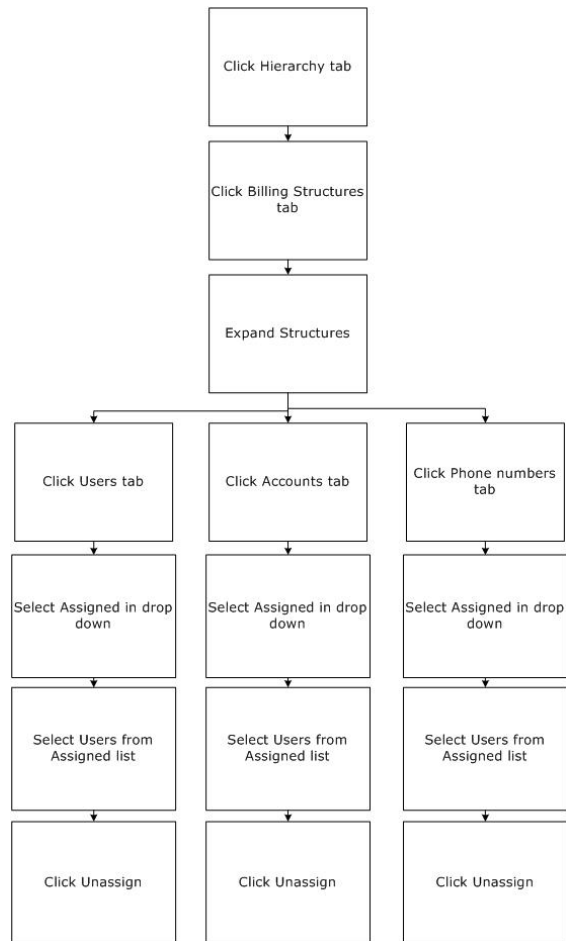
NEW

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Business Structure Users (4300)

Assign Users to Folders, Accounts, or Devices:



Un-assign Users from Folders, Accounts, or Devices:

Name:	Manage Business Structure Users
Brief Description:	The process of assigning or un-assigning users to/from folders, accounts, and devices. Users assigned to accounts or devices are able to view statement information associated with those accounts or devices. If assigned to folders, the user can view statement information for all accounts and devices within and below the folders in the tree structure to which they have been assigned.
Primary Actor	Administrator User
Trigger:	User clicks on the Hierarchy tab, clicks on Billing Structures tab, then selects Business Structure
Preconditions	Business Structures exist. User has selected a folder, account or device in a Business Structure in the left pane.

Main Path:	Main path describes viewing the users assigned to a business structure folder, account, or device. 1. User selects a folder, account, or device in a business structure in the left pane. The left pane threshold limit applies to this Use Case as noted in 4.5.2. The top of the right pane displays the name of the selected folder, account, or device 2. User selects the “user” tab in the right pane. The screen name changes to “Manage Business Structures – Manage Users.” The list of users is listed alphabetically by last name. The right pane threshold limit applies to this Use Case as noted in 4.5.2. 3. Refresh Users User selects from the following options: ◆ View (assigned, unassigned) ◆ Filter (first name, last name, user name) ◆ Text User selects “Refresh” action to view all assigned or unassigned users matching the above criteria.
Alternate Paths:	[A1] Assign user 1. User selects the “un-assigned” view and selects refresh 2. User selects one or more users to assign 3. User selects the assign action 4. Right pane view refreshes and changes to the assigned user view [A2] Un-assign user 1. User selects the “assigned” view and selects refresh 2. User selects one or more users to un-assign 3. User selects the un-assign action 4. Right pane assigned user view refreshes, no longer displaying the un-assigned user(s) [A3] User selects Add a new user hyperlink. 1. System invokes the Enroll company users use case. [A4] User selects ‘New’, to create business structure. 1. System invokes the Manage business structure use case. [A5] Select / Deselect All 1. User selects the “select all” or “deselect all” action to select or deselect all accounts in the right pane. [A6] Expanding Tree Exceeds {Display Threshold Hierarchy Tree} If the user expands the left pane tree and the {Display Threshold – Hierarchy Tree} threshold is reached, only the threshold limit is displayed and the user receives the following warning message: “Display limit threshold exceeded. Only x of y records displayed. Please use the left pane filter to search for a specific tree node.” [A7] Right Pane Threshold Exceeded If the user selects a folder in the left pane and the {Display List Threshold} in the right pane is exceeded, only the threshold limit is displayed. To avoid confusion the following warning message is

	displayed in red at the bottom of the right pane at all times. “Threshold exceeded. X (of y) records displayed” <i>Note:</i> This warning message is generic and the same business logic and message can be applied to all business structure right panes (folders, accounts, service agreements). [A8] Paging When Display List Threshold is less than the Retrieval Threshold If the service provider sets the {retrieval threshold} higher than the {display list threshold}, the user will not receive a warning message until the {retrieval threshold} is exceeded. Once the {Display List Threshold} is exceeded, paging will be implemented. <i>Rationale:</i> Limit the frequency that a user receives a message that not all records were displayed.
Standard Features:	1. Form validation 2. Download Hierarchy (UC 4700)
Notes:	<i>Limitation to Device Based Access Control:</i> If a user is given access to a device in the billing hierarchy, the user will be able to see all statement usage related data for that device, even if the usage data relates to usage from another user from the same company who had the same device. This is also true for the billing account hierarchy, except that the usage from the previous user would need to have been under the same billing account in the billing feed.

Manage Business Structure Users:

My Account

Statements

Payments

Self-Service

Overview

Hierarchy

Personal

Company

Download

Business Structures - Users

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Test

Position Name: N/A

Billing Accounts

Business Structures

Business Structures

Filter: Wireless Number

Text:

SEARCH

Test

GO

Test

Details

Users

Folders

Accounts

Wireless Numbers

View: Assigned

Filter: First Name

Text:

REFRESH

Select All - Deselect All

page 1 of 100

☐ Anne Green

☐ Tanya Louis

UNASSIGN

2 (of 2) records returned.

NEW

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Business Structure - Assign Users:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

Download

Business Structures - Move

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: tbmtest

Billing Accounts

Business Structures

Search Options

tbmtest

Wireless Number

SEARCH

Business Structures

tbmtest

GO

app1

tbmtest

Details

Users

Folders

Accounts

Wireless Numbers

View: Unassigned

Filter: First Name

Text

REFRESH

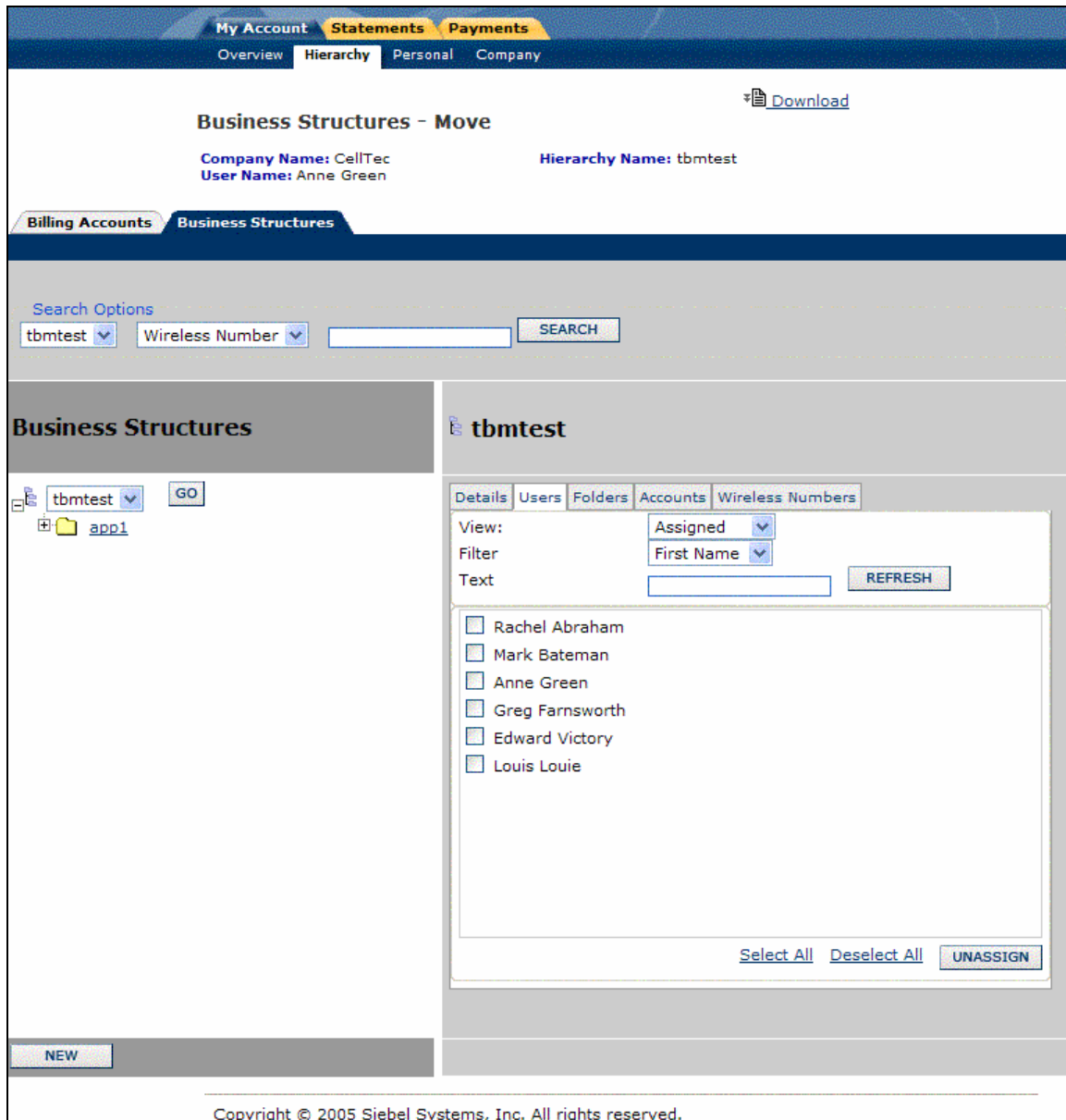
☐ Harry Trueblood
 ☐ Quentin Latifah
 ☐ Ichabod Crane
 ☐ Chris Carter
 ☐ John Smith
 ☐ Oliver Zapata
 ☐ Test User
 ☐ Susan Waters
 ☐ Karen Valentine
 ☐ Peter Peterson
 ☐ Tom Adams
 ☐ Dave Reichert

[Select All](#)
[Deselect All](#)

ASSIGN

NEW

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Business Structure - Unassign Users:

My Account **Statements** **Payments**

Overview **Hierarchy** Personal Company

Business Structures - Move [Download](#)

Company Name: CellTec Hierarchy Name: tbmtest
User Name: Anne Green

Billing Accounts **Business Structures**

Search Options
tbmtest Wireless Number

Business Structures

tbmtest
+ app1

tbmtest

Details **Users** Folders Accounts Wireless Numbers

View: Assigned
Filter: First Name
Text:

- ☐ Rachel Abraham
- ☐ Mark Bateman
- ☐ Anne Green
- ☐ Greg Farnsworth
- ☐ Edward Victory
- ☐ Louis Louie

[Select All](#) [Deselect All](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Business Structure - Display Selected Account Details:

The screenshot displays the Siebel 'Manage Business Structure - Details' page. At the top, there are tabs for 'My Account', 'Statements', and 'Payments'. Below these are sub-tabs: 'Overview', 'Hierarchy' (selected), 'Personal', and 'Company'. The page title is 'Manage Business Structure - Details', with a 'Download' link. It shows 'Company Name: CellTec' and 'User Name: Anne Green'. A 'Hierarchy Name: tbmtest' is also displayed. Below this is a 'Billing Accounts' and 'Business Structures' section. A 'Search Options' bar contains 'tbmtest' in a dropdown, 'Wireless Number' in a dropdown, a text input field, and a 'SEARCH' button. The main content area is split into two panes. The left pane, titled 'Business Structures', shows a tree view with 'tbmtest' selected, containing 'app1' which contains 'testing', which in turn contains the account '00486590' and two other accounts: '271-438-3473' and '318-473-2174'. A 'NEW' button is at the bottom left. The right pane, titled '00486590', has 'Details' and 'Users' tabs. The 'Details' tab is active, showing 'Account Number: 00486590' and 'Location: tbmtest\app1\testing\00486590'. At the bottom, a copyright notice reads 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.'

My Account Statements Payments
Overview Hierarchy Personal Company

Manage Business Structure - Details [Download](#)

Company Name: CellTec Hierarchy Name: tbmtest
User Name: Anne Green

Billing Accounts Business Structures

Search Options
tbmtest Wireless Number SEARCH

Business Structures

tbmtest GO

- app1
 - testing
 - 00486590
 - 271-438-3473
 - 318-473-2174

NEW

00486590

Details Users

Account Number: 00486590
Location: tbmtest\app1\testing\00486590

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Account Users – Unassign Users:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

Download

Business Structures - Move

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: tbmtest

Billing Accounts

Business Structures

Search Options

tbmtest

Wireless Number

SEARCH

Business Structures

tbmtest

GO

app1

testing

00486590

271-438-3473

318-473-2174

00486590

Details

Users

View: Assigned

Filter: First Name

Text:

REFRESH

No user found. [Add a new user](#)

NEW

Copyright © 2005 Cingular Systems, Inc. All rights reserved.

Manage Business Structure - Displays Selected Device Details:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

Download

Manage Business Structure - Details

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: tbmtest

Billing Accounts

Business Structures

Search Options

tbmtest

Wireless Number

SEARCH

Business Structures

tbmtest

GO

app1

testing

00486590

271-438-3473

318-473-2174

271-438-3473

Details

Users

Wireless Number: 271-438-3473

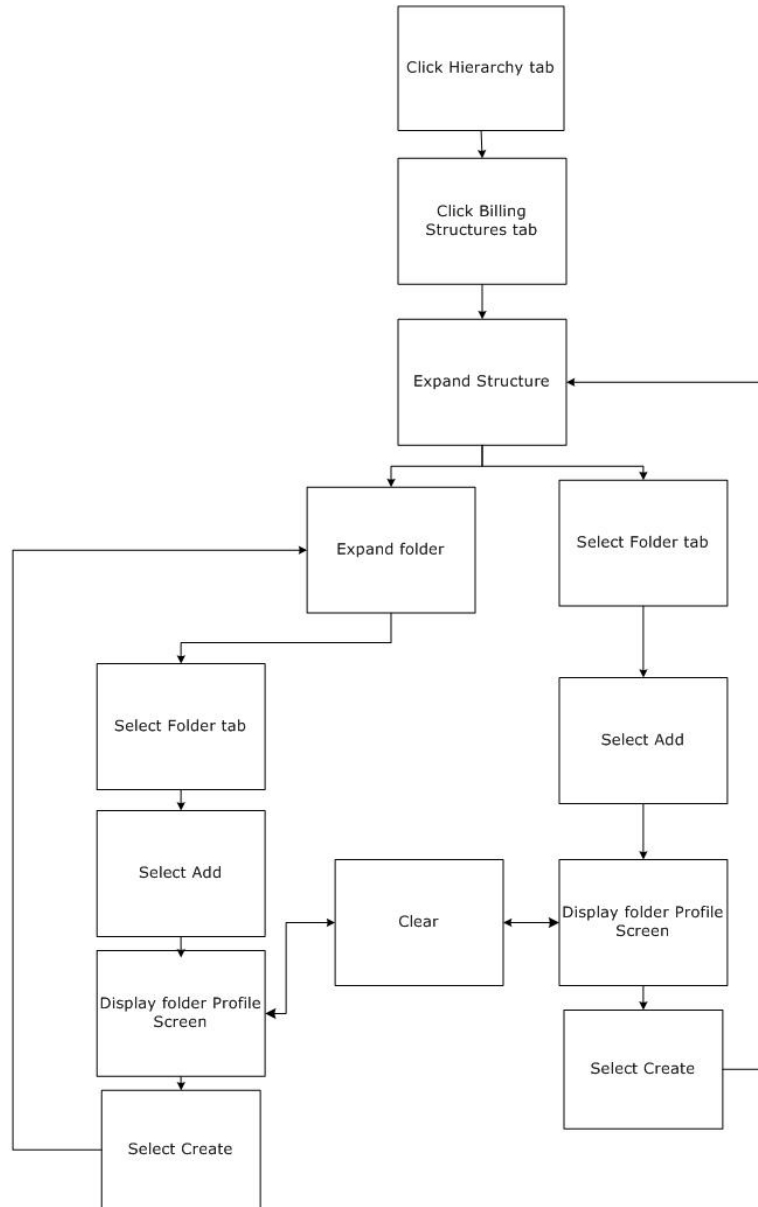
Location: tbmtest\app1\testing\271-438-3473

NEW

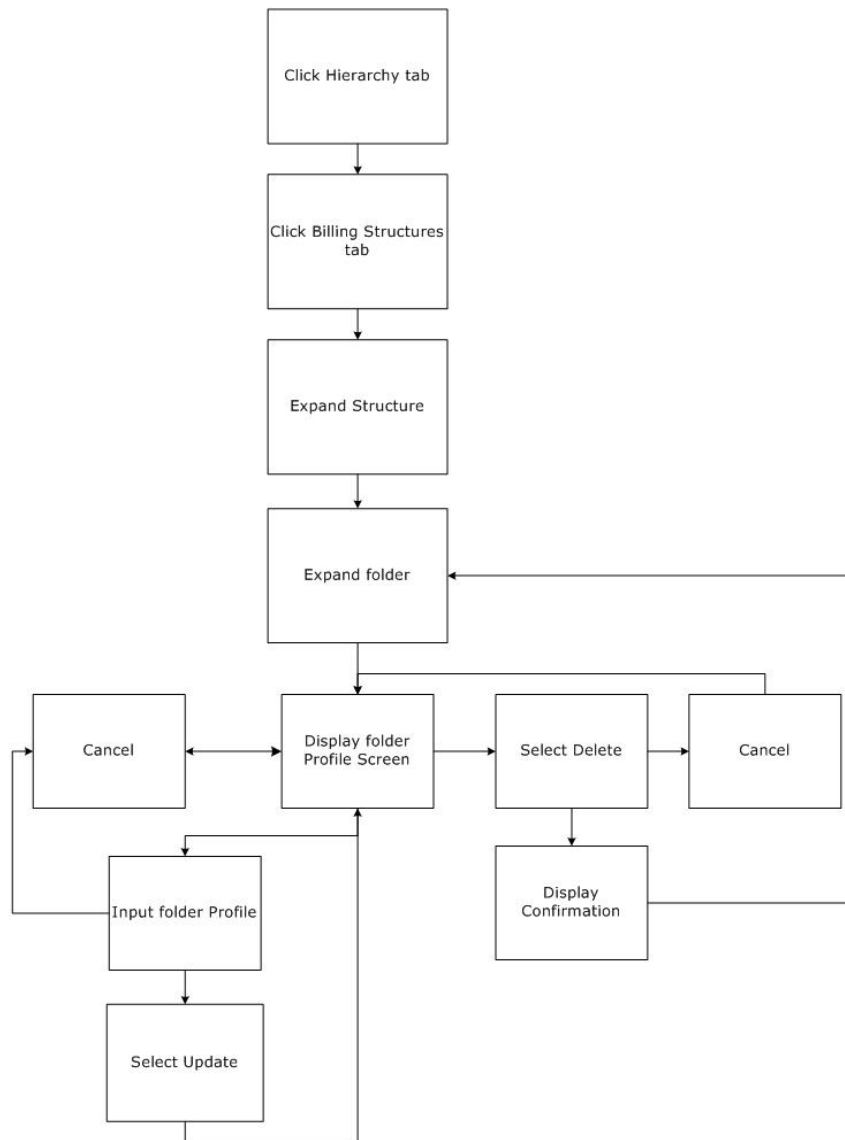
Copyright © 2005 Siebel Systems, Inc. All rights reserved.

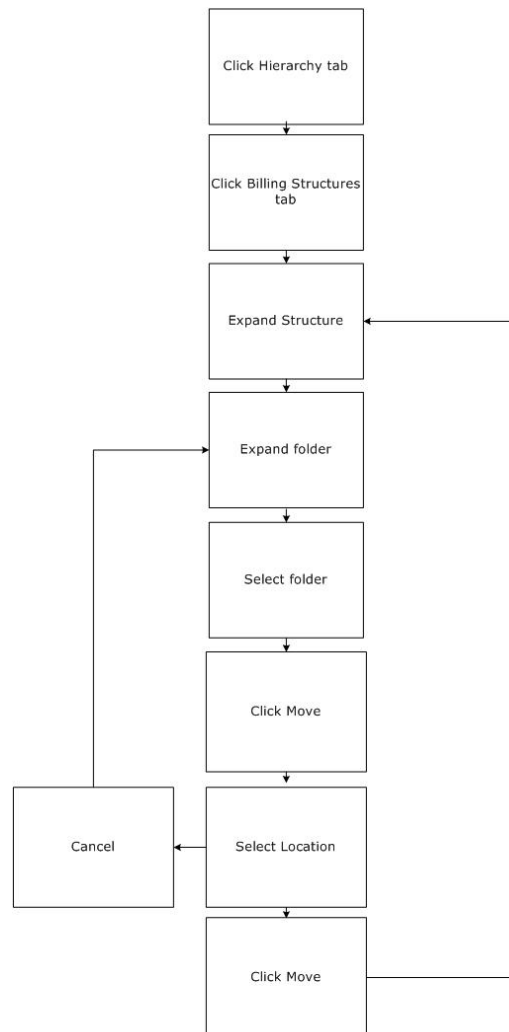
Manage Business Structure Folder Nodes (4400)

Create New Folders in a Business Structure:



Modify Folder Properties in a Business Structure:



Move Folders Into and Out of Folders:

Name:	Manage Business Structure Folder Nodes
Brief Description:	The process of adding, editing, moving, and deleting folder nodes within a business structure. Folder nodes exist so that users can create a tree structure to mimic different views of their organization. Billing accounts and devices are assigned to folders and appear under the folder in a tree structure. Folders can only be assigned to other folders or to the business structure itself (to add a folder just under the root of the tree structure). Users assigned to a folder have access to all billing accounts and devices within that folder or any folder below the folder in the business structure.
Actors:	Administrator User

Trigger:	User clicks on the Hierarchy tab, clicks on Business Structures tab, and selects a specific Business Structure
Preconditions	Business Structures exist. User has selected a Folder or root node in a Business Structure (note this screen is not available if an account or device is selected in the left pane)
Main Path:	The main path references adding a folder. - User highlights a folder within the business structure (or the business structure name itself to create a folder under the root node). The name of the selected object in the left pane is displayed at the top of the right pane. - User selects the New Folder operation. [A1 – A3] - System prompts the user to enter attribute(s) for the folder including: - Display Name - Description - User enters a name and attribute(s) for the business structure and submits. - System validates information to be correct and redisplay the business structure management screen. [A4] - Use case ends.
Alternate Paths:	[A1] Edit Folder Attributes - User selects the folder in the left pane. - User modifies one or more attributes of the folder and selects update. - System validates information to be correct. - System displays confirmation that the folder has been modified. [A2] Move an existing folder. - User selects right pane “Folder” tab. - User selects one or more folder in right pane and selects Move action. - User selects the destination for the folder and the Move action - System redisplay the structure management page to reflect the newly organized business structure. [A3] Delete folder - System requests user to confirm they wish to delete the folder and all of its contents from the business structure. - User confirms. - System removes the selected folder from the business structure and displays the Structure Management screen. [A4] System determines one or more items are missing or invalid. - System displays message informing the User of the problem and allows them to correct it. [A5] Select / Deselect All User selects the “select all” or “deselect all” action to select or

	deselect all accounts in the right pane. [A6] Filter If the list of folders displayed in the right pane is long (or if the {Display List Threshold} is exceeded), the user can filter the list of displayed folders by entering folder filter text and selecting the 'Refresh' action. [A7] Right Pane Threshold Exceeded If the user selects a folder in the left pane and the {Display List Threshold} in the right pane is exceeded, only the threshold limit is displayed. To avoid confusion the following warning message is displayed in red at the bottom of the right pane at all times. "Threshold exceeded. X (of y) records displayed" <i>Note:</i> This warning message is generic and the same business logic and message can be applied to all business structure right panes (folders, accounts, service agreements). [A8] Paging When Display List Threshold is less than the Retrieval Threshold If the service provider sets the {retrieval threshold} higher than the {display list threshold}, the user will not receive a warning message until the {retrieval threshold} is exceeded. Once the {Display List Threshold} is exceeded, paging will be implemented. <i>Rationale:</i> Limit the frequency that a user receives a message that not all records were displayed. [A9] Change Folder Focus If the user displays the assigned folders in the right pane and selects the hyperlinked folder name, the focus is changed the selected folder. This is the equivalent action of expanding the parent folder in the left pane tree and then clicking on the child folder in the left pane. <i>Rationale:</i> If expanding a folder in the left pane is going to exceed the {Display Threshold Hierarchy Tree}, giving the user the option to search for and drill into the folder in the right pane could allow the user to avoid exceeding the browser threshold since right pane paging can display more records than the left pane before exceeding the {Retrieval Threshold}. The user could actually drill down multiple levels in the right pane after the {Display Threshold Hierarchy Tree} had been exceeded in the left pane.
Standard Features:	1. Form validation 2. Folder Attributes 3. Download Hierarchy (UC 4700)
Notes:	Folders can only exist directly under other folders or the root name of the business structure. Folders can not be created or moved under accounts or devices, therefore, the folder tab (same with account and phone number) only displays in the right pane when a folder (or root) node is highlighted in the left pane.

Manage Business Structure - Folder Nodes:

The screenshot displays the 'Manage Billing Accounts - Details' interface. At the top, there are navigation tabs: 'My Account', 'Statement', 'Payments', and 'Self-Service'. Below these are sub-tabs: 'Overview', 'Hierarchy', 'Personal', and 'Company'. The 'Hierarchy' tab is active. The main title is 'Manage Billing Accounts - Details', with a 'Download' icon to its right. Below the title, there are fields for 'Company Name: default', 'User Name: sujith kumar', 'Hierarchy Name: N/A', and 'Position Name: N/A'. The interface is divided into two main sections: 'Billing Accounts' and 'Business Structures'. The 'Business Structures' section is active, showing a tree view on the left and a list view on the right. The tree view shows a hierarchy starting with 'BizStruc', which contains 'Sales' and 'Engineering' folders. 'Engineering' is selected, and it contains several sub-folders: 'Lorem', 'Ipsum', 'Dolor', 'Sit', 'Consectetuer', 'Adipiscing', 'Elit', 'Nunc', 'Ultrices', 'Facilisis', 'Egestas', 'Sapient', and 'Aenean'. The list view on the right shows the same list of folder names with checkboxes for selection. The list is titled 'Engineering' and has tabs for 'Details', 'Users', 'Folders', 'Accounts', and 'Service Agreements'. The 'Folders' tab is active. The list has a 'Filter' field, a 'Text' field, and a 'FILTER' button. Below the list, there are 'MOVE', 'DELETE', and 'NEW' buttons. The status bar at the bottom indicates '300 (of 419) records returned'.

Edit Folder Node Details:

Manage Business Structure - Details

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: tbmtest

Business Structures

Search Options: tbmtest Wireless Number SEARCH

tbmtest GO

app1

Details Users Folders Accounts Wireless Numbers

Name: app1

Location: tbmtest\app1

Description: testapp

CANCEL UPDATE DELETE

NEW

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

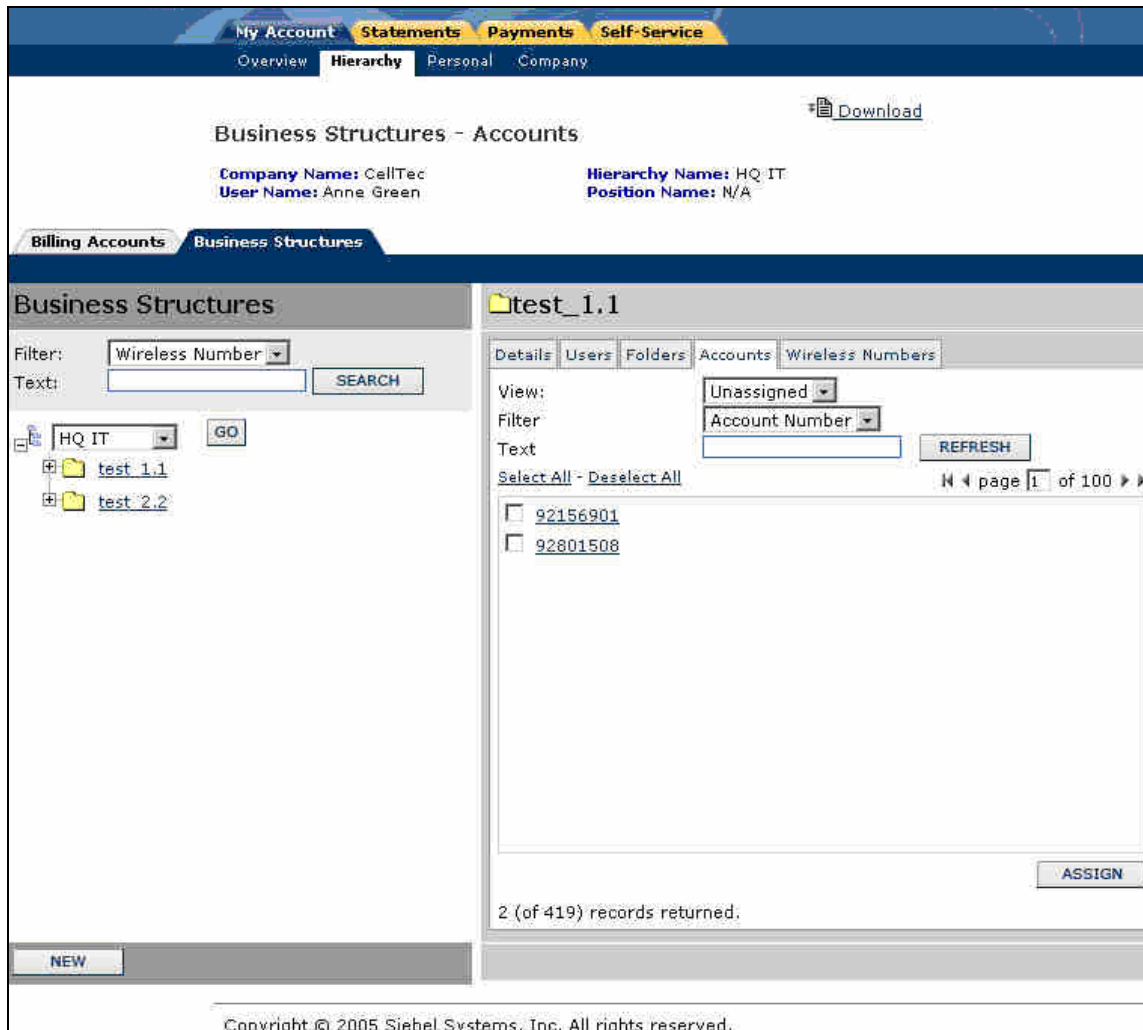
Manage Business Structure Accounts (4500)

Name:	Manage Business Structure Accounts
Brief Description:	The process of assigning, un-assigning or moving accounts within a business structure.
Primary Actor	Administrator User
Triggers	User clicks on the Hierarchy tab, clicks on Business Structures tab, and selects a specific Business Structure

Preconditions	Business Structures exist. User has selected a Folder or root node in a Business Structure (note this screen is not available if an account or device is selected in the left pane)
Main Path:	The main path refers to assigning one or more accounts to a folder. 1. User selects a folder in the left pane. The left pane threshold limit applies to this Use Case as noted in 4.5.2. The 'Details' tab in the right pane displays the folder attributes 2. User selects the Accounts tab in the right pane. The right pane threshold limit applies to this Use Case as noted in 4.5.2. The list of un-assigned Billing Accounts are displayed in the right pane 3. User selects one or more un-assigned accounts and the 'Assign' action 4. Right pane refreshes to the assigned accounts view
Alternate Paths:	[A1] Un-assign account 1. User selects the 'assigned' view in the right pane and selects refresh 2. User selects one or more accounts to un-assign 3. User selects the un-assign action 4. Right pane view refreshes the assigned accounts view [A2] Move an existing account. 1. User selects a folder in the left pane 2. User selects the account tab in the right pane 3. User selects one or more accounts to move 4. User selects 'Move' action in the right pane 5. Right pane refreshes with a list of target folders to move the selected account. 6. User selects a folder in the right pane to which the previously selected accounts should be moved. 7. User selects the 'Move' action [A3] Select / Deselect All User selects the "select all" or "deselect all" action to select or deselect all accounts in the right pane. [A4] Right Pane Threshold Exceeded If the user selects a folder in the left pane and the {Display List Threshold} in the right pane is exceeded, only the threshold limit is displayed. To avoid confusion the following warning message is displayed in red at the bottom of the right pane at all times. "Threshold exceeded. X (of y) records displayed" <i>Note:</i> This warning message is generic and the same business logic and message can be applied to all business structure right panes (folders, accounts, service agreements). [A5] Paging When Display List Threshold is less than the Retrieval Threshold If the service provider sets the {retrieval threshold} higher than the

	{display list threshold}, the user will not receive a warning message until the {retrieval threshold} is exceeded. Once the {Display List Threshold} is exceeded, paging will be implemented. <i>Rationale:</i> Limit the frequency that a user receives a message that not all records were displayed. [A6] Change Focus If the user displays the assigned folders, accounts, or service agreements in the respective right pane tab and selects the hyperlinked name, the focus is changed the selected folder, account, or service agreement. This is the equivalent action of expanding the parent folder in the left pane tree and then clicking on a child folder, account, or service agreement. <i>Rationale:</i> If expanding a folder in the left pane is going to exceed the {Display Threshold Hierarchy Tree}, giving the user the option to search for and drill into folders in the right pane could allow the user to avoid exceeding the browser threshold since right pane paging can display more records than the left pane before exceeding the {Retrieval Threshold}. The user could actually drill down multiple levels in the right pane and select an object after the {Display Threshold Hierarchy Tree} had been exceeded in the left pane.
Standard Features:	1. Form validation 2. Node / Folder Attributes 3. Download Hierarchy (UC 4700)
Notes:	Both accounts and devices follow the same process to be assigned, un-assigned, and moved.

Manage Business Structure – Manage Accounts:



My Account Statements Payments Self-Service

Overview Hierarchy Personal Company

Business Structures - Accounts

Download

Company Name: CellTec Hierarchy Name: HQ IT
User Name: Anne Green Position Name: N/A

Billing Accounts Business Structures

Business Structures

Filter: Wireless Number
Text: SEARCH

HQ IT GO

test_1.1
test_2.2

test_1.1

Details Users Folders Accounts Wireless Numbers

View: Unassigned
Filter: Account Number
Text: REFRESH

Select All - Deselect All

page 1 of 100

☐ 92156901
☐ 92801508

ASSIGN

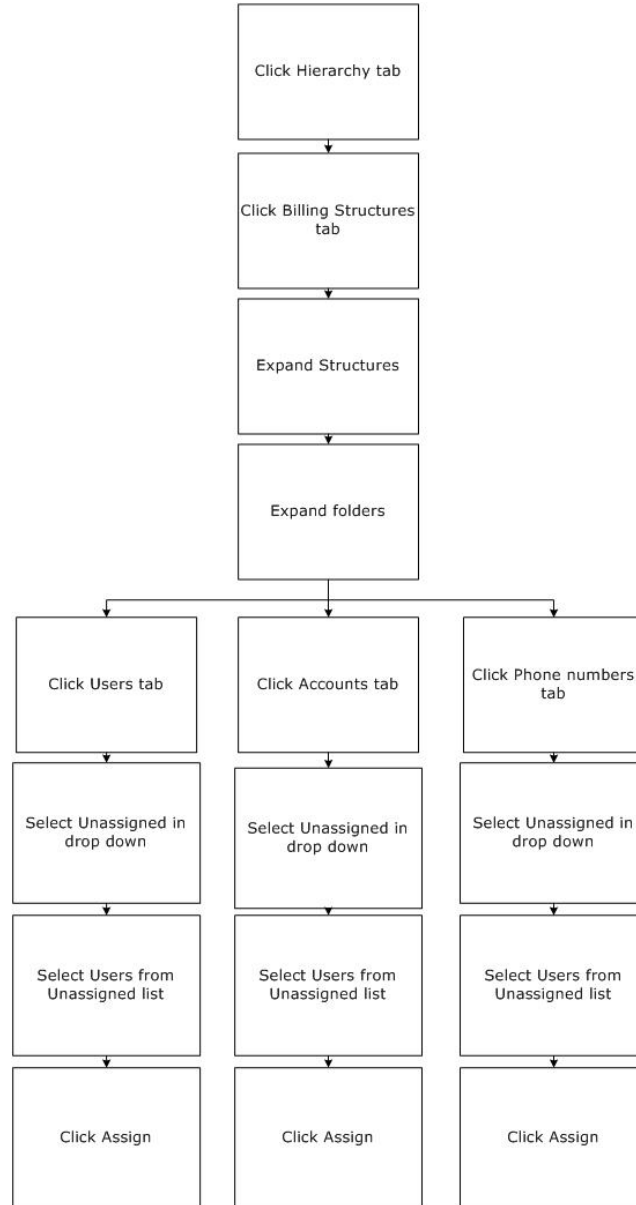
2 (of 419) records returned.

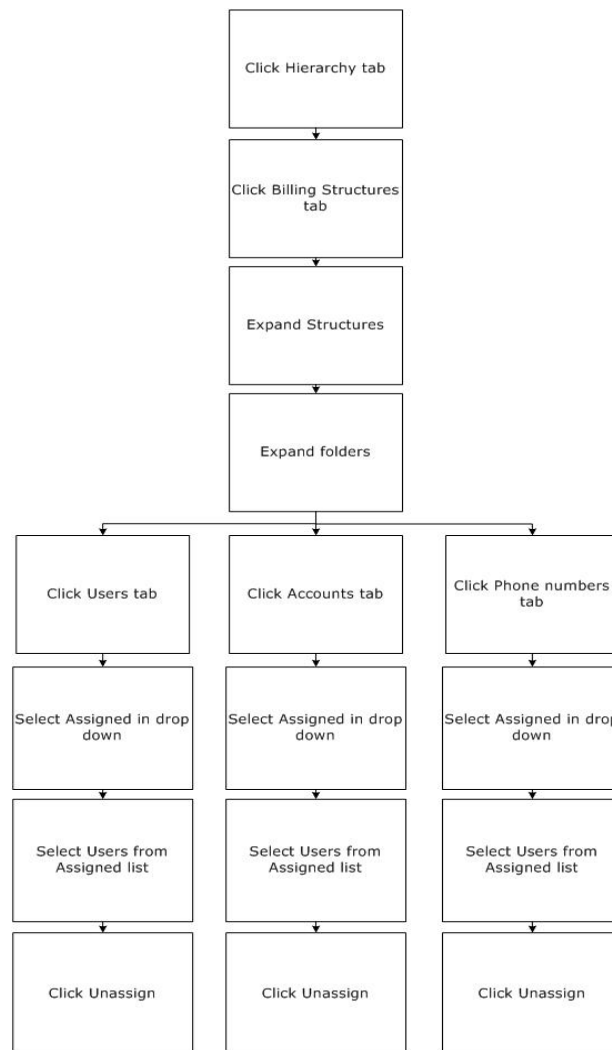
NEW

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Business Structure Service Agreement (4600)

Assign Users, Accounts or Devices to Folders:



Un-assign Users, Accounts or Devices to Folders:

Name:	Manage Business Structure Service Agreement
Brief Description:	The process of assigning or unassigning a service agreement within a business structure.
Primary Actor	Administrator User
Trigger:	User clicks on the Hierarchy tab, clicks on Billing Structures tab, and selects specific Business Structure
Preconditions	Folders exist in Business Structures. Business Structures exist. User has selected a Folder or root node in a Business Structure (note this

	screen is not available if an account or service agreement is selected in the left pane)
Preconditions	Business Structures exist. User has selected a Folder or root node in a Business Structure (note this screen is not available if an account or device is selected in the left pane)
Main Path:	The main path refers to assigning one or more devices to a folder. 1. User selects a folder in the left pane. The left pane threshold limit applies to this Use Case as noted in 4.5.2. The 'Details' tab in the right pane displays the folder attributes 2. User selects the Service Agreement tab in the right pane. The right pane threshold limit applies to this Use Case as noted in 4.5.2. The list of un-assigned devices are displayed in the right pane 3. User selects one or more un-assigned service agreements and the 'Assign' action. 4. Right pane refreshes to the assigned service agreement view.
Alternate Paths:	[A1] Un-assign service agreement 1. User selects the 'assigned' view in the right pane and selects refresh 2. User selects one or more service agreements to un-assign 3. User selects the un-assign action 4. Right pane view refreshes the assigned service agreements view [A2] Select / Deselect All 1. User selects the "select all" or "deselect all" action to select or deselect all service agreements in the right pane. [A3] Right Pane Threshold Exceeded If the user selects a folder in the left pane and the {Display List Threshold} in the right pane is exceeded, only the threshold limit is displayed. To avoid confusion the following warning message is displayed in red at the bottom of the right pane at all times. "Threshold exceeded. X (of y) records displayed" <i>Note:</i> This warning message is generic and the same business logic and message can be applied to all business structure right panes (folders, accounts, service agreements). [A4] Paging When Display List Threshold is less than the Retrieval Threshold If the service provider sets the {retrieval threshold} higher than the {display list threshold}, the user will not receive a warning message until the {retrieval threshold} is exceeded. Once the {Display List Threshold} is exceeded, paging will be implemented. <i>Rationale:</i> Limit the frequency that a user receives a message that not all records were displayed. [A5] Change Focus Execute the "Change Focus" alternate path described in the "Manage Business Structure Accounts" use case

Standard Features:	1. Form validation 2. Node / Folder Attributes 3. Download Hierarchy (UC 4700)
Notes:	None

Manage Business Structure – Service Agreements

My Account Statement Payments Self-Service

Overview Hierarchy Personal Company

Download

Manage Billing Accounts - Details

Company Name: __default__ Hierarchy Name: N/A
User Name: sujith kumar Position Name: N/A

Folder display threshold exceeded. Only x of y records displayed. Please use the search feature below to search for a specific tree node.

Billing Accounts Business Structures

Business Structures

Filter: Service Agreement
Text: FILTER

BizStruc GO

- Sales
- Engineering
 - Lorem
 - Ipsum
 - Dolor
 - Sit
 - Consectetur
 - Adipiscing
 - Elit
 - Nunc
 - Ultrices
 - Facilisis
 - Egestas
 - Sapien
 - Aenean

Engineering

Details Users Folders Accounts Service Agreements

View: ☒ Assigned ☐ Unassigned
Filter: Service Agreement
Text: REFRESH

select all - deselect all page 1 of 100

- ☐ 425-603-8749
- ☐ 425-603-1576
- ☐ 425-603-6740
- ☐ 425-603-6941
- ☐ 425-603-2597
- ☐ 425-603-4267
- ☐ 425-603-1973
- ☐ 425-603-3647
- ☐ 425-603-6716
- ☐ 425-603-4572
- ☐ 425-603-3147
- ☐ 425-603-5671

ASSIGN

300 (of 419) records returned

Download Hierarchy (4700)

Name:	Download
Brief Description:	Enables the user to download the billing account or business structure hierarchy in standard formats.
Main Path:	1. User selects Download CSV option. 2. Systems display the standard file save or open dialogue box User selects file name, folder, and save action 3. Use case ends.
Alternate Paths:	[A1] Download XML format
Standard Features:	Cancel action
Exception Paths:	[E1] User encounters a system error: 1. System invokes the Error Message use case.
Notes:	System would support XML format in future.

My Account

Statements

Payments

Self-Service

Overview

Hierarchy

Personal

Company

■ Tree display limit exceeded. Only 10 of 24 children of Billing Accounts displayed. Please use the left-pane filter to search for a specific item.

Download

Manage Billing Accounts

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Billing Accounts

Position Name: Billing Accounts

Billing Accounts

Business Structures

Billing Accounts

Filter: Wireless Number

Text:

CLEAR

SEARCH

Billing Accounts

00486590

03286008

05128140

05696543

06122165

06876439

07655448

08654347

09677685

10756456

Billing Accounts

Details

Users

Folders

Accounts

Service Agreements

Name:

Billing Accounts

Location:

Billing Accounts

Description:

Contents:

2 Users

File Download

Do you want to open or save this file?

Name: Billing Accounts.csv

Type: Microsoft Office Excel Comma Separated Values File

From: natv280s002.siebel.com

Open

Save

Cancel

While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file.

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

3.10 Personal Profile Use Cases

The profile use cases include the following functionality:

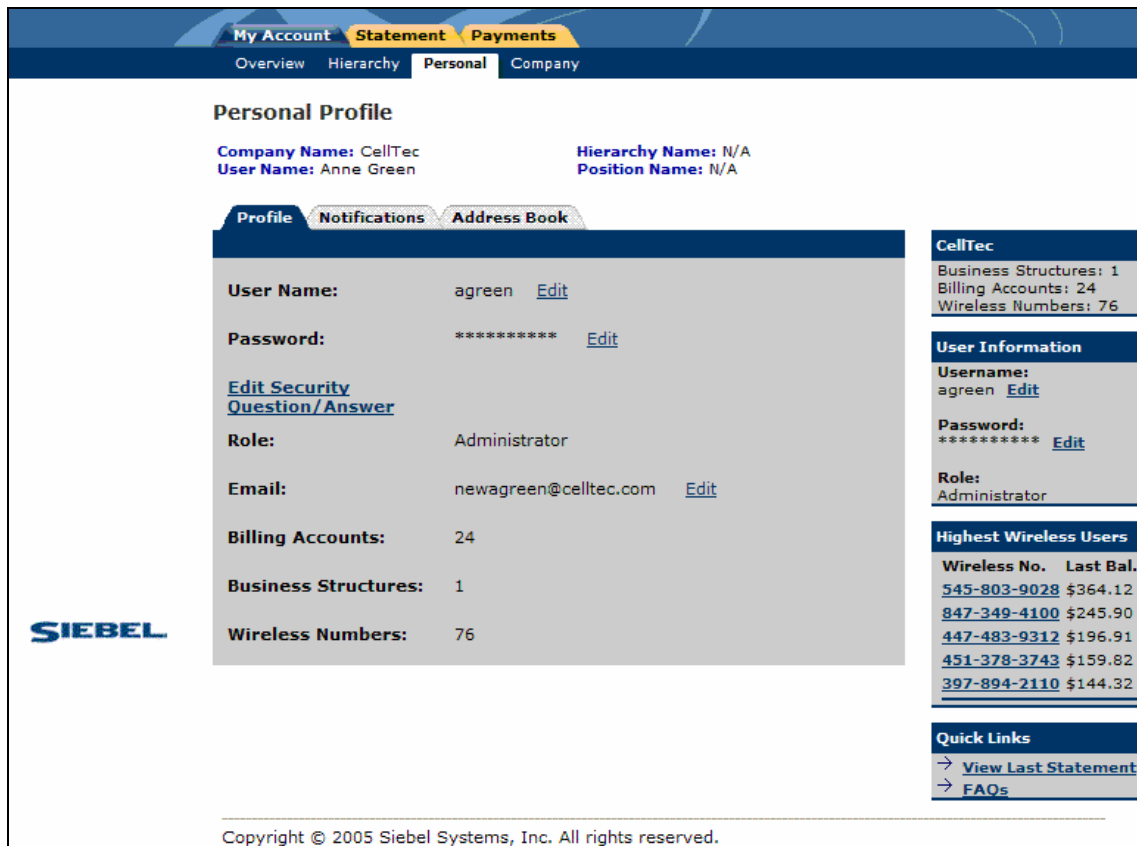
- Manage Personal Profile (5000)
- Manage Password (5100)
- Manage Username (5200)
- Manage Personal Address Book (PAB) (5300)
- Manage Notifications (5400)

Manage Personal Profile (5000)

Name:	Manage Personal Profile
Brief Description:	Business User view profile info and optionally modifies their password and user name.
Primary Actor:	Business User
Triggers	1. User selects "My Account" \ "Personal" \ "Profile" menu option
Main Path:	- System displays a page containing the current profile information in read only format with the following: - User Name - Password - Edit Security Question and Answer - Role - Email - Billing Accounts - Business Structures - Wireless numbers - User selects to edit their username. - Manage Username use case(UC 5200) is invoked - User selects to edit their password. - Manage Password use case(UC 5100) is invoke
Alternate Paths:	[A1] User selects 'Edit email address' If the entered email does not follow the <text>@<text>, the user is prompted with a message "invalid email format, please enter your email again". [A2] User selects 'Edit Secret Question/Answer'
Standard Features:	None
Notes:	1. The Personal Profile collects basic information pertaining to the user.

2. Email addresses are collected in the Notifications portion of the application.

Personal Profile:



The screenshot shows the Siebel Personal Profile page for user Anne Green. The page has a navigation bar with tabs for My Account, Statement, and Payments. Below this is a sub-navigation bar with tabs for Overview, Hierarchy, Personal, and Company. The main content area is titled 'Personal Profile' and displays user information for 'CellTec' and 'Anne Green'. The user's role is 'Administrator'. The page also shows a list of 'Highest Wireless Users' with their wireless numbers and last balances. The Siebel logo is visible on the left side of the page.

Personal Profile

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Profile | Notifications | Address Book

User Name: agreeen [Edit](#)

Password: ***** [Edit](#)

[Edit Security Question/Answer](#)

Role: Administrator

Email: newagreen@celltec.com [Edit](#)

Billing Accounts: 24

Business Structures: 1

Wireless Numbers: 76

CellTec

Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information

Username: agreeen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

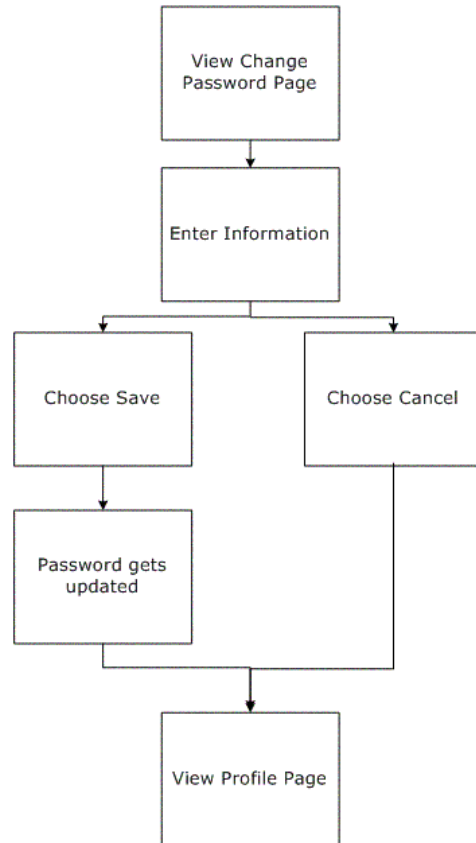
→ [View Last Statement](#)

→ [FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Password (5100)

Manage Password:



Name:	Manage Password
Brief Description:	Business User updates their password.
Primary Actor:	Business User
Triggers	1. User selects "My Account" \ "Personal" \ "PAB" menu option
Main Path:	1. User selects "Edit" action from the Personal Profile display screen. 2. User enters in their existing password. 3. User enters in the desired password. 4. User re-enters in the desired password. 5. User submits the password change. 6. System confirms to the user that the password has been changed.[A1-A3] 7. System stores updated password.

Alternate Paths:	[A1] Current password is not valid. 1. System error message stating that the password does not match the one on record. [A2] New passwords do not match security standards. 1. System responds with a message stating that the new passwords do not meet the required security standards. [A3] New passwords do not match each other. 1. System responds with a message stating that the new passwords do not match each other.
Standard Features:	Form validation Cancel action
Notes:	None

Manage Password:

My AccountStatementPayments

OverviewHierarchyPersonalCompany

Change/Reset Password

Company Name: CellTec

Hierarchy Name: N/A

User Name: Anne Green

Position Name: N/A

ProfileNotificationsAddress Book

Please reset your password by entering current and new password.
*indicates required field.

Current Password*

New Password*

Confirm Password*

CANCEL

SAVE

CellTec

Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information

Username: agreeen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

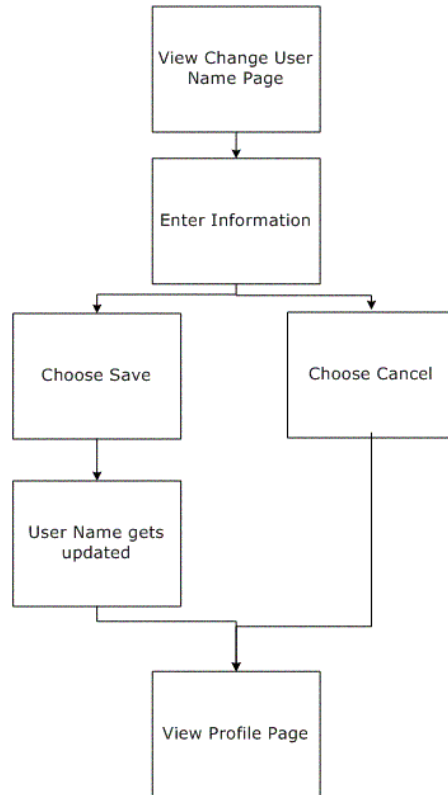
[FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Username (5200)

Manage User Name:



Name:	Manage Username
Brief Description:	Business User updates their username.
Primary Actor:	Business User
Triggers	1. User selects "My Account" \ "Personal" \ "Profile" menu option
Main Path:	1. User selects "Edit" action from the Personal Profile display screen. 2. User enters in the desired username. 3. User submits the username change. 4. System confirms to the user that the username meets the validation criteria and has been changed. [A1] 5. System stores updated username.
Alternate Paths:	[A1] Username is not valid. 1. System responds with a message stating that the new username is not available or invalid.
Standard Features:	Form validation

Notes:

For many Self-Service applications it is common to have the email address be the username for a user. This often ensures that the user will not forget their username for the site.

Manage Username:

Edit User Name

Company Name: CellTec Hierarchy Name: N/A
 User Name: Anne Green Position Name: N/A

Profile **Notifications** **Address Book**

Please change your username by entering your current password and new username.
 *indicates required field.

Current User Name agreeen
 New User Name*
 Confirm User Name*
 Current Password*

CellTec
 Business Structures: 1
 Billing Accounts: 24
 Wireless Numbers: 76

User Information
 Username: agreeen [Edit](#)
 Password: ***** [Edit](#)
 Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

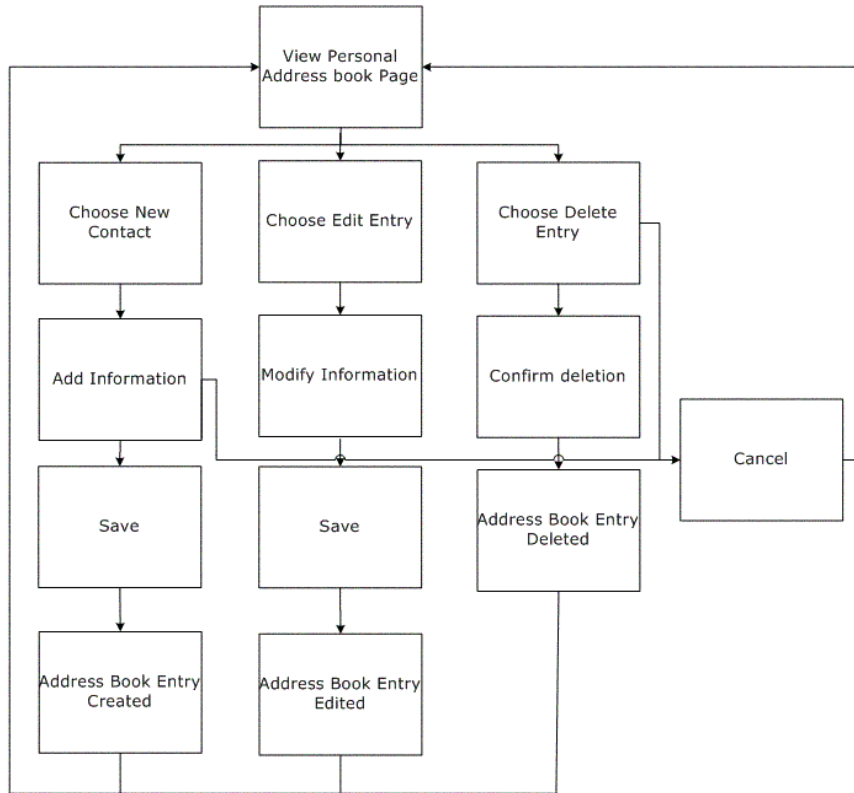
Quick Links
[→ View Last Statement](#)
[→ FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Personal Address Book (5300)

Manage PAB:



Name:	Manage Personal Address Book (PAB)
Brief Description:	Business User manages all their personal address book by adding (Main Path), editing and deleting entries. To make online statements more readable, PAB names can be displayed rather than phone numbers.
Primary Actor:	Business User
Triggers	1. User selects "My Account" \ "Personal" \ "PAB" menu option
Main Path:	- System displays the user's complete PAB with the following fields. - Alias (Required, no character validation) - Name (Optional no character validation) - Number (Required) And actions - Edit function - Delete function - User selects the add operation. [A1-A2]

	3. System displays an entry form. 4. User enters the information and submits the form. 5. System stores the new entry. 6. System displays the updated PAB list.
Alternate Paths:	[A1] Edit PAB entry 1. System displays an entry form that is pre-populated with the existing PAB entry. 2. User edits the information and submits the form. 3. System stores the new entry. 4. System displays the updated PAB list. [A2] Delete PAB entry 1. System displays a page requesting user to confirm the delete operation. 2. User confirms. 3. System deletes entry from the User's PAB [A3] Manage PAB from usage screen This alternate path is same as the main path except 1. The trigger is a user selecting the PAB icon next to a phone number on an online statement or usage report. 2. The phone number is not editable (defaults to phone number selected on statement) 3. The user is returned to the statement or report after saving the PAB entry without seeing the list of other PAB entries
Configuration Points	UI field validation
Notes:	The name will be substituted for the phone number when displaying details.

Display List of Personal Address Book Entries:

My Account

Statement

Payments

Overview

Hierarchy

Personal

Company

View Personal Address Book Entries

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: N/A

Position Name: N/A

Profile

Notifications

Address Book

NEW CONTACT

My Address Book Entries

Alias	Name	Phone Number	Manage Entry
Robert	Robert Shatsky	451-378-3743	Edit Delete
Chris	Christopher Thomas	803-898-9688	Edit Delete
harry	prince harry	803-935-7500	Edit Delete
testddd	testee	803-765-9200	Edit Delete
Victor	Victor Roberts	447-437-2734	Edit Delete

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreeen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

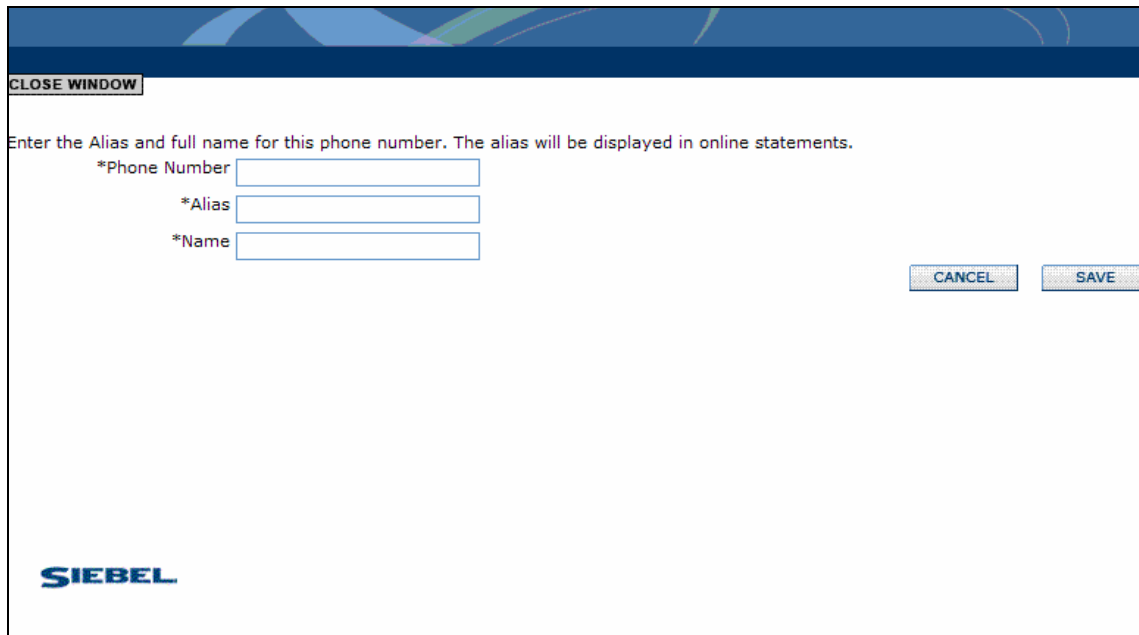
[View Last Statement](#)

[FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Add Contact to the PAB:



The screenshot shows a Siebel application window titled "Add Contact to the PAB:". The window has a dark blue header bar with a "CLOSE WINDOW" button on the left. Below the header, a message reads: "Enter the Alias and full name for this phone number. The alias will be displayed in online statements." There are three input fields: "*Phone Number", "*Alias", and "*Name", each preceded by an asterisk. To the right of these fields are two buttons: "CANCEL" and "SAVE". The Siebel logo is located in the bottom left corner of the window.

CLOSE WINDOW

Enter the Alias and full name for this phone number. The alias will be displayed in online statements.

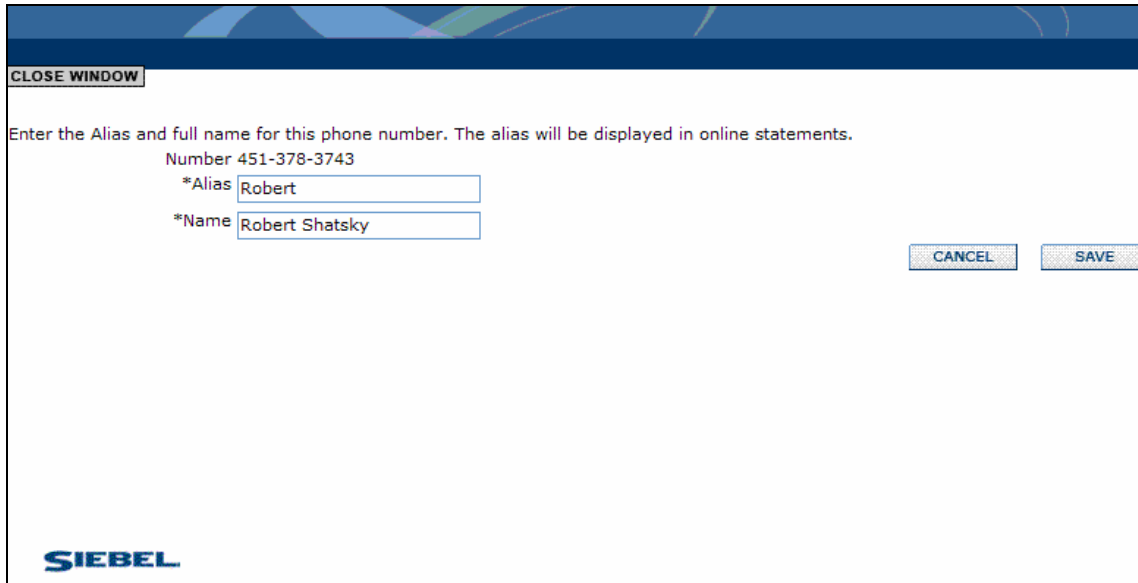
*Phone Number

*Alias

*Name

CANCEL **SAVE**

SIEBEL

Manage Personal Address Book Entry:

Close Window

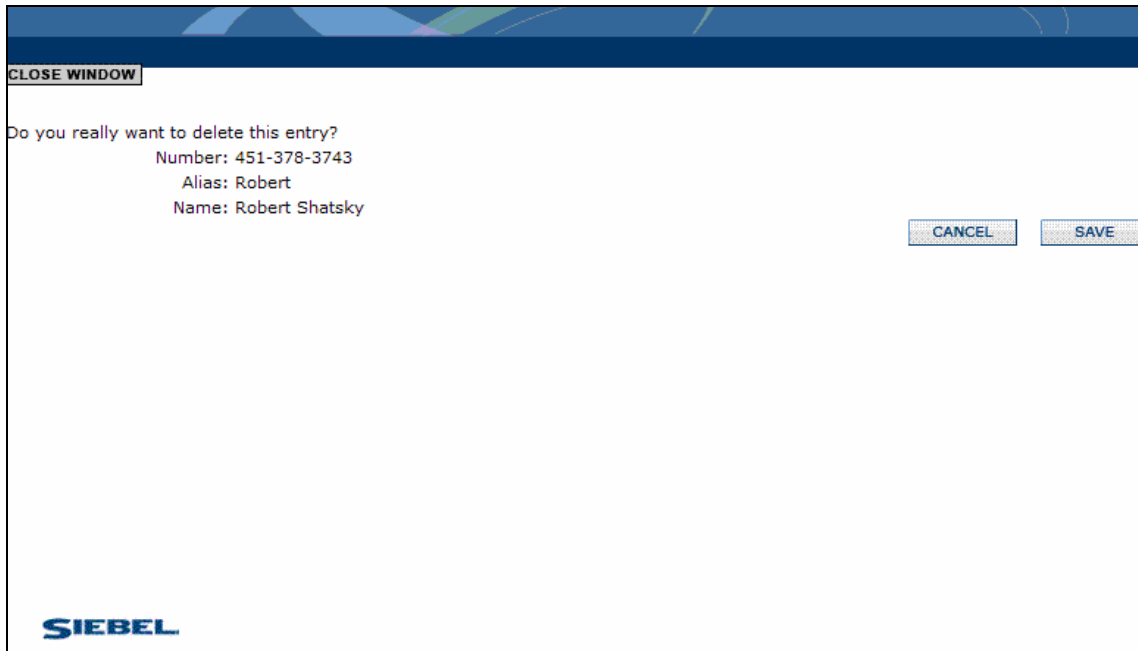
Enter the Alias and full name for this phone number. The alias will be displayed in online statements.

Number 451-378-3743

*Alias

*Name

SIEBEL



Close Window

Do you really want to delete this entry?

Number: 451-378-3743
Alias: Robert
Name: Robert Shatsky

SIEBEL

Manage Notifications (5400)

Name:	Manage Notifications
Brief Description:	Business User opts in or out of event based email/SMS notifications.
Primary Actor:	Business User
Triggers	1. User selects "My Account" \ "Personal" \ "Notifications" menu option

Main Path:	1. Select User User selects the first of the following options a. Modify your notification settings b. Modify another user's notification settings 2. Display System displays form that lists possible notifications. Checked notifications have been previously activated. Grayed checked/unchecked notifications are not editable. Unchecked notifications can be activated. <i>Note:</i> Each notification is tracked as a separate alternate path. <u>Statement</u> (one consolidated notification for all billing accounts for which the user has access.) a. Bill Ready Notification b. Payment Due date in 5 days <u>Payment Account</u> (one consolidated notification for any payment account or billing account for which you have access) a. Completed One Time Payment b. Create/Edit Recurring Payment c. Recurring Payment Threshold Exceeded d. Scheduled Payment Paid e. ACH Payment Returned f. Credit card payment failed g. Credit Card Expiration Notice <u>Service Manager</u> (one consolidated notification for any service agreement to which you have access to create a service request) [NOTE: Included for future Siebel Service Manager integration functionality] a. Failed Service Request b. Daily Summary (summary of all submitted, completed, and failed service requests for the day) <u>Other</u> [NOTE: Included for future Siebel Billing Analytics & enrollment functionality] a. Batch Report Ready b. Enrollment Confirmation 3. Edit Notifications User selects to edit any of the notification selections 4. User select the save action 5. Message is displayed that notifications have been successfully saved
Alternate Paths:	[A1] Enter alternative email addresses for a notification Instructional Text: In addition to the email address in your personal profile, you may enter additional email addresses to receive notifications."

	User optionally enters additional email addresses to receive all email notifications selected in this screen. 1. Select the add email addresses actions 2. Two fields are displayed to enter and re-enter an email address 3. User selects save action 4. Email is validated that it is an email address and that the same address is entered in each field. 5. User is returned to the notification page with the new email address displayed under the list of alternative email addresses. [A2] Delete additional email address 1. User selects the delete action next to the alternative email address 2. User is prompted to confirm the deletion 3. Screen re-displays without the email address [A3] Select another user for which to edit notifications 1. User selects "Modify another user's notification settings" 2. Search for username 3. User enters search text to search for the user name (similar to the manage company users use case) 4. Select user from search results 5. Notification settings are displayed for the entered user. 6. Full name of entered user is displayed at the top of the screen with a clear message that the notification edits are being performed for this user and not the currently logged in user. 7. Notifications are modified and saved according to the main path. 8. The successfully saved message should state the name of the user for which the changes have been made. [A4] SMS Notification Same as main path, except the user has the option to select an SMS notification option in addition to an email option. [A5] Statement Notification: Bill Ready [A6] Statement Notification: Payment Due date in X days [A7] Payment Notification: Completed One Time Payment [A8] Payment Notification: Create/Edit Recurring Payment [A9] Payment Notification: Recurring Payment Threshold Exceeded [A10] Payment Notification: Scheduled Payment Paid [A11] Payment Notification: ACH Payment Returned [A12] Payment Notification: Credit card payment failed [A13] Payment Notification: Credit Card Expiration Notice
Standard Features:	Form validation
Configuration Points:	1. Email notification will be sent to payment user's email account only. (If a

	admin user checks payment notification, the admin user receives notifications for all accounts to which the user has access) 2. If payment is performed on a consolidated basis, email notification will be consolidated (all confirmations for payment in one email) based on all payments made within the day. 3. After adding or removing accounts to/from an organization, an email notification will be sent to the administrator(s) for the organization. This notification will be triggered off of the confirmation screen when accounts have been successfully added/removed. 4. Service provider can configure certain notifications to be checked and uneditable.
Notes:	Email Templates The following email template is used to notify the user on payment confirmation. From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Recurring Payment Confirmation Dear <xsl:value-of select="user"/>, This email is to confirm that you have been enrolled into the Automatic Bill Payment program for your online Account <xsl:value-of select="actnum"/>. Amount: <xsl:value-of select="amount"/> The first automatic bill payment will take place after your next billing cycle. You will receive a payment confirmation email when the payment has been submitted. You may also continue to make other payments on your account using the Quick Payment option on the Payments Menu. Thank you for using automatic bill payment. Please continue visiting <a href="http://<localhost>:7001/tbm">http://<localhost>:7001/tbm This is an automatically generated email. Please do not reply to this email address.

Manage Notifications:

My Account

Statement

Payments

Overview

Hierarchy

Personal

Company

Notifications - Select User

Company Name: CellTec

Hierarchy Name: N/A

User Name: Anne Green

Position Name: N/A

Profile

Notifications

Address Book

Modify your notification settings

EDIT YOUR NOTIFICATIONS

Modify another user's notification settings

Search for Users:

GO

User ID	Name	Role	
blankuser	Fred Fredericks	User	Edit
nathan	Nathan Zuckerman	Administrator	Edit
chpchp	chpchp chpchp	User	Edit
davidr	David Reichert	User	Edit

CellTec

Business Structures: 1

Billing Accounts: 24

Wireless Numbers: 76

User Information

Username: agreen [Edit](#)

Password: ***** [Edit](#)

Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

→ [View Last Statement](#)

→ [FAQs](#)

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Edit Notifications:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

Edit Notifications

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: tbmtest

Profile

Notifications

Address Book

Activate or deactivate specific notifications and select save.

Available Alerts

	Email	SMS
Statement		
Bill Ready Notification	☐	☐
Payment due in 5 days	☒	☐
Payment Account		
Completed One Time Payment	☐	☐
Create/Edit Recurring Payment	☐	☐
Recurring Payment Threshold Exceeded	☐	☐
Scheduled Payment Paid	☐	☐
ACH Payment Returned	☐	☐
Credit card payment failed	☐	☐
Credit Card Expiration Notice	☐	☐
Service Manager		
Failed Service Request	☐	☐
Daily Summary	☐	☐
Other		
Batch Report Ready	☐	☐
Enrollment Confirmation	☐	☐

CANCEL SAVE

Alternate Email Addresses

In addition to the email address in your personal profile, you may enter additional email addresses to receive notifications.

Email	Actions
	NEW

CellTec

Business Structures: 3
 Billing Accounts: 24
 Wireless Numbers: 77

User Information

Username
 agreen [Edit](#)

Password

***** [Edit](#)

Role

Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)
[FAQs](#)

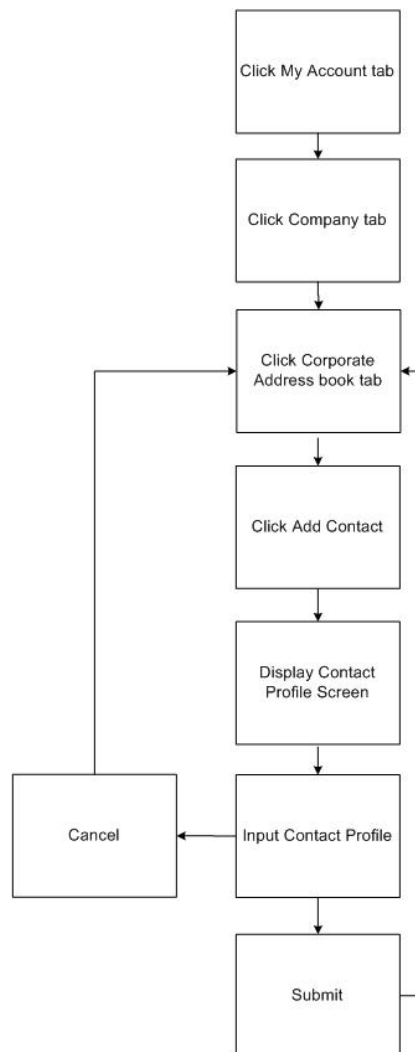
3.11 Company Profile Use Cases

The following use cases cover the functional requirements for allowing businesses to manage their profiles:

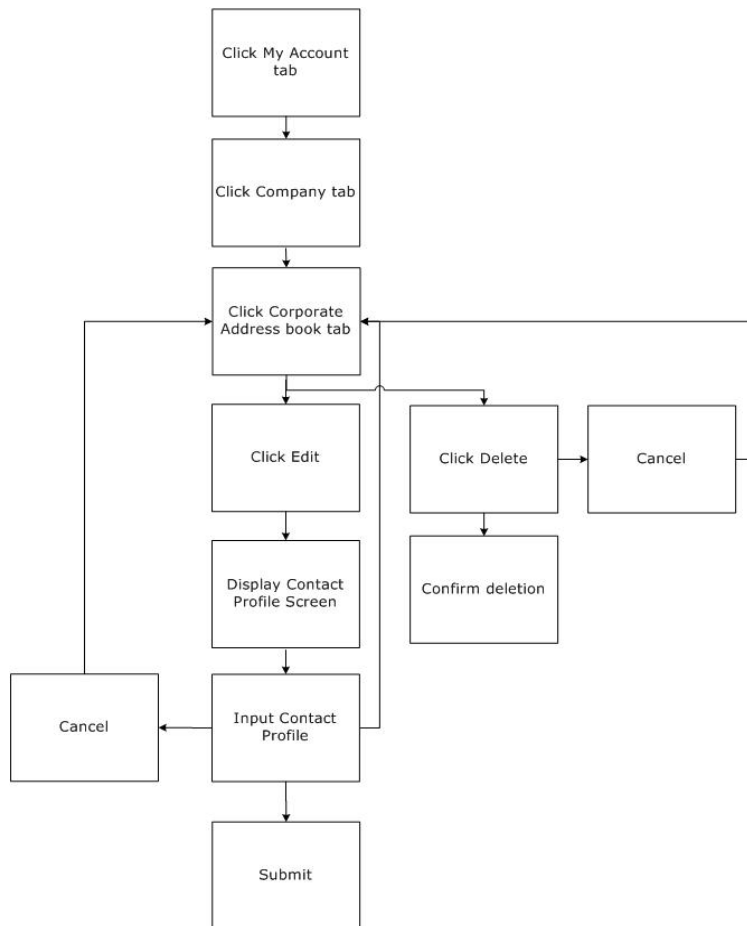
- Manage Corporate Address Book (5700)
- Manage Company Profile (5800)
- Manage Company Users (5900)

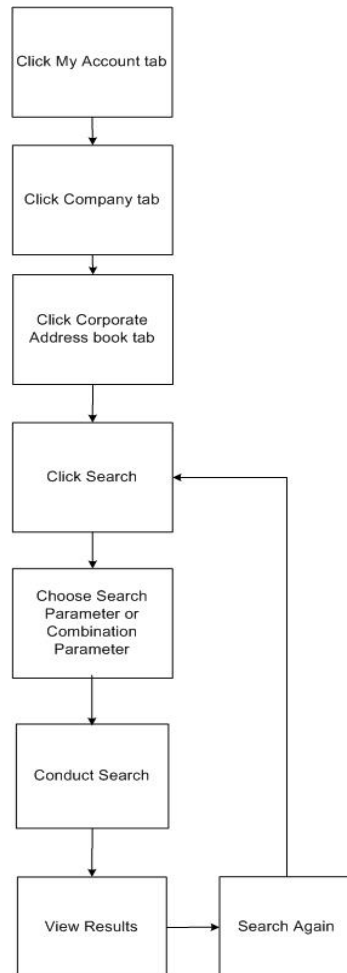
Manage Corporate Address Book (5700)

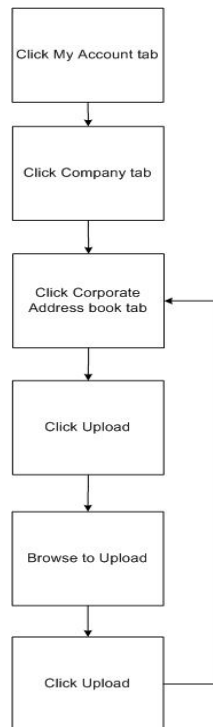
Add Contact Flow:



Modify Contact List Flow:



Search Contacts:

Upload Contact List:

Name:	Manage Corporate Address Book (CAB)
Brief Description:	Administrator User manages all their corporate address book entries.
Primary Actor:	Administrator User
Trigger:	The Admin must Click on the My Account tab; Corporate tab and then Corporate Address book tab
Preconditions	Organization and Accounts exist.
Main Path:	1. This use case begins when the User wishes to manage one or more CAB entries and navigates to the Corporate Address Book. 2. System displays the user's complete CAB with the following fields. a. Alias (Required, no character validation) b. Name (Optional no character validation) c. Number (Required) And actions a. Edit function b. Delete function c. Upload function 3. User selects the add operation. [A1 – A4]

	- System displays an entry form. - User enters the information and submits the form. - System stores the new entry. - System displays the updated CAB list.
Alternate Paths:	[A1] Edit operation for a specific CAB entry - System displays an entry form that is pre-populated with the existing CAB entry. - User edits the information and submits the form. - System stores the new entry. - System displays the updated CAB list. [A2] Delete operation for a specific CAB entry - System displays a page requesting user to confirm the delete operation. - User confirms. - System deletes entry from the User's CAB [A3] Search CAB - System displays a search criteria window for user to search. - Alias - Name - Phone Number - User enters search criteria in to window - System displays CAB results [A4] Upload contact list from a .CSV file - Select upload action - Select previously formatted text file from windows dialog window alias, first_name,last_name, phone_number
Standard Features:	- Corporate Address Book entries contain the following fields - Friendly Name/Alias - Name - Number
Configuration Points	UI field validation
Notes:	The name will be substituted for the phone number when displaying details.

Manage Corporate Address Book:

View Company Address Book Entries

Company Name: CellTec Hierarchy Name: Billing Accounts
User Name: Anne Green Position Name: N/A

Profile Company Address Book Users

UPLOAD SEARCH NEW CONTACT

My Address Book Entries

Alias	Name	Phone Number	Manage Entry
Laura	Laura Marcini	545-803-9028	Edit Delete
Nicholas	Nicholas Auerbach	451-378-3743	Edit Delete
tested	tested	397-894-2110	Edit Delete
testing	testingtesting	989-087-0877	Edit Delete

CellTec
Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information
Username: agreeen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

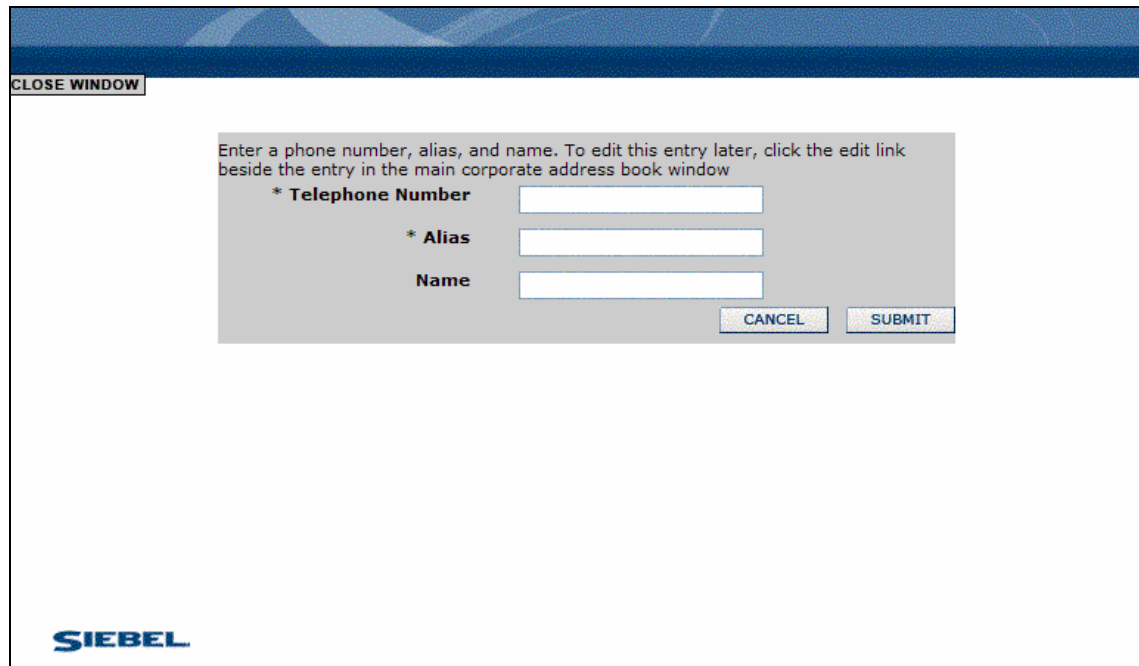
Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Add Contact to CAB:

The image shows a Siebel application window titled "Add Contact to CAB:". The window has a dark blue header bar with a "CLOSE WINDOW" button on the left. The main content area is white and contains a gray rectangular form. At the top of the gray form is the instruction: "Enter a phone number, alias, and name. To edit this entry later, click the edit link beside the entry in the main corporate address book window". Below this instruction are three input fields: the first is labeled "* Telephone Number", the second is labeled "* Alias", and the third is labeled "Name". To the right of each label is a white text input box. At the bottom right of the gray form are two buttons: "CANCEL" and "SUBMIT". The Siebel logo is located in the bottom left corner of the window.

CLOSE WINDOW

Enter a phone number, alias, and name. To edit this entry later, click the edit link beside the entry in the main corporate address book window

* **Telephone Number**

* **Alias**

Name

CANCEL **SUBMIT**

SIEBEL

Upload Contacts:

CLOSE WINDOW

Please select the csv file you wish to upload.
The file should be a csv file with the following columns: alias, first name, last name, phone #

*File **Browse...**

CANCEL **UPLOAD**

SIEBEL

Manage Company Profile (5800)

Name:	Manage Company Profile
Brief Description:	The process of viewing a company or organization's profile.
Primary Actor	Administrator User
Main Path:	1. This use case begins when the User wishes to view the Company Profile and selects the Company Profile function. 2. System displays the current profile including: a. Company Name b. Number of Billing Accounts c. Number of Service Agreements (devices) d. Total Enrolled Users for Company e. Number of Administrators f. Number of View/Pay Users g. Primary Contact Name h. Primary contact Phone Number i. Primary Contact Email Address j. Sales Rep Name (Up to 10) k. Sales Rep Email address (Up to 10)
Alternate Paths:	None
Standard Features:	None

Notes:	None
--------	------

Manage Company Profile:

My Account

Statement

Payments

OverviewHierarchyPersonalCompany

View Company Profile

Company Name: CellTec
User Name: Anne Green

Hierarchy Name: N/A
Position Name: N/A

Profile

Company Address Book

Users

Company Information

Company Name: CellTec
Billing Accounts: 24
Wireless Numbers: 76

User Information

Total Enrolled Users: 5
Administrators: 2
View Only Users: 3

Contact Information

Main SPOC: Anne Green
Phone Number: 508-652-8600
Email Address: agreen@celltec.com
Sales Rep(s):
Support Center: 508-652-8600

CellTec

Business Structures: 1
Billing Accounts: 24
Wireless Numbers: 76

User Information

Username: agreen [Edit](#)
Password: ***** [Edit](#)
Role: Administrator

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

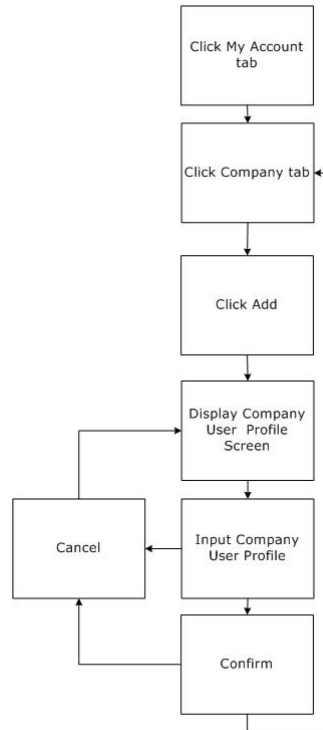
[→ View Last Statement](#)
[→ FAQs](#)

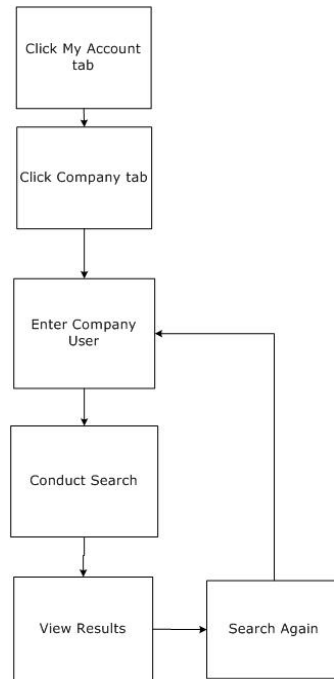
SIEBEL

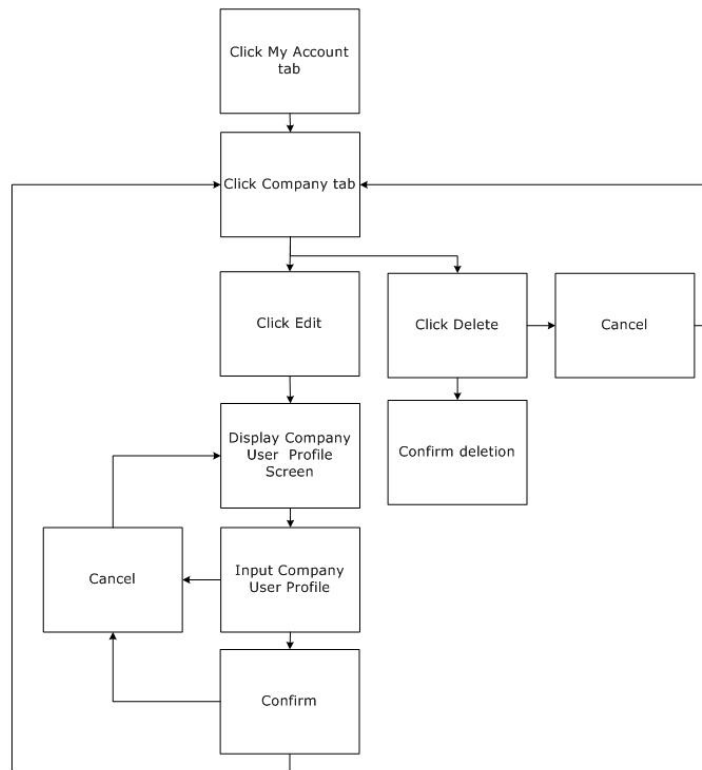
Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Manage Company Users (5900)

Add Company User Flow:



Search Company User Flow:

Edit Company User Flow:

Name:	Manage Company Users.
Brief Description:	The process of managing the profile of any users to which the administrator has access.
Primary Actor	Administrator User
Trigger:	The Admin must Click on the My Account tab; Hierarchy tab and then Company User tab
Preconditions	Organization and Accounts exist.
Main Path:	(Main path addresses the “edit” function) 1. User optionally enters search text and selects filter option. 2. System displays list of user by any field containing the entered search text. 3. List sorts by role, last name and first name. 4. Admin user selects the edit action for a user profile. 5. System displays the User’s Profile page with fields that may be edited. a. First name b. Last name c. Email Address

	d. User Name e. New Password f. Confirm Password g. Role h. Status {Active, Inactive} i. Security Question j. Security Answer 6. User modifies one or more field and submits. [A1] 7. System displays confirmation that the profile has been updated.
Alternate Paths:	[A1] Change user role 1. System displays confirmation that the profile has been updated. [A2] Add company user. 1. System displays an add page with the following fields: a. First name b. Last name c. Email Address d. User Name e. Password f. Role 2. User updates company user information and submits 3. System updates company user information [A3] Delete Company User 1. User selects delete action 2. System displays delete confirmation page and requests user to confirm delete. 3. User confirms company user deletion 4. System deletes company user and returns to search results page. [A4] System cannot edit / delete company user 1. System returns error message that the transaction has failed. [A5] System cannot add company user 1. System returns error message that the transaction has failed. [A6] Retrieval Threshold Exceeded If the user views a list of accounts and the {Retrieval Threshold} is exceeded, only the threshold limit is displayed and the user receives the following warning message: Display threshold exceeded. Only x of y records displayed."
Standard Features:	1. The following fields have configurable form validation: 2. Email 3. Zip/Post Code 4. Phone Number

Notes:	None
--------	------

Screen Displays List of Users:

My Account

Statements

Payments

Overview

Hierarchy

Personal

Company

View Company Users

Company Name: CellTec

User Name: Anne Green

Hierarchy Name: Billing Accounts

Profile

Company Address Book

Users

Search for Users:

GO

Page 1 of 2 →

User ID	Name	Role	
agreeen	Anne Green	Administrator	Edit
john_smith	John Smith	User	Edit Delete
abaker	Amy Baker	User	Edit Delete
bbaker	Bob Baker	User	Edit Delete
ccarter	Chris Carter	User	Edit Delete
dreichert	Dave Reichert	User	Edit Delete
evictory	Edward Victory	Administrator	Edit Delete
fpeters	Fred Peters	User	Edit Delete
gfarnsworth	Greg Farnsworth	Administrator	Edit Delete
htrueblood	Harry Trueblood	User	Edit Delete
icrane	Ichabod Crane	User	Edit Delete
jmason	James Mason	User	Edit Delete
kvalentine	Karen Valentine	User	Edit Delete
llouie	Louis Louie	Administrator	Edit Delete
mbateman	Mark Bateman	Administrator	Edit Delete
ncarraway	Nick Carraway	User	Edit Delete
ozapata	Oliver Zapata	User	Edit Delete
ppeterson	Peter Peterson	User	Edit Delete
qlatifah	Quentin Latifah	User	Edit Delete
rabraham	Rachel Abraham	Administrator	Edit Delete

NEW

CellTec

Business Structures: 3

Billing Accounts: 24

Wireless Numbers: 77

User Information

Username

agreeen [Edit](#)

Password

***** [Edit](#)

Role

Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links

[View Last Statement](#)

[FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Edit/Delete User Profile:

Edit User Profile

Company Name: CellTec Hierarchy Name: Billing Accounts
 User Name: Anne Green

Profile **Company Address Book** **Users**

*indicates required field
 Please Enter your details to update.

* **First Name:**

* **Last Name:**

* **Email Address:**

* **User Name:**

* **New Password:**

* **Confirm Password:**

* **Role:**

Security Question

Security Answer

CellTec
 Business Structures: 3
 Billing Accounts: 24
 Wireless Numbers: 77

User Information
Username
 agreen [Edit](#)

Password
 ***** [Edit](#)

Role
 Admin

Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
[→ View Last Statement](#)
[→ FAQs](#)

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

3.12 CSR Use Cases

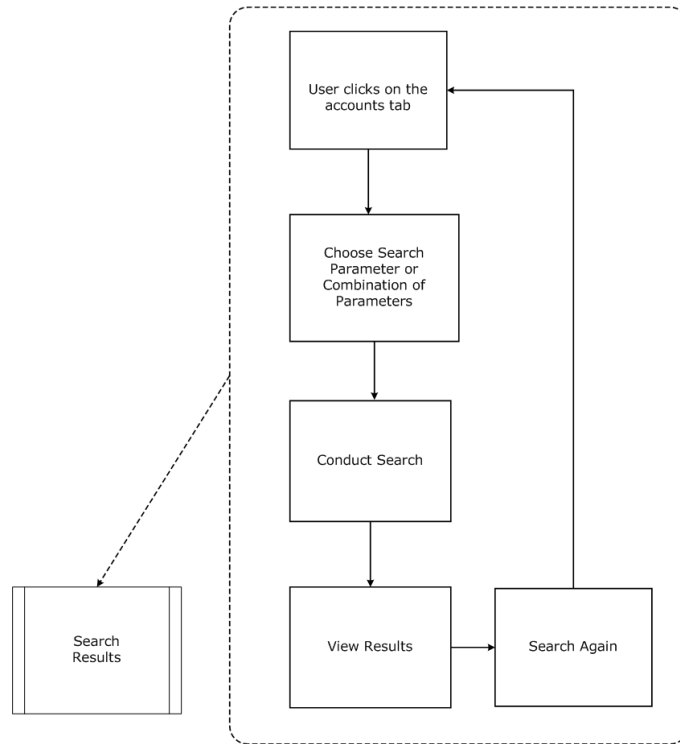
The customer service use cases cover the functional requirements for allowing the service provider to effectively manage business users:

- Search for Users (6200)
- Impersonate User (6900)
- Search Organization (6300)
- Manage Organization (6100)
- View Accounts for Organization (6500)
- Add Billing Accounts (6550)
- View Administrators for Organization (6600)
- Edit Administrator (6650)
- Manage Internal User (6700)

- Add Internal Users (6750)
- Modify Personal Profile (6850)

Search for Users (6200)

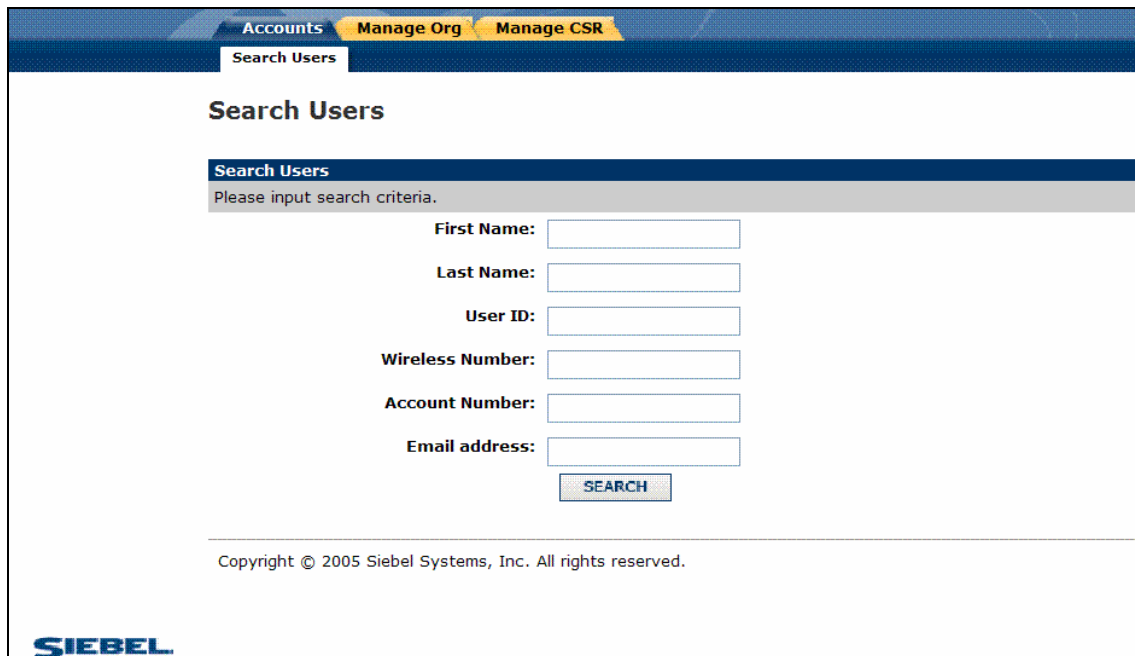
Search for Users:



Name:	Search for Users
Brief Description:	CSR enters search criteria to locate users that they can impersonate.
Actor:	CSR, CSR Administrator
Trigger:	Successful login into CSR application (default page) or user clicks on the Search for User sub tab of the Search Tab from any other page.
Preconditions:	Login
Main Path:	1. This use case begins when a Customer Service Representative selects search criteria from the Search Accounts screen. 2. System displays search screen with the following attributes: a. User First Name b. User Last Name c. User ID d. Wireless Number e. Account Number

	f. Email 3. User enters the search criteria and submits the form. 4. System displays search results screen of all users matching search criteria, a. User ID, Names b. Action: Edit/Delete [A2] and Impersonate [A1] 5. Use case ends.								
Alternate Path:	[A1] User clicks “Impersonate” link in search results. 1. System invokes the Impersonate User use case. [A2] CSR User selects Edit/Delete action. 1. User selects edit action, system displays user edit profile screen with the following attributes: a. First Name b. Last Name c. User Name d. Password e. Confirm Password f. Email Address g. Role: {Administrator, User} h. Secret Question i. Secret Answer j. Status : {Active, Inactive} 2. CSR User changes the status to ‘Active’ and selects submit action. 3. System activates the user and allows CSR user to impersonate. [A2] Retrieval Threshold Exceeded If the user views a list of accounts and the {Retrieval Threshold} is exceeded, only the threshold limit is displayed and the user receives the following warning message: “Display threshold exceeded. Only x of y records displayed.								
Standard Features:	Form Validation Paging (UC 0040)								
Configuration:	<table><tr><th>Screen</th><th>Field</th><th>Validation</th></tr><tr><td rowspan="2">Search Screen</td><td>User First Name</td><td>Only characters and numbers and spaces allowed.</td></tr><tr><td>User Last Name</td><td>Only characters and numbers and spaces allowed.</td></tr></table>	Screen	Field	Validation	Search Screen	User First Name	Only characters and numbers and spaces allowed.	User Last Name	Only characters and numbers and spaces allowed.
Screen	Field	Validation							
Search Screen	User First Name	Only characters and numbers and spaces allowed.							
	User Last Name	Only characters and numbers and spaces allowed.							

	User ID	Only characters and numbers allowed.
	Wireless Number	Only Numbers, spaces, and dashes.
	Account Number	Only Numbers spaces, and dashes.
Notes:	1. System should display users (userid) associated at account level and subscription level in the search results page. 2. Paging is implemented for organization with large hierarchies and is configurable.	

Search User Accounts Screen:

Accounts Manage Org Manage CSR

Search Users

Search Users

Please input search criteria.

First Name:

Last Name:

User ID:

Wireless Number:

Account Number:

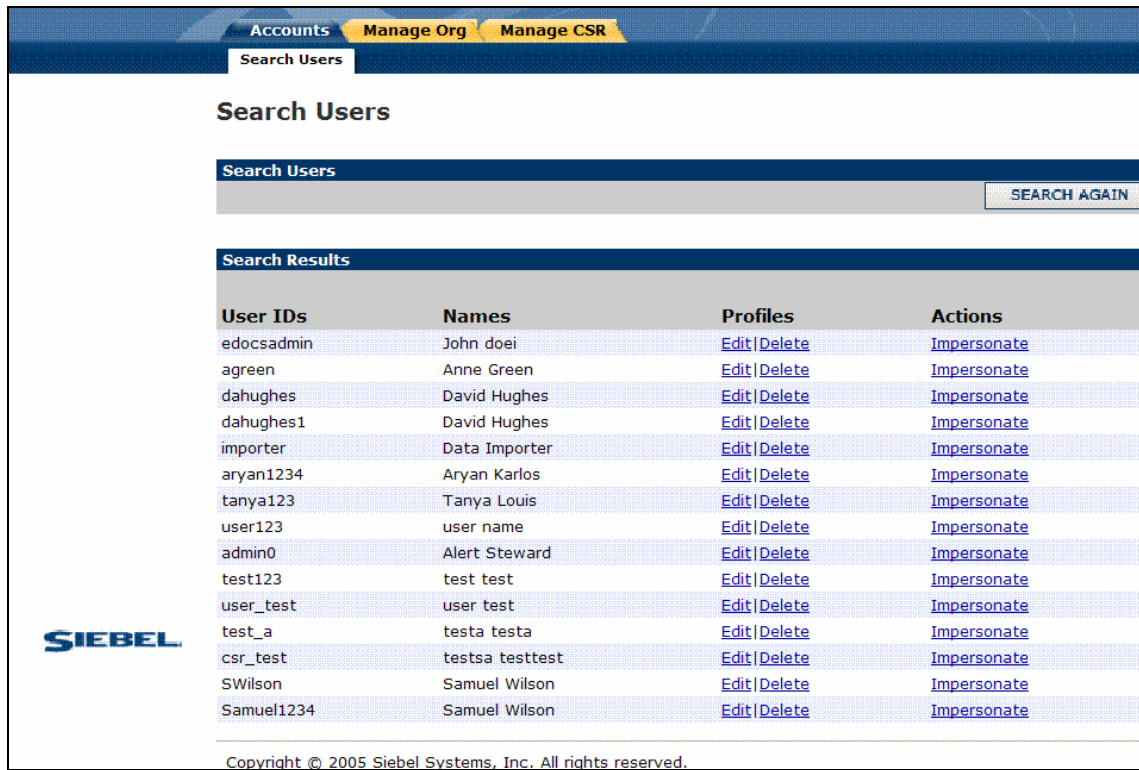
Email address:

SEARCH

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Search Result Screen:



The screenshot displays the Siebel Search Users interface. At the top, there are navigation tabs: Accounts, Manage Org, and Manage CSR. Below these is a 'Search Users' tab. The main heading is 'Search Users'. A search bar is present with a 'SEARCH AGAIN' button. Below the search bar is a 'Search Results' section containing a table with four columns: User IDs, Names, Profiles, and Actions. The table lists 16 users, each with a unique ID, name, and profile, and provides links for Edit, Delete, and Impersonate actions. The Siebel logo is visible on the left side of the screen. At the bottom, a copyright notice states: Copyright © 2005 Siebel Systems, Inc. All rights reserved.

User IDs	Names	Profiles	Actions
edocsadmin	John doi	Edit Delete	Impersonate
agreen	Anne Green	Edit Delete	Impersonate
dahughes	David Hughes	Edit Delete	Impersonate
dahughes1	David Hughes	Edit Delete	Impersonate
importer	Data Importer	Edit Delete	Impersonate
aryan1234	Aryan Karlos	Edit Delete	Impersonate
tanya123	Tanya Louis	Edit Delete	Impersonate
user123	user name	Edit Delete	Impersonate
admin0	Alert Steward	Edit Delete	Impersonate
test123	test test	Edit Delete	Impersonate
user_test	user test	Edit Delete	Impersonate
test_a	testa testa	Edit Delete	Impersonate
csr_test	testsa testtest	Edit Delete	Impersonate
SWilson	Samuel Wilson	Edit Delete	Impersonate
Samuel1234	Samuel Wilson	Edit Delete	Impersonate

Edit User Details:

Accounts **Manage Org** **Manage CSR**

Search Users

Search Users

Edit User Details

Please edit user profile details below.

*indicates required field.

***First Name:**

***Last Name:**

***User Name:**

***Password:**

***Confirm Password:**

***Email Address:**

***Role:** ▼

***Status:** ▼

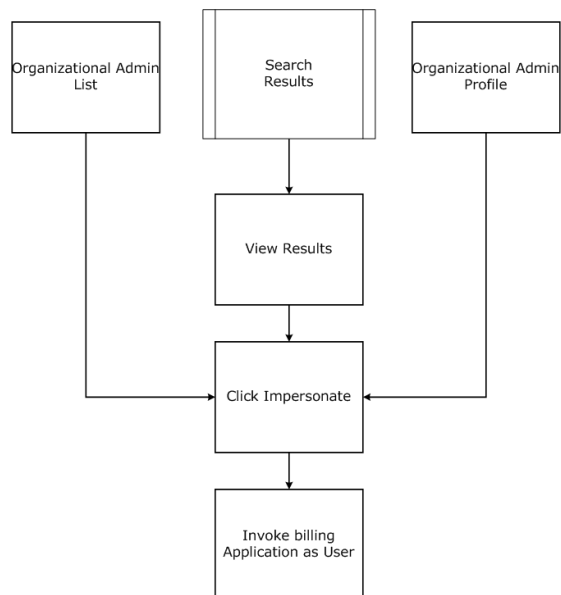
Secret Question

Secret Answer

SUBMIT

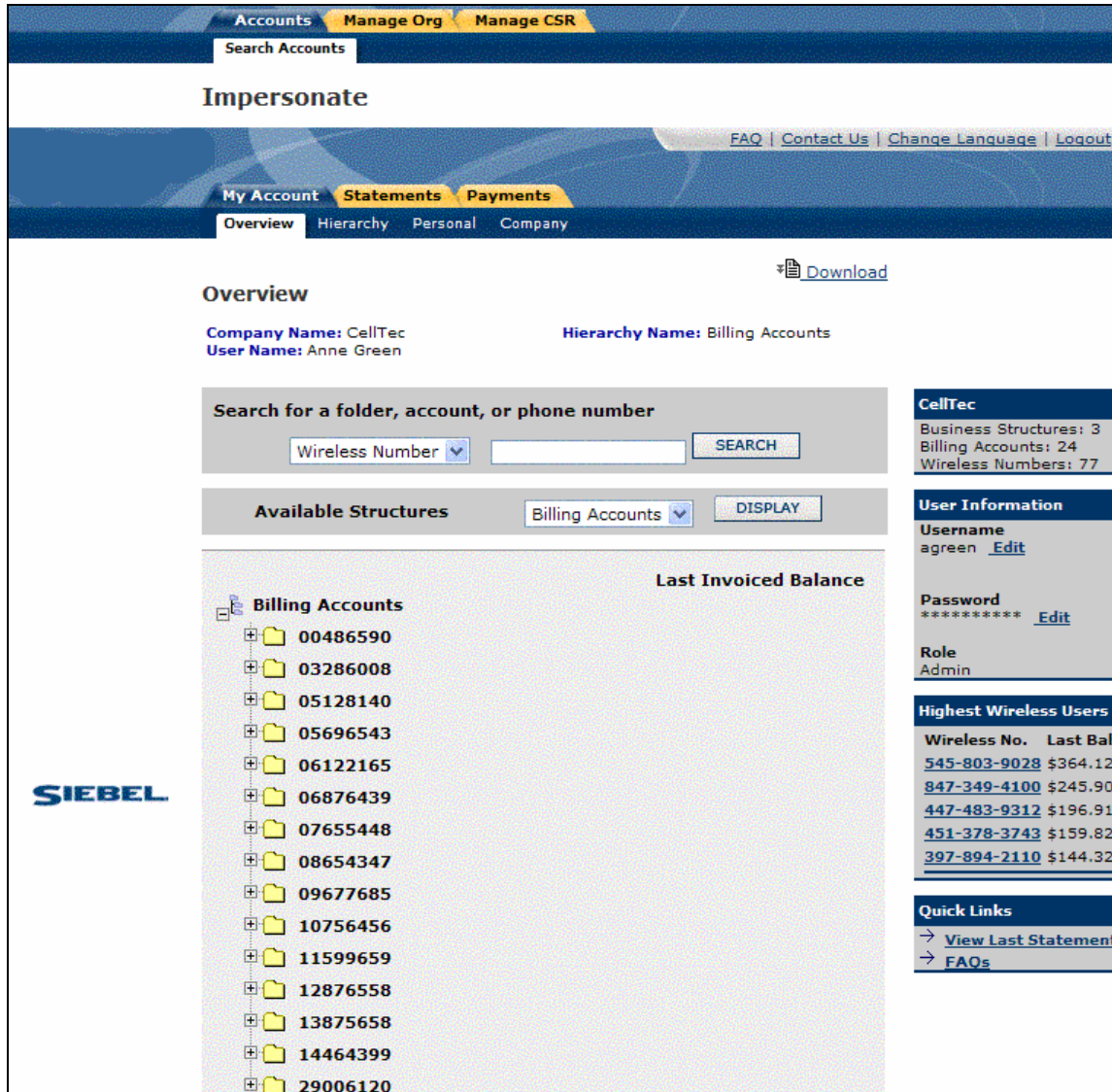
SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Impersonate User (6900)**Impersonate User Flow:**

Name:	Impersonate User
Brief Description:	A Customer Service Representative impersonates a user or views a specific account.
Actor:	Customer Service Representative
Trigger:	User clicks “Impersonate” link in search results
Preconditions	The CSR can use either search result to locate users and use the “Impersonate” link to impersonate the user.
Main Path:	1. This use case begins when a CSR selects a user and invokes the impersonate operation. 2. System displays the initial page for the selected user, while maintaining the existing CSR navigation menu. 3. The CSR navigates through the application as an end User. 4. CSR exits the impersonated user. 5. System ends impersonation session for the selected user and returns the CSR to the search screen.
Standard Features:	Sorting Paging
Notes:	1. A CSR inherits the same rights and privileges as the user they are impersonating. 2. Actions taken by a CSR will be tracked based separately than those actions taken by the individual users.

CSR Impersonate User Screen:



The screenshot displays the Siebel CSR Impersonate User Screen. The top navigation bar includes 'Accounts', 'Manage Org', and 'Manage CSR'. Below this is a 'Search Accounts' bar. The main header area features the 'Impersonate' title and links for 'FAQ', 'Contact Us', 'Change Language', and 'Logout'. The left sidebar contains 'My Account', 'Statements', and 'Payments', with 'Overview' selected. The main content area shows the 'Overview' tab with a 'Download' icon. It displays 'Company Name: CellTec' and 'Hierarchy Name: Billing Accounts'. Below this is a search bar for folders, accounts, or phone numbers, with a dropdown set to 'Wireless Number' and a 'SEARCH' button. An 'Available Structures' section shows 'Billing Accounts' selected with a 'DISPLAY' button. The main list shows 'Billing Accounts' with a 'Last Invoiced Balance' column. The list includes 15 accounts, each with a folder icon and a plus sign. The Siebel logo is visible on the left. The right sidebar contains 'CellTec' summary statistics, 'User Information' for 'agreen' (Admin role), 'Highest Wireless Users' table, and 'Quick Links' for 'View Last Statement' and 'FAQs'.

Accounts **Manage Org** **Manage CSR**

Search Accounts

Impersonate

[FAQ](#) | [Contact Us](#) | [Change Language](#) | [Logout](#)

My Account **Statements** **Payments**

Overview **Hierarchy** **Personal** **Company**

Overview  [Download](#)

Company Name: CellTec **Hierarchy Name:** Billing Accounts
User Name: Anne Green

Search for a folder, account, or phone number

Wireless Number

Available Structures **Billing Accounts**

	Last Invoiced Balance
 Billing Accounts	
 00486590	
 03286008	
 05128140	
 05696543	
 06122165	
 06876439	
 07655448	
 08654347	
 09677685	
 10756456	
 11599659	
 12876558	
 13875658	
 14464399	
 29006120	

CellTec
Business Structures: 3
Billing Accounts: 24
Wireless Numbers: 77

User Information
Username
agreen [Edit](#)
Password
***** [Edit](#)
Role
Admin

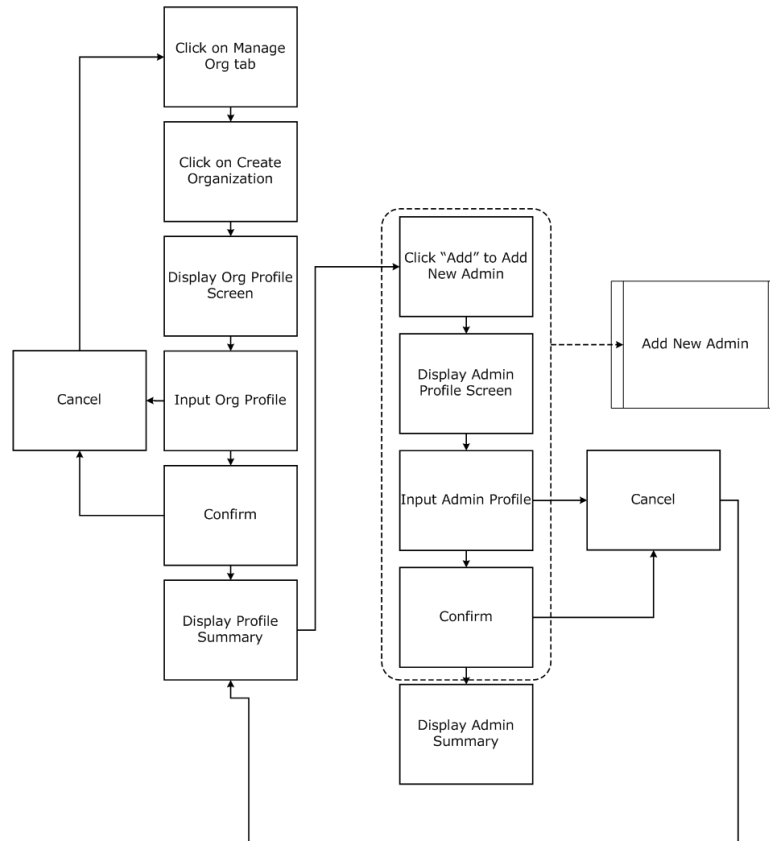
Highest Wireless Users

Wireless No.	Last Bal.
545-803-9028	\$364.12
847-349-4100	\$245.90
447-483-9312	\$196.91
451-378-3743	\$159.82
397-894-2110	\$144.32

Quick Links
→ [View Last Statement](#)
→ [FAQs](#)

Create Organization and Organization Administrator (6000)

Create Organization Flow:



Name:	Create Organization and Organization Administrator
Brief Description:	The process of initially enrolling an organization. After performing this action, the CSR assigns at least on company admin user and billing accounts so that the system can be use used by company users.
Actor:	Customer Service Representative (CSR), CSR Admin
Trigger:	The CSR must Click on the Manage Org tab and Select Create Organization
Preconditions	To create an organization the CSR has to complete the org profile. CSR must add an administrator to the Organization
Main Path:	1. This use case begins when the User chooses to enroll an organization and selects the Enroll Organization operation. 2. System requests User to provide the organization's details such as: a. Organization/Company name b. Corporate Account number c. Tax ID d. Address, city, state, postal code

	</
--	--

	State Zip/Postal Code Primary Contact First Name Primary Contact Last Name Primary Contact Phone Number Primary Contact Email Address Sales Rep Email Address Add Accounts Account Number First Name Last Name User Name Password Role Administrator, CSR Admin Status Either Active or Inactive.
Notes:	None

Create New Organization and Administrator:

Accounts

Manage Org

Manage CSR

Search Organization

Create Organization

Create Organization & Administrator

Create New Organization

Please enter new information below.

*indicates required field.



*Company Name:

*Corporate Account No.:

*Tax ID:

*Address:

*City:

*State:

Select a state

*Zip Code:

*Primary Contact First Name:

*Primary Contact Last Name:

*Primary Contact Phone Number:

(NNN-NNN-NNNN)

*Primary Contact Email:

*Support Phone Number:

(NNN-NNN-NNNN)

Sales Rep One First Name:

Sales Rep One Last Name:

Sales Rep One Email Address:

Sales Rep Two First Name:

Sales Rep Two Last Name:

Sales Rep Two Email Address:

Sales Rep Three First Name:

Sales Rep Three Last Name:

Sales Rep Three Email Address:

Sales Rep Ten First Name:

Sales Rep Ten Last Name:

Sales Rep Ten Email Address:

CANCEL

SUBMIT

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Create New Administrator:

The screenshot shows a web application interface for Siebel. At the top, there is a navigation bar with three tabs: 'Accounts', 'Manage Org', and 'Manage CSR'. Below these tabs, there are two sub-tabs: 'Search Organization' and 'Create Organization', with 'Create Organization' being the active one. The main heading of the page is 'Create Organization & Administrator'. Below this, there is a section titled 'Create Administrator' with a grey background. The text 'Please enter administrators information below.' is displayed, followed by a note '*indicates required field.' The form contains several input fields, each preceded by an asterisk indicating it is required: 'First Name', 'Last Name', 'User Name', 'Password', 'Confirm Password', and 'Email Address'. There are also two dropdown menus: 'Role' (set to 'Administrator') and 'Status' (set to 'Active'). At the bottom of the form are two buttons: 'CANCEL' and 'SUBMIT'. The Siebel logo is visible in the bottom left corner, and the copyright notice 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.' is in the bottom right corner.

Accounts **Manage Org** **Manage CSR**

Search Organization **Create Organization**

Create Organization & Administrator

Create Administrator

Please enter administrators information below.
*indicates required field.

*First Name:

*Last Name:

*User Name:

*Password:

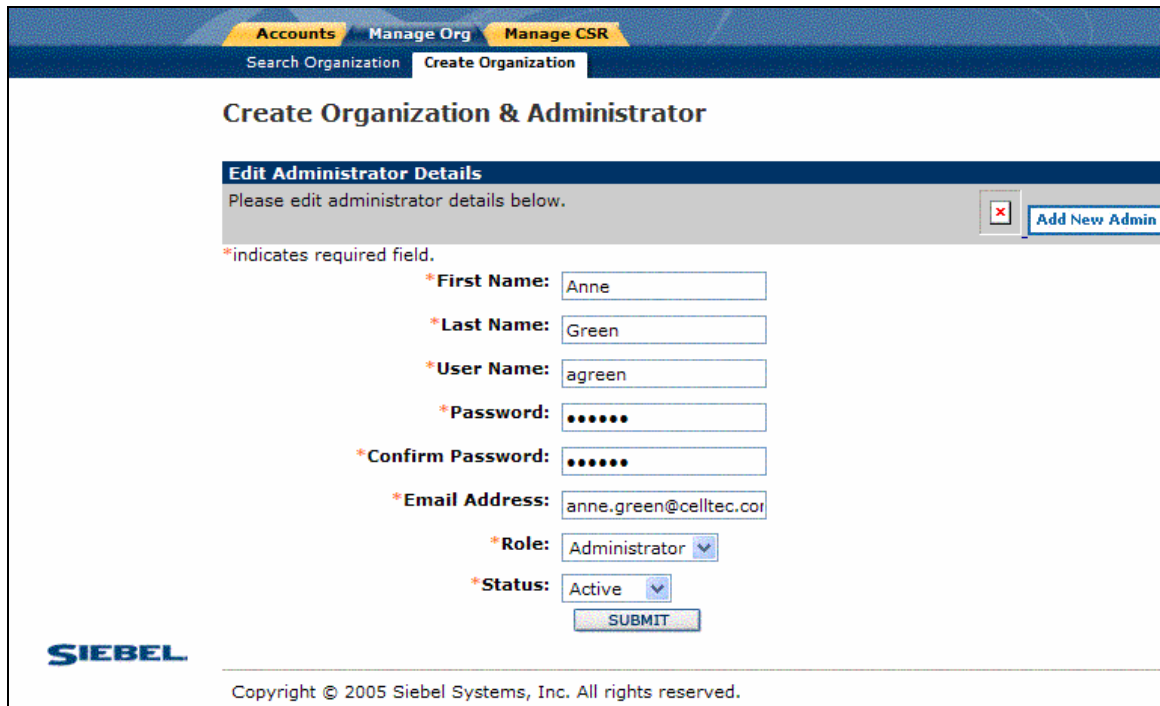
*Confirm Password:

*Email Address:

*Role: Administrator ▼

*Status: Active ▼

SIEBEL Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Edit Administrator Details:

The screenshot shows the Siebel 'Create Organization & Administrator' form. At the top, there are tabs for 'Accounts', 'Manage Org', and 'Manage CSR'. Below these are links for 'Search Organization' and 'Create Organization'. The main heading is 'Create Organization & Administrator'. A sub-heading 'Edit Administrator Details' is followed by the instruction 'Please edit administrator details below.' and a close button (X icon). To the right of this instruction is a button labeled 'Add New Admin'. Below the instruction, a note states '*indicates required field.' The form contains several fields, each preceded by an asterisk: 'First Name' (text box with 'Anne'), 'Last Name' (text box with 'Green'), 'User Name' (text box with 'agreen'), 'Password' (password box with six dots), 'Confirm Password' (password box with six dots), 'Email Address' (text box with 'anne.green@celltec.cor'), 'Role' (dropdown menu with 'Administrator' selected), and 'Status' (dropdown menu with 'Active' selected). A 'SUBMIT' button is located at the bottom right of the form. The Siebel logo is in the bottom left corner, and the copyright notice 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.' is at the bottom center.

Accounts **Manage Org** **Manage CSR**

[Search Organization](#) [Create Organization](#)

Create Organization & Administrator

Edit Administrator Details

Please edit administrator details below.  [Add New Admin](#)

*indicates required field.

***First Name:**

***Last Name:**

***User Name:**

***Password:**

***Confirm Password:**

***Email Address:**

***Role:** ▼

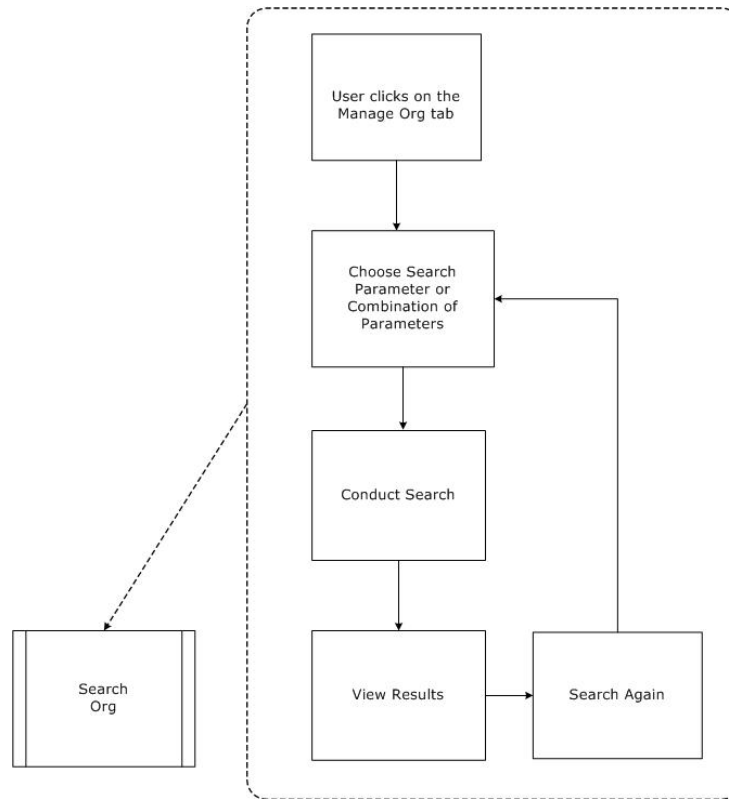
***Status:** ▼

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Search Organization (6300)

Search Organization Flow:



Name:	Search for an Organization
Brief Description:	Customer Service Representative searches for an organization.
Actor:	Customer Service Representative (CSR)
Trigger:	User chooses Manage Org tab from another tab OR chooses the Search Organization sub tab of Manage Org tab from another sub tab of the Manage Org tab OR chooses "Search Again" from the Search Organization results page.
Preconditions	Organization and Accounts exist.
Main Path:	1. This use case begins when a Customer Service Representative selects Search Organization to find an account in order to view the account details. 2. System displays search screen. a. Company name b. Wireless number c. Account Number

	d. Tax ID e. Address f. City g. State h. Postal Code 3. User enters criteria and submits the form. [A1] ("*" can be entered for wild card search) 4. System displays a list of all matching Organizations – Search Organization Results screen. [A2] 5. System displays search results screen and provides options to select: a. Company / Organization Summary [A3] b. View Account [A4] c. View Assigned Administrator Details [A5] 6. System displays the appropriate child screen. 7. Use case ends.
Alternate Paths:	[A1] User clears search fields and can search again. [A2] No matching accounts found for the given criteria 1. System displays a message stating that there are no matching results. [A3] User selects Company link. 1. System displays Company / Organization Summary screen. [A4] User selects View Account 1. System displays list of accounts for company, the View Accounts screen [A5] User selects View Administrator Details 1. System displays View Administrator Details screen [A6] Retrieval Threshold Exceeded If the user views a list of accounts and the {Retrieval Threshold} is exceeded, only the threshold limit is displayed and the user receives the following warning message: "Display threshold exceeded. Only x of y records displayed.
Standard Features:	The following are core fields that are available for search: a) Organization Name b) Wireless Number c) Account Number
Notes:	Results will only show created organizations, accounts that are loaded into the system, but are not part of an organization will not appear. Paging is implemented and is configurable.

Configuration:	Screen	Field	Validation
	Search Organization	Company Name Phone Number Account Number Tax ID Address City State Postal Code	

Search Organization Screen:

Accounts **Manage Org** **Manage CSR**

Search Organization **Create Organization**

Search Organization

Search Organization

Please input search criteria.

Company Name:

Wireless Number:

Account Number:

Tax ID:

Address:

City:

State: ▼

Zip Code:

SEARCH

SIEBEL Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Search Result Screen:



Accounts **Manage Org** **Manage CSR**

[Search Organization](#) [Create Organization](#)

Search Organization

Search Organization [SEARCH AGAIN](#)

Search Results

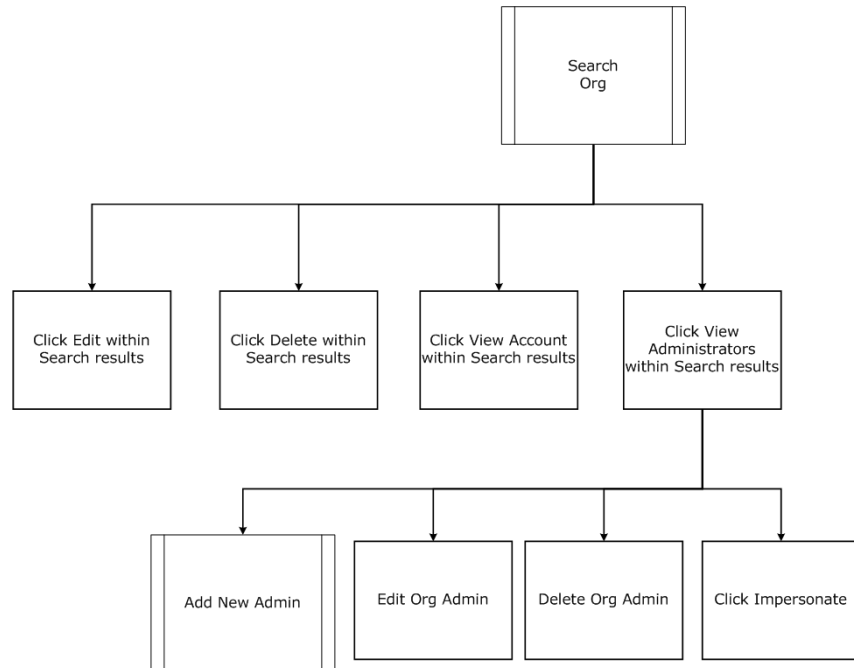
Company Name	Company Actions	View Account	Assigned Administrator
CellTec	Edit Delete	View	View

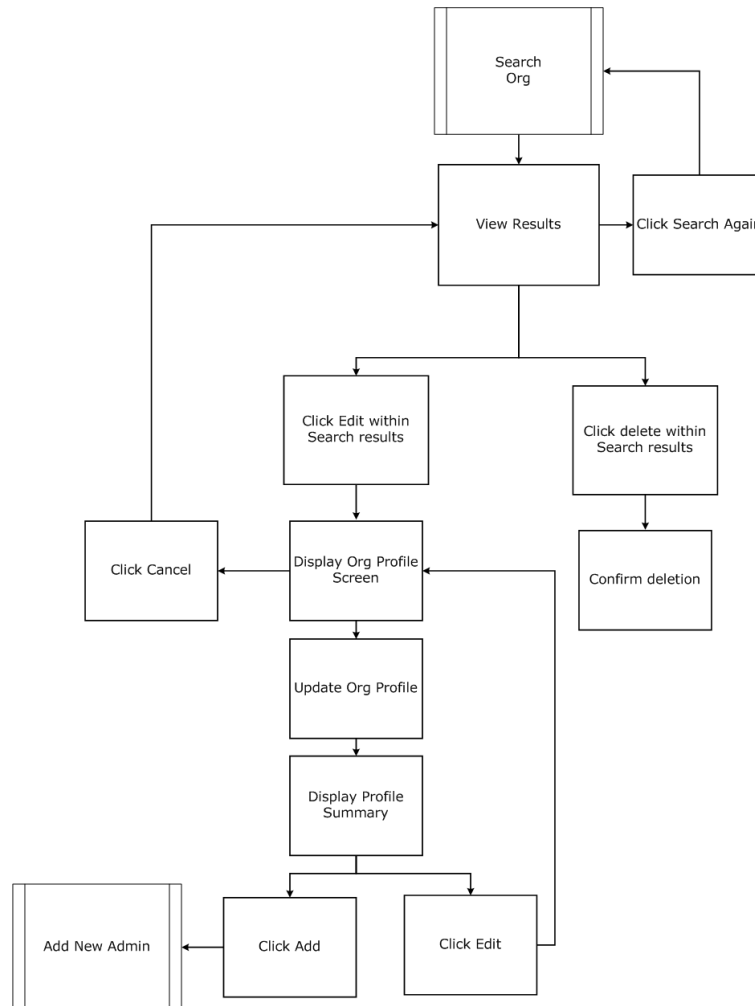
Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Manage Organization (6100)

Manage Organization:



Modify Organization Flow:

Name:	Manage Organization
Brief Description:	Confirmation of adding a new Organization and option to add a new Administrator.
Actor:	Customer Service Representative (CSR), CSR Admin
Precondition:	User completed the Search for Organization use case and it returned results.
Trigger:	User chooses “edit” option for Company OR chooses “delete” for a Company OR chooses “view” for an account OR chooses “view” for an administrator.
Main Path:	1. This use case begins when the User views the search result screen. 2. User has options to: a. Edit Organization/Company details [A2] b. Add an Administrator to the new organization

	This user would have access to all current and future billing accounts and business structure hierarchies created by this user or other users. c. Accept new Organization creation and navigate elsewhere in the application. 3. Use case ends.																					
Alternate Paths:	[A1] System is unable to link to optional pages. 1. System displays message informing the User of the problem and allows them to correct it. [A2] User selects Delete Company link. 1. System invokes modify or delete organization use case. [A3] User selects View Account 1. System displays list of accounts for company, the View Accounts screen. [A4] User selects View Administrator Details 1. System displays View Administrator Details screen. [A5] Add Administrator																					
Standard Features:	None																					
Notes:	None																					
Configuration:	<table><tr><th>Screen</th><th>Field</th><th>Validation</th></tr><tr><td rowspan="7">Search Organization</td><td>Company Name</td><td></td></tr><tr><td>Phone Number</td><td></td></tr><tr><td>Account Number</td><td></td></tr><tr><td>Tax ID</td><td></td></tr><tr><td>Address</td><td></td></tr><tr><td>City</td><td></td></tr><tr><td>State</td><td></td></tr><tr><td></td><td>Postal Code</td><td></td></tr></table>	Screen	Field	Validation	Search Organization	Company Name		Phone Number		Account Number		Tax ID		Address		City		State			Postal Code	
Screen	Field	Validation																				
Search Organization	Company Name																					
	Phone Number																					
	Account Number																					
	Tax ID																					
	Address																					
	City																					
	State																					
	Postal Code																					

Edit Organization Details:

Accounts

Manage Org

Manage CSR

Search Organization

Create Organization

Create Organization & Administrator

Edit Organization

Please edit organization details below.
*indicates required field.

*Organization Name

CellTec

*Corporate Account No.:

12345678989

*Tax ID:

12345678990

*Address:

One Apple Hill

*City:

Natick

*State:

Massachusetts

*Zip Code:

01410

*Primary Contact First Name:

Anne

*Primary Contact Last Name:

Green

*Primary Contact Phone Number:

508-652-8766

(NNN-NNN-NNNN)

*Primary Contact Email Address:

agreen@celltec.com

*Support Phone Number:

508-652-8766

(NNN-NNN-NNNN)

Sales Rep One First Name:

Sales Rep One Last Name:

Sales Rep One Email Address:

Sales Rep Two First Name:

Sales Rep Two Last Name:

Sales Rep Two Email Address:

Sales Rep Three First Name:

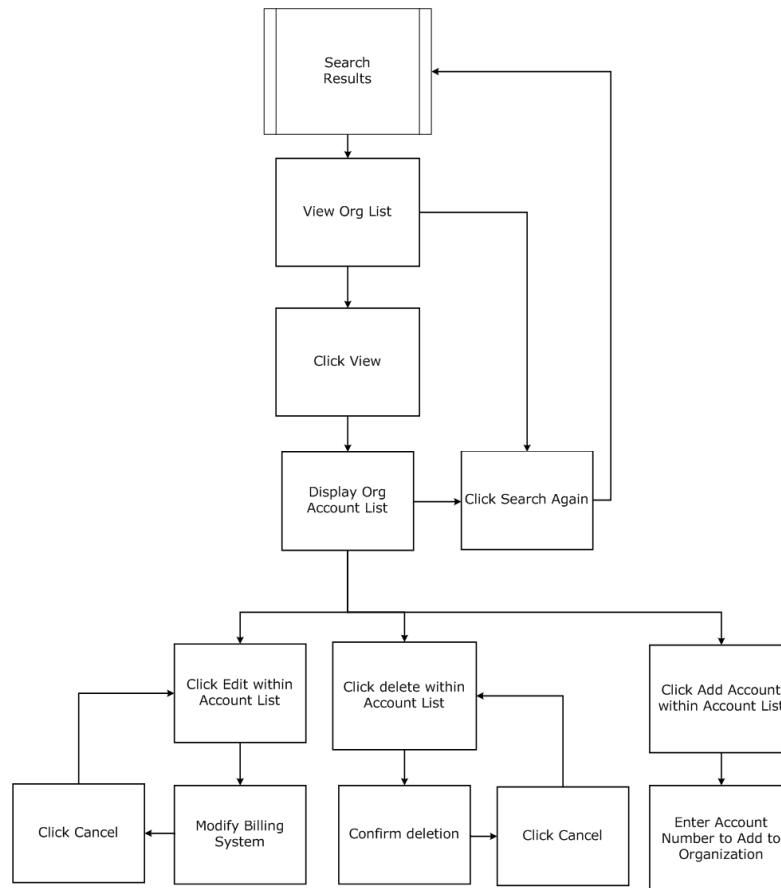
Sales Rep Three Last Name:

Sales Rep Three Email Address:



View Accounts for Organization (6500)

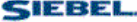
Modify Organization Accounts:



Name:	View Accounts for Organization
Brief Description:	Customer Service Representative views Accounts for an Organization. <i>Rationale:</i> This screen enables the CSR to consolidate under one organization multiple billing accounts that may come from multiple billing systems from the service provider.
Actor:	Customer Service Representative (CSR).
Trigger:	Clicking the View link for an organization in the organization list displays the Org Account List. Click Edit link within Org Account List.
Preconditions	The CSR has searched for an existing organization.
Main Path:	1. This use case begins when a Customer Service Representative selects the View Accounts view from the Search Organization Results screen. 2. System displays the list of accounts for the company. 3. User can select:

	a. Add Account button [A1] b. Edit Account link [A2] c. Remove Account link [A3] 4. Use case ends.
Alternate Paths	[A1] User selects to Add Account to an Organization. 1. System displays Add Billing Account screen. [A2] User selects Edit Account 1. System displays the Edit Accounts screen [A3] User selects Remove Account 1. System displays confirmation page to verify account removal [A4] Retrieval Threshold Exceeded If the user views a list of accounts and the {Retrieval Threshold} is exceeded, only the threshold limit is displayed and the user receives the following warning message; “Display threshold exceeded. Only x of y records displayed. [A5] Search for account 1. User enters an account number and selects search 2. System displays search results page. System should support wild card (*) search for search by account number.
Standard Features:	Paging (UC 0040)
Notes:	Paging is implemented and is configurable.

View Billing Accounts:



Accounts **Manage Org** **Manage CSR**

Search Organization Create Organization

Search Organization

View Organization Accounts [SEARCH AGAIN](#)

Accounts for CellTec

Accounts	Account Actions	Add Account
00486590	Edit Remove	
07655448	Edit Remove	
06122165	Edit Remove	
08654347	Edit Remove	
71385461	Edit Remove	
13875658	Edit Remove	
81441916	Edit Remove	
80011008	Edit Remove	
31569801	Edit Remove	
41251761	Edit Remove	
14464399	Edit Remove	
29006120	Edit Remove	
12876558	Edit Remove	
92156901	Edit Remove	
11599659	Edit Remove	
03286008	Edit Remove	
92801508	Edit Remove	
91459771	Edit Remove	
06876439	Edit Remove	
61362310	Edit Remove	
05128140	Edit Remove	
10756456	Edit Remove	
05696543	Edit Remove	
09677685	Edit Remove	

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Account Summary with Confirmation:

The screenshot shows the 'Add Accounts' form in the Siebel application. The top navigation bar includes 'Accounts', 'Manage Org', and 'Manage CSR'. Below this, there are links for 'Search Organization' and 'Create Organization'. The main heading is 'Add Accounts'. A sub-heading 'Add Accounts' is also present. The form contains the following fields: 'Company' with the value 'CellTec', 'Account No.' with an empty text box, and 'Billing System' with a dropdown menu showing 'Billing System 1'. A 'SUBMIT' button is located below the dropdown. At the bottom, there is a copyright notice: 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.' and the Siebel logo.

Accounts **Manage Org** **Manage CSR**

[Search Organization](#) [Create Organization](#)

Add Accounts

Add Accounts

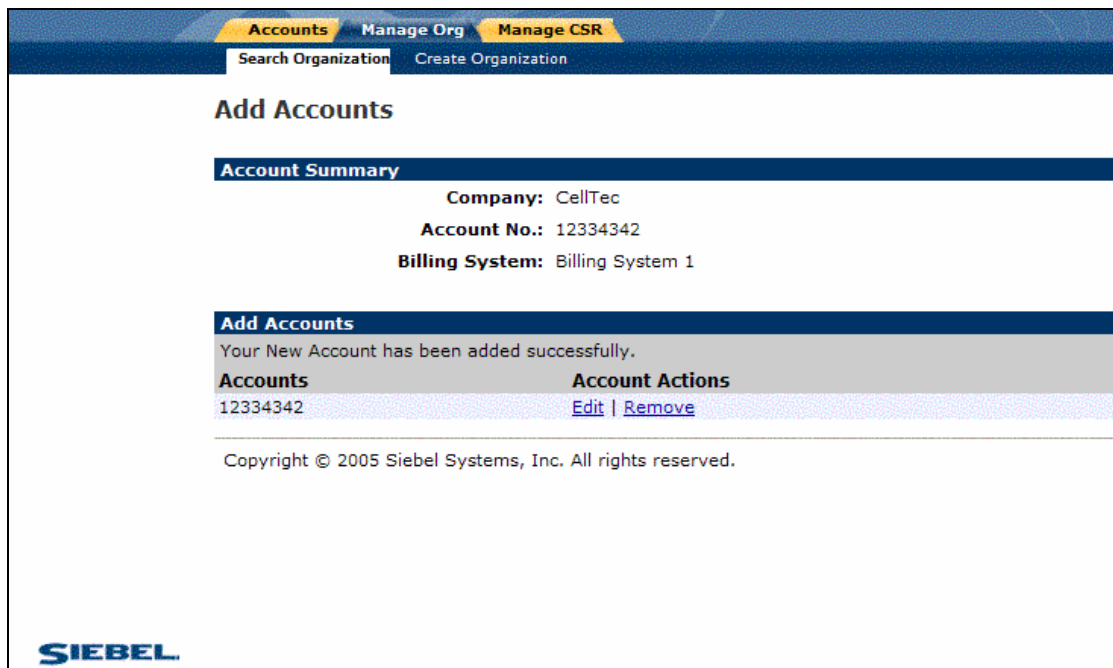
Company: CellTec

Account No.:

Billing System:

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL



The screenshot shows the 'Add Accounts' form in the Siebel application, displaying the confirmation screen. The top navigation bar includes 'Accounts', 'Manage Org', and 'Manage CSR'. Below this, there are links for 'Search Organization' and 'Create Organization'. The main heading is 'Add Accounts'. A sub-heading 'Account Summary' is present. The form contains the following fields: 'Company' with the value 'CellTec', 'Account No.' with the value '12334342', and 'Billing System' with the value 'Billing System 1'. Below these fields, there is a message: 'Your New Account has been added successfully.' A table with two columns, 'Accounts' and 'Account Actions', is shown. The table has one row with the account number '12334342' and the actions 'Edit' and 'Remove'. At the bottom, there is a copyright notice: 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.' and the Siebel logo.

Accounts **Manage Org** **Manage CSR**

[Search Organization](#) [Create Organization](#)

Add Accounts

Account Summary

Company: CellTec

Account No.: 12334342

Billing System: Billing System 1

Your New Account has been added successfully.

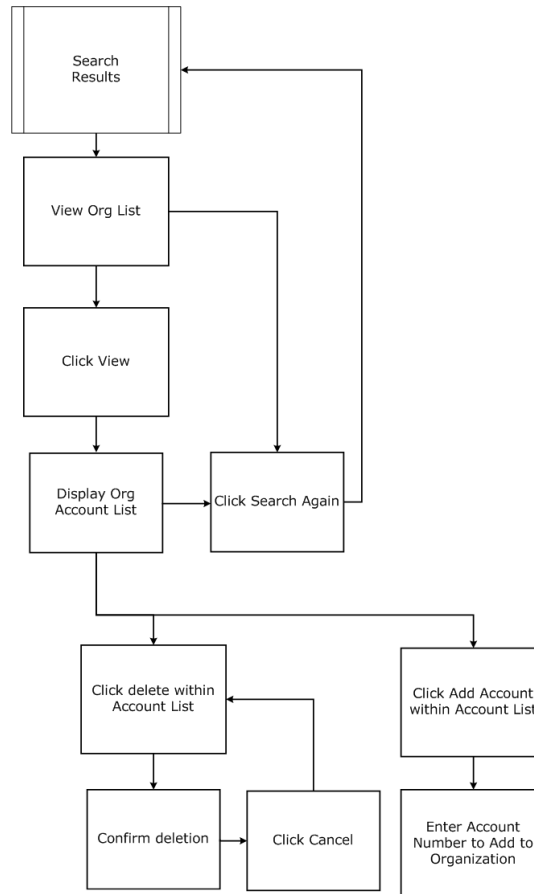
Accounts	Account Actions
12334342	Edit Remove

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Add Billing Account (6550)

Add and Delete Billing Accounts:



Name:	Add Accounts to an Organization
Brief Description:	A user needs to add billing accounts available to an organization.
Actor:	Customer Service Representative (CSR) admin.
Precondition:	The CSR has searched and located an existing organization.
Trigger:	Choose the Add Account option within Organization Account list.
Main Path:	1. This use case begins when the User chooses to add billing accounts to an organization. The User searches and selects an organization via the Search for Organization use case. 2. System displays a page with the organization's details including items such as: a. Account Numbers b. Billing System (if applicable) 3. User chooses to add an additional billing account and provides billing

	account information. - User selects Add button to add billing account to an organization. - System verifies the submission and adds the billing account. [A1] - Use case ends.
Alternate Paths:	[A1] System is unable to verify the entry. System displays message informing the User of the problem and allows them to correct it.
Standard Features:	Form validation.
Notes:	

Add Billing Accounts:


The screenshot shows the 'Add Accounts' form in the Siebel application. The form is titled 'Add Accounts' and has a sub-header 'Add Accounts'. It contains the following fields and controls:

- Company:** CellTec
- Account No.:** A text input field.
- Billing System:** A dropdown menu showing 'Billing System 1'.
- SUBMIT:** A button to submit the form.

The footer of the form displays the copyright notice: 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.' and the Siebel logo.

View Administrators for Organization (6600)

Name:	View Administrators for Organization
Brief Description:	Customer Service Representative views Administrators for an Organization.
Actor:	Customer Service Representative (CSR)
Main Path:	- This use case begins when a Customer Service Representative selects the View Administrator view from the Search Organization Results screen. - System displays the list of administrators for the company. - User can select:

	a. Edit Administrator Profile [A1] b. Impersonate Administrator [A2] 4. Use case ends.
Alternate Paths:	[A1] User selects to edit Administrator profile information. 1. System displays User Profile screen. [A2] User selects to Impersonate Administrator 1. System invokes the Impersonate User functionality
Standard Features:	Paging (UC 0040)
Notes:	Paging is implemented and is configurable.

View Organization Administrators:

The screenshot displays the 'View Organization Administrators' interface in Siebel. At the top, there are tabs for 'Accounts', 'Manage Org', and 'Manage CSR'. Below these, there are links for 'Search Organization' and 'Create Organization'. The main heading is 'Search Organization'. Underneath, there's a sub-heading 'View Organization Administrators' with a 'SEARCH AGAIN' button. The table is titled 'Administrators for CellTec' and has three columns: 'Administrators', 'Profile', and 'Action'. The 'Action' column includes a link to 'Add New Admin'. The table lists six administrators with their names, profile links, and impersonation links.

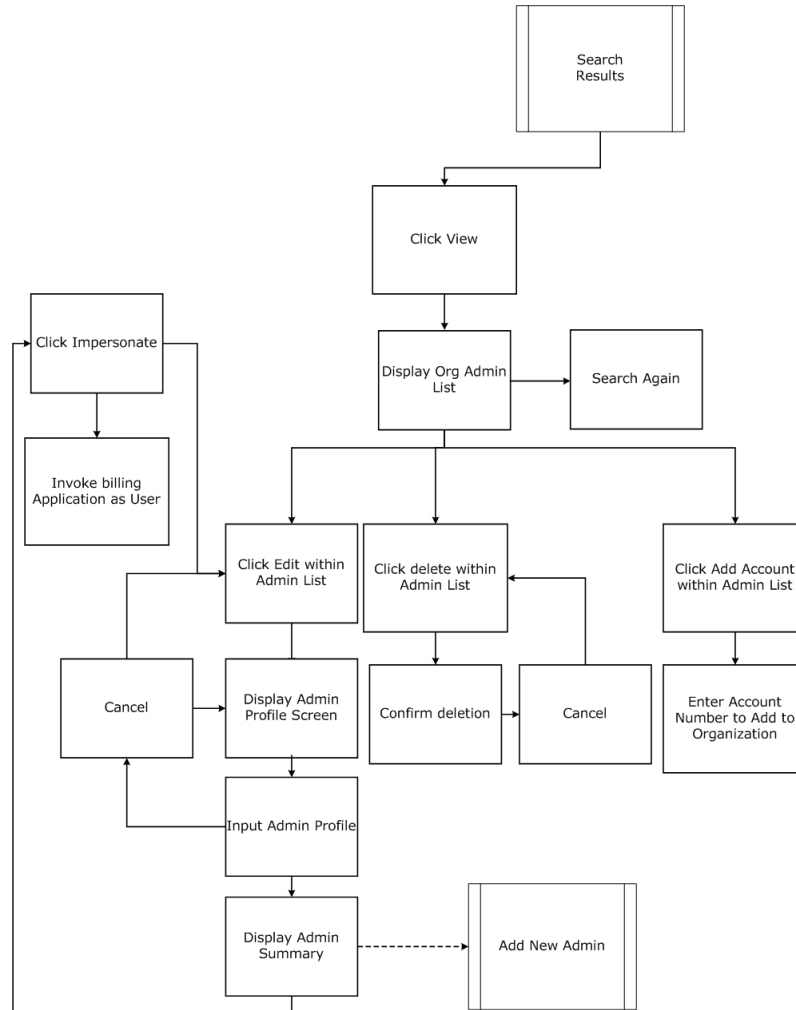
Administrators	Profile	Action
Anne Green	Edit Delete	Impersonate
Edward Victory	Edit Delete	Impersonate
Greg Farnsworth	Edit Delete	Impersonate
Louis Louie	Edit Delete	Impersonate
Mark Bateman	Edit Delete	Impersonate
Rachel Abraham	Edit Delete	Impersonate

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Edit Administrator (6650)

Edit Organization Administration Flow:



Name:	Edit Administrator Details
Brief Description:	Customer Service Representative edits an Administrators details for an organization.
Actor:	Customer Service Representative (CSR)
Trigger:	User chooses "edit" or "delete" on the View Organization Administrators page in the Search for Organization and Organization's Information use case.
Preconditions	The CSR has searched for an existing organization
Main Path:	1. This use case begins when a Customer Service Representative selects

	Edit Organization Administrator Details link. 2. System displays Edit Organization Administrator Details screen. [A1-A2] a. First Name b. Last Name c. Password d. Confirm Password e. Email Address f. Role (Drop Down) g. Status (Active/Inactive/Locked) 3. User edits Administrator details and submits the form. 4. System displays Edit Administrator Details Summary page with the updated information. 5. Use case ends.																				
Alternate Paths:	[A1] User can select to Add New Administrator 1. User is taken to Add Administrator page. [A2] User can select to Impersonate Administrator 2. The system invokes the Impersonate User function for the Administrator																				
Standard Features:	1. Password Reset – CSRs can reset Administrator passwords by changing the Password and Confirm Password fields and submitting.																				
Notes:	None																				
Configuration:	<table><thead><tr><th>Screen</th><th>Field</th><th>Validation</th></tr></thead><tbody><tr><td rowspan="8">Edit Administrator Details</td><td>First Name</td><td></td></tr><tr><td>Last Name</td><td></td></tr><tr><td>User Name</td><td>Only characters and numbers allowed.</td></tr><tr><td>Password</td><td></td></tr><tr><td>Confirm Password</td><td></td></tr><tr><td>Email Address</td><td></td></tr><tr><td>Role</td><td>Either Administrator or User.</td></tr><tr><td>Status</td><td>Either Active or Inactive.</td></tr></tbody></table>	Screen	Field	Validation	Edit Administrator Details	First Name		Last Name		User Name	Only characters and numbers allowed.	Password		Confirm Password		Email Address		Role	Either Administrator or User.	Status	Either Active or Inactive.
Screen	Field	Validation																			
Edit Administrator Details	First Name																				
	Last Name																				
	User Name	Only characters and numbers allowed.																			
	Password																				
	Confirm Password																				
	Email Address																				
	Role	Either Administrator or User.																			
	Status	Either Active or Inactive.																			

Search Result Screen:



The screenshot displays the Siebel application interface for searching organizations. At the top, there are tabs for 'Accounts', 'Manage Org', and 'Manage CSR'. Below these, a sub-header 'Search Organization' is visible, with a 'Create Organization' link. The main content area is titled 'Search Organization' and features a 'View Organization Administrators' section. This section includes a 'SEARCH AGAIN' button. Below this, a table titled 'Administrators for CellTec' lists six administrators with their names, profiles, and actions (Edit, Delete, Impersonate). An 'Add New Admin' button is located to the right of the table. The footer of the screen shows the Siebel logo and a copyright notice for 2005 Siebel Systems, Inc.

Accounts **Manage Org** **Manage CSR**

Search Organization Create Organization

Search Organization

View Organization Administrators [SEARCH AGAIN](#)

Administrators for CellTec			
Administrators	Profile	Action	Add New Admin
Anne Green	Edit Delete	Impersonate	
Edward Victory	Edit Delete	Impersonate	
Greg Farnsworth	Edit Delete	Impersonate	
Louis Louie	Edit Delete	Impersonate	
Mark Bateman	Edit Delete	Impersonate	
Rachel Abraham	Edit Delete	Impersonate	

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

CSR Edits Administrator Details:

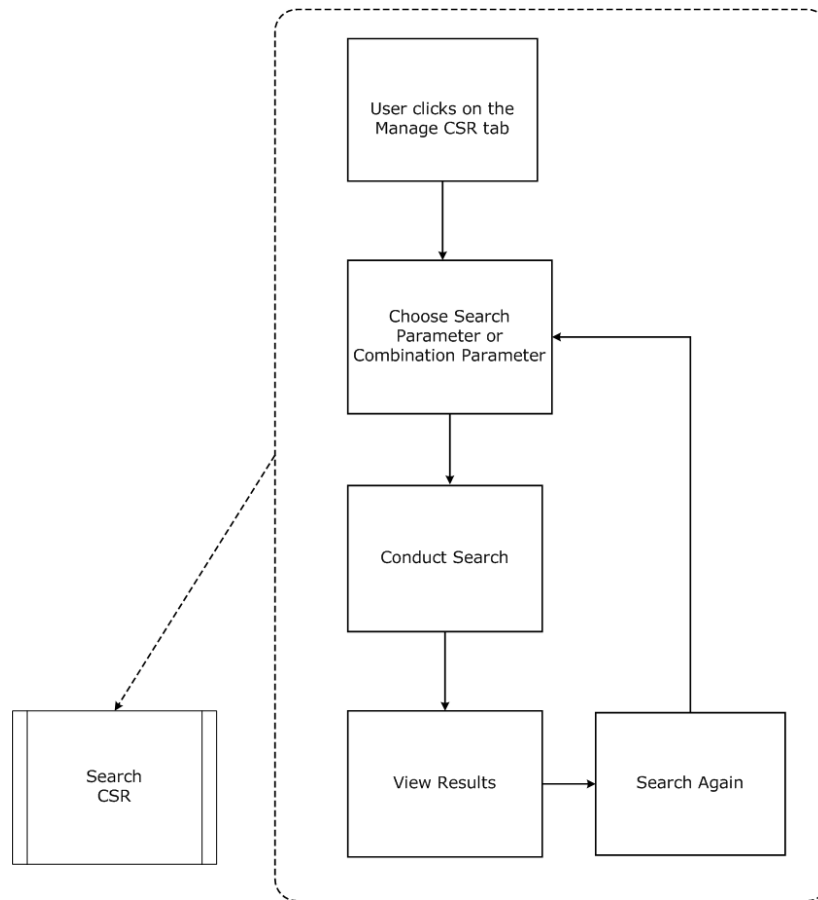
The screenshot shows the Siebel CRM interface for creating an administrator. The top navigation bar includes 'Accounts', 'Manage Org', and 'Manage CSR'. Below this, there are tabs for 'Search Organization' and 'Create Organization'. The main heading is 'Create Organization & Administrator'. A sub-section titled 'Edit Administrator Details' contains the instruction 'Please edit administrator details below.' and two buttons: 'Impersonate' and 'Add New Admin'. A note states '*indicates required field.' The form fields are as follows:

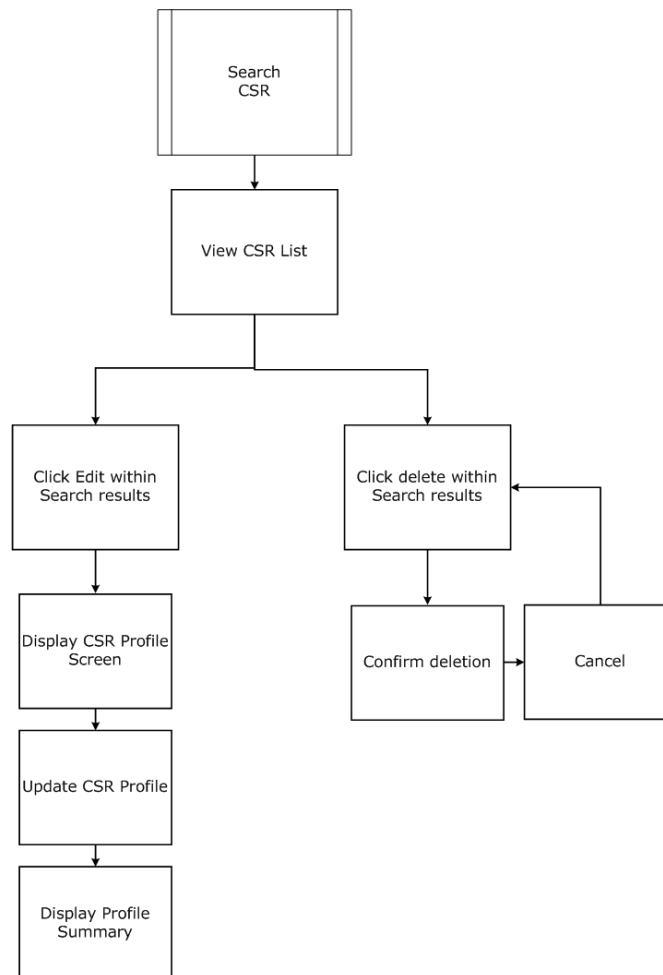
- *First Name: Anne
- *Last Name: Green
- *User Name: agreeen
- *Password: (masked with dots)
- *Confirm Password: (masked with dots)
- *Email Address: anne.green@celltec.cor
- *Role: Administrator (dropdown menu)
- *Status: Active (dropdown menu)

A 'SUBMIT' button is located at the bottom of the form. The Siebel logo and copyright notice 'Copyright © 2005 Siebel Systems, Inc. All rights reserved.' are at the bottom of the page.

Manage Internal User (6700)

Search CSR Flow:



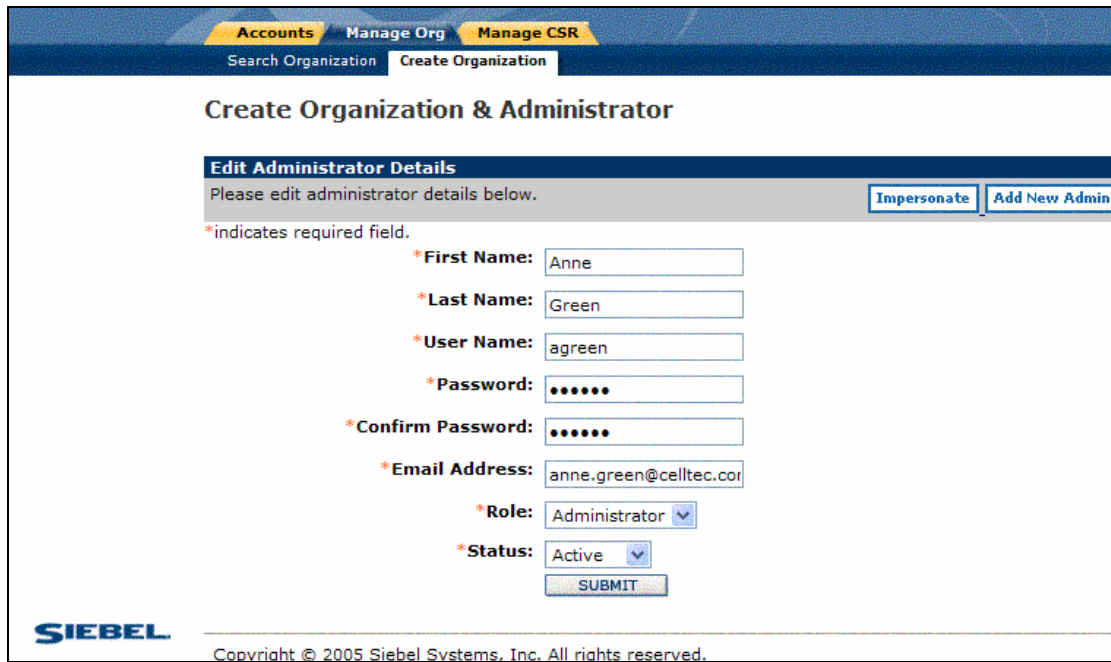
Modify CSR Flow:

Name:	Manage Internal Users (CSR)
Brief Description:	A Customer Service Representative Administrator, adds, deletes, or modifies other CSR's, so that they can access the application.
Actor:	Customer Service Representative Administrator (CSR Admin)
Trigger:	Successful login into CSR application. CSR Admin clicks on the Manage CSR tab.
Preconditions	The CSR admin User has been created. Organization and Accounts exist.
Main Path:	1. This use case begins when a Customer Service Representative wishes to find a CSR user. 2. System displays search screen with the following attributes: a. CSR ID

	b. CSR First Name c. CSR Last Name 3. User enters the search criteria and submits the form. 4. System displays search result with the list of internal user accounts to the administrator. [A1] 5. User has option to: a. Edit CSR User [A2] b. Delete CSR User [A3] 6. User selects an appropriate option. 7. System links to appropriate page based on option selected. 8. Use case ends.
Alternate Paths:	[A1] There are no matching accounts found for the given criteria. 1. System displays a message stating that there are no matching results. [A2] Edit CSR Details. CSR Admin selects user from the list and invokes the Edit User option. 1. System displays <i>Edit User</i> page including: 1. First name 2. Last name 3. CSR ID 4. Password 5. Password confirmation 6. Email Address 7. Role 8. Status (Active/Inactive/Locked) 2. User updates fields and submits the form. 3. System validates the information and updates the profile for the selected user. [A4] 4. System displays the updated list of internal users to the administrator. [A3] CSR Admin selects the Delete operation: 1. System displays a confirmation page with the following information: 1. Name 2. Role 2. User confirms the operation. 3. System validates the request and logs details of inactivated user and disables the user's access. 4. System displays the updated list of Internal Users [A4] System is unable to validate information 1. System prompts the user to review the information and does not accept the transaction.
Notes:	Search use "exact match" logic, meaning all records are returned with fields

	that exactly match the values entered in the search criteria. “*” can be added to the end of any value to change it to “starts with” match logic.		
Configuration:	Screen	Field	Validation
	Search CSR Profile	First Name	
		Last Name	
		CSR ID	
	Modify CSR Profile	First Name	
		Last Name	
		CSR ID	Only characters and numbers allowed.
		Password	
		Confirm Password	
		Email Address	
		Role	Either CSR Administrator or CSR.
		Status	Either Active or Inactive.

Search CSR Screen:



Accounts **Manage Org** **Manage CSR**

Search Organization **Create Organization**

Create Organization & Administrator

Edit Administrator Details

Please edit administrator details below. [Impersonate](#) [Add New Admin](#)

*indicates required field.

* **First Name:**

* **Last Name:**

* **User Name:**

* **Password:**

* **Confirm Password:**

* **Email Address:**

* **Role:** ▼

* **Status:** ▼

SIEBEL Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Search Result Screen:

The screenshot shows the Siebel application interface. At the top, there is a navigation bar with three tabs: "Accounts", "Manage Org", and "Manage CSR". Below these tabs is a sub-navigation bar with three buttons: "Search CSRs", "Add CSRs", and "Profile". The "Search CSRs" button is currently selected. The main content area is titled "Profile". Below this title is a section header "Search CSR Profile" followed by the instruction "Please input search criteria.". There are three input fields: "User ID:", "First Name:", and "Last Name:". To the right of each label is a text input box. Below these fields is a "SEARCH" button. At the bottom of the page, there is a copyright notice: "Copyright © 2005 Siebel Systems, Inc. All rights reserved." and the Siebel logo.

Accounts **Manage Org** **Manage CSR**

Search CSRs **Add CSRs** **Profile**

Profile

Search CSR Profile

Please input search criteria.

User ID:

First Name:

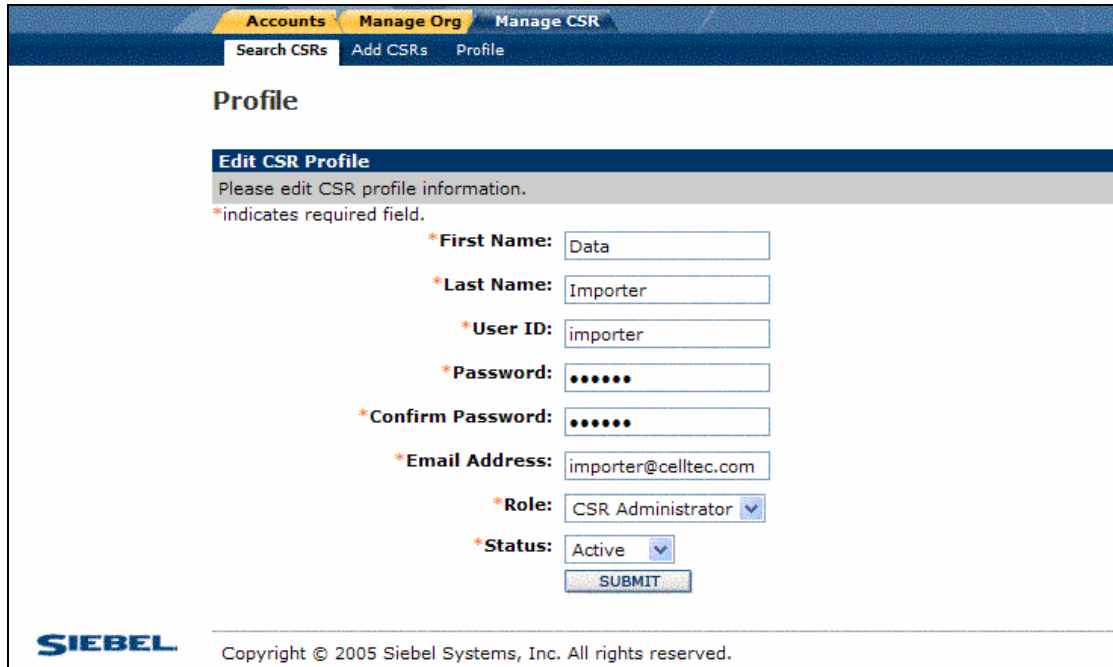
Last Name:

SEARCH

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Edit CSR Screen:



Accounts **Manage Org** **Manage CSR**

Search CSRs **Add CSRs** **Profile**

Profile

Edit CSR Profile

Please edit CSR profile information.

*indicates required field.

*First Name:

*Last Name:

*User ID:

*Password:

*Confirm Password:

*Email Address:

*Role:

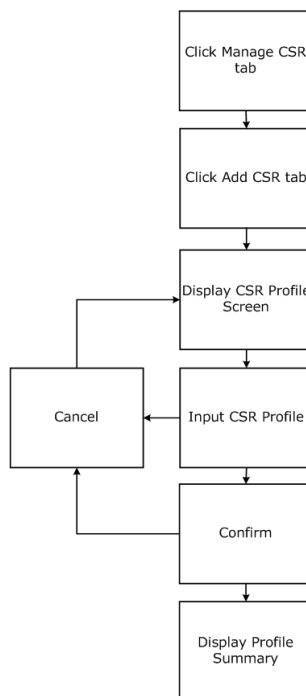
*Status:

SUBMIT

SIEBEL Copyright © 2005 Siebel Systems, Inc. All rights reserved.

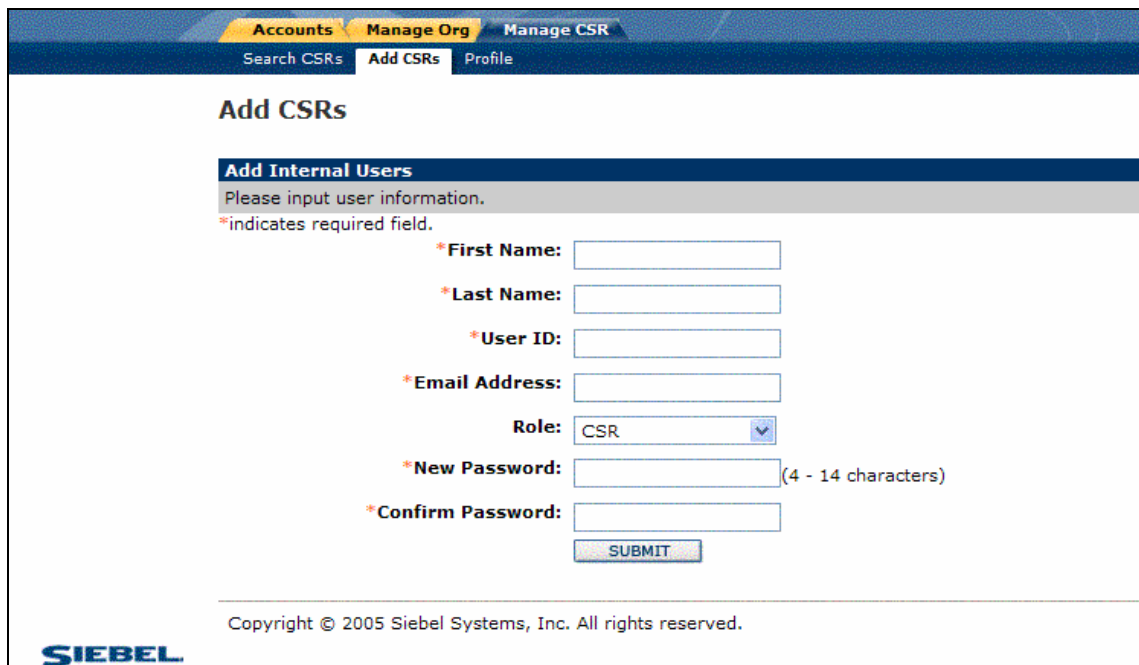
Add Internal Users (6750)

Add CSR Flow:



Name:	Add Internal Users (CSR)
Brief Description:	A Customer Service Representative Administrator adds other CSR's.
Actor:	Customer Service Representative Administrator (CSR Admin)
Trigger:	The CSR must Click on the Manage CSR tab and Select Add CSR
Preconditions	The CSR admin User has been created. Organization and Accounts exist.
Main Path:	1. This use case begins when an administrator CSR chooses to Add Internal Users. 2. User selects the Add function for a chosen CSR user and enters the user's details. a. User ID b. Email c. Team (Need List of teams for dropdown.) d. Role e. Password f. Confirm Password 3. Admin Internal User enters information and submits the form. 4. System validates the information and displays the added confirmation summary to the administrator. [A1]

	5. Use case ends
Alternate Paths:	[A1] System is unable to validate information 1. System prompts the user to review the information and does not accept the transaction.
Standard Features:	Form Validation
Notes:	1. Only Administrator CSR's have the ability to manage other CSR users. 2. Regular CSR Users will have access to the profile tab, but will only have access to their own profile so that they can update their information. This is a request from the business. 3. Username and password will have same limits as end users.

Add Internal Users:


Accounts **Manage Org** **Manage CSR**

Search CSRs **Add CSRs** Profile

Add CSRs

Add Internal Users

Please input user information.

*indicates required field.

*First Name:

*Last Name:

*User ID:

*Email Address:

Role:

*New Password: (4 - 14 characters)

*Confirm Password:

SIEBEL

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

Add CSR Confirmation Screens:

Accounts **Manage Org** **Manage CSR**

Search CSRs Add CSRs Profile

Confirm Add CSRs

Confirm ADD Internal Users

Please confirm the information below and click submit.

First Name: John
Last Name: Smith
User ID: JSmith
Email Address: john.smith@docscs.com
Role: CSR Administrator
New Password: *****
Confirm Password: *****

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Accounts **Manage Org** **Manage CSR**

Search CSRs Add CSRs Profile

Add CSRs

Add Internal Users

Your user has been added successfully.

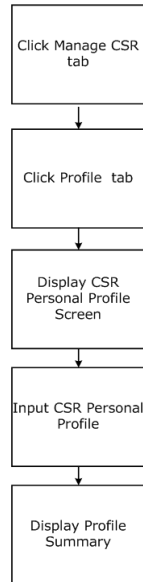
First Name: John
Last Name: Smith
User ID: JSmith
Email Address: john.smith@docscs.com
Role: CSR Administrator
New Password: *****
Confirm Password: *****

Copyright © 2005 Siebel Systems, Inc. All rights reserved.

SIEBEL

Modify Personal Profile (6850)

Edit Personal Profile:



Name:	Modify Personal Profile
Brief Description:	The Admin CSR may also modify their own profile.
Actor:	Admin CSR
Trigger:	The CSR must Click on the Manage CSR tab and Profile
Preconditions	The CSR admin User has been created.
Main Path:	1. This use case begins when an administrator CSR chooses to modify their own profile. 2. System displays the personal profile details. 3. CSR updates the profile and select submit action. 4. System displays confirmation page. 5. Use case ends.
Alternate Paths:	None
Standard Features:	Form Validation
Notes:	None

Modify Profile:

Accounts **Manage Org** **Manage CSR**

Search CSRs Add CSRs **Profile**

Profile

Edit Profile

Please edit your profile information.
*indicates required field.

*First Name:

*Last Name:

*User ID:

*Password:

*Confirm Password:

*Email Address:

*Role: ▼

*Status: ▼

SIEBEL Copyright © 2005 Siebel Systems, Inc. All rights reserved.

3.13 System Use Cases

The system use cases enable the following business requirements:

- Create Billing Accounts (7000)
- Process Recurring Payments (7100)
- System Email Notification (7500)
- Recycle Phone Number
- Internationalization
- Large Hierarchy Configuration

Create Billing Accounts (7000)

Name:	Create Billing Hierarchy
Brief Description:	The process of initially creating the organization's billing hierarchy
Actor(s):	System, CSR Administrator
Trigger(s):	1. A new hierarchy is created when an Administrator CSR creates an organization, company administrator and assigns accounts to the new organization. The initial hierarchy is viewable by the company administrator when they log in to the system and view Billing Accounts. 2. Add Account 3. Bill Feed
Main Path:	1. This use case begins when an Administrator creates a new organization, assigns a company administrator and assigns accounts to the new organization through the CSR application. 2. System creates parent node/folder (organization) 3. System assigns company administrator to the parent node/folder 4. System links accounts assigned to the organization at sub nodes/folders 5. System displays Billing Accounts (hierarchy) to company administrator on Dashboard or Administration hierarchy pages. 6. Use case ends.
Alternate Paths:	[A1] Bill Feed [A2] Move Account/Device (Bill Feed) If an account or device has moved to a different node than previously imported into Billing Manager, than the previous account or device should be deleted and the account or device should be added to the billing account hierarchy in it new location.

Standard Features:	None
Notes:	If an organization is created and a company administrator assigned without subsequent account assignment, the only node/folder to display is the parent organization node/folder.

Process Recurring Payments (7100)

Name:	Process Recurring Payments
Brief Description:	System schedules a recurring payment based on recurring payment instructions setup by the User. A recurring payment instruction gets created by a user in the recurring payment screen. Scheduled recurring payment gets created before a payment is due.
Actor(s):	System
Main Path:	1. System retrieves a list of all billing accounts that have a recurring payment instructions that dictate their payment should be made within x days of the current date (x is configurable by service provider). 2. System verifies information is valid. 3. System generates a payment file containing scheduled payments for all billing accounts with recurring payment instructions. [A2] Note: This scheduled payment is separate from the recurring payment instruction associated with the billing account. Scheduled payments can be edited from the payment activity screen before they come due to be paid. Editing a scheduled recurring payment does not change the recurring payment instruction associated with the billing account. Also, if a scheduled recurring payment already exists, editing the recurring payment instruction associated with the billing account will not affect the existing scheduled payments, only the creation of new scheduled payments 4. System triggers payment notification email event. 5. Scheduled payments should now display in the payment activity screen 6. Use case ends.
Alternate Paths:	[A1] System is unable to process recurring payments: 1. System records the fault 2. System alerts the system administrator via a job failure in the Command Center. 3. System places the scheduling job on hold. [A2] Payment amount exceeds specified payment threshold: 1. System processes the recurring payments for those accounts that have exceeded a threshold limit by paying the threshold amount, 2. System sends a threshold exceeded email message to customer that the amount due exceeded the threshold amount. 3. System generates the payment file containing all valid recurring payments.

Standard Features	Email notification for processed and failed payments
Notes:	This created scheduled payment is separate from the recurring payment instruction associated with the billing account. Scheduled payments can be edited from the payment activity screen before they come due to be paid. Editing a scheduled recurring payment does not change the recurring payment instruction associated with the billing account. However, if a scheduled recurring payment already exists, editing the recurring payment instruction associated with the billing account will also apply the same edits to any scheduled recurring payments that have not yet been paid.
Configuration Notes:	The service provider can configure how many days before a payment due date that a recurring payment is scheduled.

System Email Notification (7500)

Name:	Send system email notification
Brief Description:	System sends email to notify User of a system event
Actor(s):	System
Trigger(s):	System detects an event that should result in an email to the User.
Main Path:	1. This use case begins when a system notification event has occurred. [A1] 2. System generates email message based on one of the following triggering events: [A2-A14] <u>Statement</u> (One consolidated notification for all billing accounts for which the user has access.) a. Bill Ready Notification b. Payment Due date in 5 days <u>Payment Account</u> (One consolidated notification for any payment account or billing account for which you have access.) a. Completed One Time Payment b. Create/Edit Recurring Payment c. Recurring Payment Threshold Exceeded d. Scheduled Payment Paid e. ACH Payment Returned f. Credit Card Payment Failed g. Credit Card Expiration Notice <u>Service Manager</u> (one consolidated notification for any service agreement to which you have access to create a service request)

	a. Failed Service Request b. Daily Summary (summary of all submitted, completed, and failed service requests for the day) <u>Other</u> a. Batch Report Ready b. Enrollment Confirmation 3. System generates list of email accounts that will receive email. 4. System generates a file that has the appropriate information. [A16] 5. System transfers the file to a location specified in the configuration of the file creation job. 6. The appropriate server processes and generates email file. [A17] 7. The server places the file in a location that is specified in the configuration of the email notification job. 8. System processes the file to generate email. [A18] 9. System sends email message to SMTP server. [A19] 10. Use case ends.
Alternate Paths:	[A1]System is unable to start job notification 1. System updates the status of the job to “Failed” [A2]Bill Ready Notification (Account & User Level) 1. Bill cycle is completed for billing accounts 2. System creates Bill Ready email [A3]Completed One Time Payment (User Level) 1. One Time Payment is completed 2. System creates One Time Payment Completed email [A4]Recurring Payment Scheduled (User Level) 1. A recurring payment is scheduled 2. System creates Recurring Payment Scheduled email [A5]Recurring Payment Threshold Exceeded (User Level) 1. The recurring payment threshold is exceeded 2. System creates a Recurring Payment Threshold Exceeded email [A6]Schedule Payment Paid (User Level) 1. A scheduled payment has been paid 2. System creates a Scheduled Payment Paid email [A7]ACH Payment Returned 1. System creates a payment failure notification. [A8]Credit Card Payment Failed 1. System creates a payment failure notification. [A9]Credit Card Expiration Notice (User Level) 1. The credit card expiration date has expired 2. System creates a Credit Card Expiration Notice [A10] Setup Recurring Payment Rules (User Level) 1. The recurring payment rules are setup 2. System creates a Setup Recurring Payment Rules Notice [A11] Modify Recurring Payment Rules (User Level) 1. The recurring payment rules are modified 2. System creates a Recurring Payment Rules Modified Notice

	[A12] Enrollment Confirmation 1. User is successfully enrolled. 2. System creates an Enrollment Confirmation Notice. [A13] Quick Payment Notification 1. System creates a Quick Payment Notification when a one-time payment is submitted. [A14] Quick Payment Failure Notification 1. A problem occurred during one-time Quick Payment transaction 2. System creates a Quick Payment Failure notification [A15] Payment Due Reminder (Payment Due in X days) 1. System allows setting up a reminder to remind the user to pay bills periodically. 2. System checks if any payment has been scheduled for the account before due date. 3. System creates a Payment Reminder Notification. [A16] System is unable to generate the file 1. System updates the status of the job to "Failed". 2. System logs the error and specific error code. [A17] The server is unable to generate the file 1. System updates the status of the job to "Failed". 2. System logs the error and specific error code. [A18] System is unable to process the file to generate email 1. System updates the status of the job to "Failed". 2. System logs the error and specific error code. [A19] Email server is unavailable 1. System updates the status of the job to "Failed". 2. System logs the error and specific error code.
Configuration Points:	1. Email notification will be sent to payment user's email account only. (If a admin user checks payment notification, the admin user receives notifications for all accounts to which the user has access in a consolidated email) If payment is performed on a consolidated basis, email notification will be consolidated (all confirmations for payment in one email) based on all payments made within the day. 2. After adding or removing accounts to/from an organization, an email notification will be sent to the administrator(s) for the organization. This notification will be triggered off of the confirmation screen when accounts have been successfully added/removed.
Notes:	None

Email Notifications Scenarios and Content Table

The foundation application ships with the following email template text which can be modified by the service provider.

Ref	Flow	Email Templates
1	Bill Ready Notification	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Bill Ready Notification Dear <xsl:value-of select="user"/>, The following account(s) registered under your email address have their bills ready for viewing. Please select the link provided to access the site. <xsl:for-each select="acct"> Account Number: <xsl:value-of select="number"/> </xsl:for-each> This is an automatically generated email. Please do not reply to this email address.
2	Enrollment Notification	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Enrollment Notification Email Dear <xsl:value-of select="user"/>, Welcome to your online customer care application, your temporary password is: <xsl:value-of select="pass"/> Now you can enjoy managing and paying your bills online. Why wait! Please visit <http://localhost:7001/tbm> Log in now to the application. Upon login, we recommend changing your temporary password. This is an automatically generated email. Please do not reply to this email address.
3	Recurring Payment Confirmation	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Recurring Payment Confirmation Dear <xsl:value-of select="user"/>,

Ref	Flow	Email Templates
		This email is to confirm that you have been enrolled into the Automatic Bill Payment program for your online Account <xsl:value-of select="actnum"/>. Amount: <xsl:value-of select="amount"/> The first automatic bill payment will take place after your next billing cycle. You will receive a payment confirmation email when the payment has been submitted. You may also continue to make other payments on your account using the Quick Payment option on the Payments Menu. Thank you for using automatic bill payment. Please continue visiting <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.
4	Recurring Payment Configuration Update	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Recurring Payment Configuration Update Dear <xsl:value-of select="user"/>, This email confirms that your recurring payment on your online Account(s) <xsl:value-of select="actnum"/> has been updated. Amount: <xsl:value-of select="amount"/> Thank you for using automatic bill payment. Please continue visiting <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.
5	Quick Payment Notification	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Quick Payment Notification Dear <xsl:value-of select="user"/>, Thank you for submitting your one-time Quick Payment to Billing Manager in the amount of \$ <xsl:value-of select="amount"/>. Visit us again to make your next online payment. <xsl:if test="ref!="">The master reference number is <xsl:value-of select="ref"/>.</xsl:if> Thank you for using Quick Payment. Please continue visiting <http://localhost:7001/tbm>

Ref	Flow	Email Templates
		This is an automatically generated email. Please do not reply to this email address.
6	Quick Payment Failure Notification	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Quick Payment Failure Notification Dear <xsl:value-of select="user"/>, A problem occurred during your one-time Quick Payment transaction. The payment failed to process successfully. The details are as follows. Amount: \$<xsl:value-of select="amount"/> Message: <xsl:value-of select="msg"/> <xsl:if test="ref!="">The master reference number is <xsl:value-of select="ref"/>. xsl:if> Please visit <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.
7	Payment Due Reminder	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Payment Due Reminder Dear <xsl:value-of select="user"/>, This email is to remind you of your payment due date information for each account. <xsl:for-each select="acct"> Account number is: <xsl:value-of select="number"/> Due date is: <xsl:value-of select="duedate"/> Due amount is: <xsl:value-of select="dueamount"/> </xsl:for-each> Thank you for using online payment. Please continue visiting <http://localhost:7001/tbm>

Ref	Flow	Email Templates
		This is an automatically generated email. Please do not reply to this email address.
8	Payment Scheduled Confirmation	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Payment Scheduled Confirmation Dear <xsl:value-of select="user"/>, This email is to confirm that your payments are scheduled for following accounts. <xsl:for-each select="acct"> Account number is: <xsl:value-of select="number"/> Due date is: <xsl:value-of select="duedate"/> Amount is: <xsl:value-of select="dueamount"/> </xsl:for-each> Thank you for using online payment. Please continue visiting <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.
9	Payment Success Confirmation	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Payment Success Confirmation Dear <xsl:value-of select="user"/>, This email is to confirm that your payments have completed successfully for following accounts. <xsl:for-each select="acct"> Account number is: <xsl:value-of select="number"/> Amount is: <xsl:value-of select="dueamount"/> </xsl:for-each> Thank you for using online payment. Please continue visiting <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.

Ref	Flow	Email Templates
10	Payment Failure Notification	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Payment Failure Notification Dear <xsl:value-of select="user"/>, This email is to notify you that your online payments have failed for the following accounts. <xsl:for-each select="acct"> Account number is: <xsl:value-of select="number"/> Amount is: <xsl:value-of select="dueamount"/> </xsl:for-each> Additional details are not available in this message. Please continue visiting <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.
11	Payment Threshold Reached	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Payment Threshold Reached Dear <xsl:value-of select="user"/>, This email is to notify you that the due amount exceeds the threshold you set for automated payment for the following accounts. <xsl:for-each select="acct"> Account number is: <xsl:value-of select="number"/> Due Amount is: <xsl:value-of select="dueamount"/> Configured amount is: <xsl:value-of select="configamount"/> </xsl:for-each> Thank you for using online payment. Please continue visiting <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.

Ref	Flow	Email Templates
12	Credit Card Expiration Reminder	From: admin@Siebel.com Sent: 25 August 2004 04:45 PM To: <xsl:value-of select="user"/> Subject: Credit Card Expiration Reminder Dear <xsl:value-of select="user"/>, This email is to remind you that your credit card accounts used for online payments are about to expire. <xsl:for-each select="acct"> Credit card number: <xsl:value-of select="number"/> Expiration date: <xsl:value-of select="expdate"/> </xsl:for-each> Thank you for using online payment. Please continue visiting <http://localhost:7001/tbm> This is an automatically generated email. Please do not reply to this email address.

Recycle Phone Number

Name:	Recycle Phone Number
Brief Description:	A service agreement phone number may appear in the billing feed associated with a different billing account because either the phone number was recycled to another subscriber or the service provider intended to change the billing account for the same service agreement phone number. The system assumes that the new billing account/service agreement combination belongs to a new subscriber, regardless of whether the billing account is in a different company or the same company.
Actors:	
Pre-Conditions:	

Main Path:

1. Change Billing Account for a Recycled Number

A service agreement phone number is recycled from a subscriber under billing account BA_1 and given to a subscriber under billing account BA_b.

2. Billing Load & Index

A new billing file is received with the service agreement phone number under a different billing account, BA_b. The flat file is loaded and indexed.

3. Hierarchy Synchronizer

When the system identifies that the phone number already exists in the billing hierarchy listed under a different billing account, the following system actions are taken to update the billing hierarchy and business structures.

- a. *Delete Billing Hierarchy Node:* The billing hierarchy node associated with the old billing account / phone number combination is deleted.
- b. *Add New Billing Hierarchy Node:* A new billing hierarchy node is added for the new billing account / phone number combination.
- c. *Delete Business Structure Node:* Any business structure hierarchy nodes associated with the old billing account / phone number will be deleted.

4. UI Impact

These screens will show the following changes based on the above service agreement phone number being recycled to another billing account and company.

- a. *Billing Hierarchy:* The service agreement phone number will only appear under the new billing account BA_b. It is deleted from the billing account BA_1 folder.
- b. *Business Structure Hierarchy:* The phone number is deleted from any business structure in which it is referenced.
- c. *Overview Page:* This will mirror exactly what is in the hierarchy and business structures.
- d. *CCM:* This module is used to select individual statements.
 - i. *New Account:* The phone number will only be accessible to users that have been assigned access to the service agreement or a folder above it after the new billing hierarchy node was added.
 - ii. *Old Account:* Users that previously had access to this service agreement phone number will no longer have access to historical statements for the old billing account / service agreement combination.

[A1] Duplicate Phone Numbers in the Billing Feed

The same phone number can not appear in more than one node of the same hierarchy.

If the billing invoice file contains the same service agreement phone number more than once under different billing accounts (and their associated statement data), the flat file statements will be loaded for both the old and new billing account. However, when the billing hierarchy is updated during the indexing and hierarchy synchronization process, only one of the two phone number / billing account combinations will exist in the hierarchy.

It is not possible to determine which phone number / billing account will be displayed, but if it is not the most recent one, this will be corrected in the following month when there is only one phone number / billing account in the file.

Alternate Paths (cont)	[A2] System Notification Separate notification jobs can optionally be run by the service provider after the hierarchy synchronizer deletes any business structure nodes. <i>Rationale:</i> Since user created business structure nodes are being automatically deleted from the system, the users who rely on the business structure or the user associated with a deleted node should be notified of this deletion to avoid confusion and calls to customer support. The following two notifications will be sent 1. Business Structure User: Any user assigned to a hierarchy or business structure node at or above the node in which a hierarchy node was deleted by the system since the last time the notification job was run will receive the following consolidated notification: “Subject: Service Agreement Maintenance” “Body: The following service agreement phone numbers have been deleted from the identified business structures because the number is no longer active with its account and has been reused by your provider. For access to historic statement information on this account, please contact your provider. <table> <tr> <th><u>Phone Number</u></th><th><u>Business Structure</u></th></tr> <tr> <td>{phone number}</td><td>{Business Structure Name}</td></tr> <tr> <td>{phone number}</td><td>{Business Structure Name}</td></tr> <tr> <td>...</td><td>...</td></tr> </table> 2. User Associated to Deleted Business Structure Node: Any user associated to a specific business structure hierarchy node deleted by the system since the last time the notification was run will receive the following notification: “Subject: Customer Self-Service Account Access” “Body: Your access to service agreement {phone number} in business structure {business structure name} has been removed from the customer self service system because the phone number is no longer active with your billing account and has been recycled to another subscriber. If you do not have access to any other service agreement phone numbers, you will not be able to log into the system. If you have a new phone number, contact your system administrator and request access to your new service agreement. Thank you for using Customer Self Service.”	<u>Phone Number</u>	<u>Business Structure</u>	{phone number}	{Business Structure Name}	{phone number}	{Business Structure Name}	...	...
<u>Phone Number</u>	<u>Business Structure</u>								
{phone number}	{Business Structure Name}								
{phone number}	{Business Structure Name}								
...	...								
Plug-in / Extension Point	The notification should be designed in such a way that it is relatively easy for a developer from the service provider implementation team to change the program that selects which users should receive a notification. For instance, by Spring to specify this implementation, the Spring XML configuration file could be easily modified to point to another implementation that selected only users assigned to the root node of the hierarchy as opposed to any user assigned to a node at or above the link-target node that is deleted.								

Standard Features:	
Business Rules:	None
Notes:	None

Internationalization

Name:	Internationalization support
Brief Description:	CBM application supports Internationalization.
Actor:	System
Pre-Condition:	It is required that the server as well as the client browser supports the language.
Main Path:	The three layers of the CBM application that needs to be modified for internationalization support are: 1. Presentation files(UI) User interface layout needs to accommodate text expansion and shrinkage caused by localization. 2. Views (CBM Views) Custom framework to present data. 3. Backend – Java files. Add/Update entries for all application text into a localized file (<i>ApplicationResources.properties</i>). Modify files to look for the values based on the keys.
Alternate Path:	None
Exception Path:	None
Standard Features:	None
Configuration Points:	None
Business Rules:	None
Notes:	The application uses the properties file with base key-value entries to create other application resources files which are translated versions and support other languages without changing the code. CBM Internationalization support and changes applies to all UI (jsp, struts and tiles) pages in the application.
Questions:	

Large Hierarchy Configuration

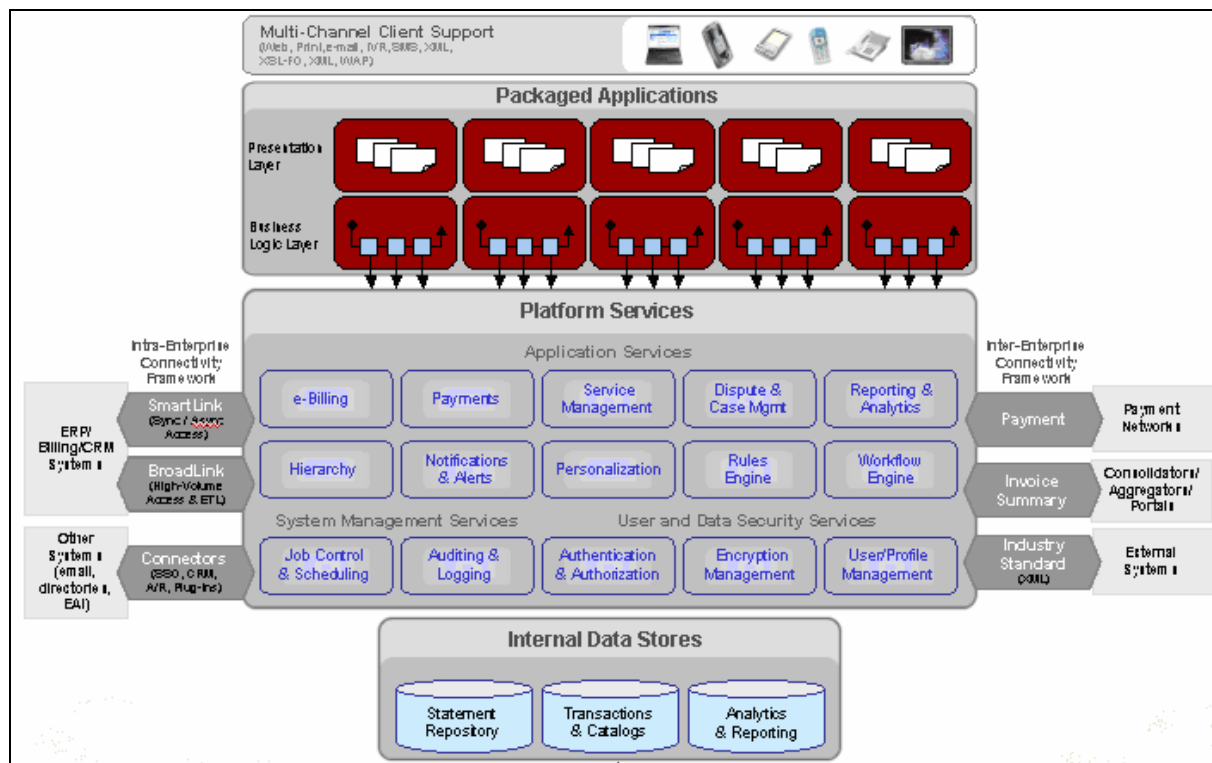
Name:	Large Hierarchy Configuration
Brief Description:	CBM application can display varying hierarchy sizes and can be optimized by altering business rules.
Actor:	Developer
Pre-Condition:	
Main Path:	Service provider sets global threshold limits in a configuration file.
Alternate Path:	None
Exception Path:	None
Standard Features:	None
Configuration Points:	1. {Display Threshold Hierarchy Tree} [default = 2,000] Configuration threshold is used to not display more than X records when expanding a folder in the left pane. This threshold prevents the capacity of the client-side browser from being exceeded. When a user expands multiple child nodes, the parent nodes remain expanded but any sibling folder nodes collapse. 2. {Display List Threshold} [default = 7,000] Configuration threshold is used to not display more than X records in the right pane. This threshold prevents the capacity of the client-side browser from being exceeded. <i>Note:</i> If a scrollable screen also implements the {Retrieval Threshold} and paging, the user will not receive a warning message until the {Retrieval Threshold} is exceeded and the {Display Threshold Hierarchy Tree} threshold will just be used to define when paging starts. 3. {Retrieval Threshold } [default = 20,000] Configuration setting for the maximum number of records which can be returned in a backend query. This is different than a display threshold which limits the number of records that can be displayed in the browser. It is possible for a single use case to have a display threshold of 200 records, implement paging, and utilize a backend retrieval threshold of many thousands. <i>Rationale:</i> Limits the frequency that users receive a warning message that not all records could be displayed (retrieved). 4. {Dropdown Threshold} [default = 100]

	Configuration setting for the maximum number of items that can appear in a drop-down field. In the CCM module, if this threshold is exceeded for the account or service agreement drop-down fields, the user is presented with an alternate means of selecting the account or service agreement. 5. {Large Enterprise User} [default = 5,000] Configuration setting for the number of service agreements to which a user has access that will cause the "Top 5 Service Agreements" right pane component to be suppressed. <i>Rationale:</i> This is the number whose latency to execute on the service provider's hardware is considered unacceptable.
Business Rules:	None
Notes:	The application uses the properties file with base key-value entries to alter the behavior of the hierarchy management screens.

4 External Interfaces

Overview of Integration Points

The following diagram illustrates the Billing Manager's extensible, multi-channel architecture:



The external interfaces are shown eXtensible Multi-channel Architecture (XMA) diagram, above.

These components are customized through the configuration and generation of lower level components within a J2EE infrastructure, including JSP pages, HTML templates, JavaBeans, Struts action classes, Tiles, and Java-based batch processes.

The integration points, as shown in the System Context Diagram in Chapter 2, consist of:

- **Billing data files** – Generated by the billing system following the monthly billing cycle and transferred into an input directory on the IFS system.
- **Daily billing data files** – Generated by the A/R system on a daily basis to provide daily updates to customer accounts.
- **Payment data** – Generated by the system by a scheduled process and transferred to the payment processor.
- **Payment status data** – Generated by the payment processor and returned to the system.
- **A/R payments data** – Generated by the A/R system on processing customer payments.
- **A/R payments reconciliation file** – Generated by the system by a scheduled process and transferred to the A/R system.

Data Files

The Billing Manager application can receive billing data in a variety of formats. The Siebel application can take print composition formats, raw billing table extracts and other well-structured legacy formats. This data is loaded into the Siebel application using a batch scheduling process that is configurable based on specified business rules.

ACH Files

Billing Manager provides connections to payment networks. Real-time and batch interfaces to ACH, Credit Card, and proprietary networks using a cartridge based approach yields complete payment flexibility.

A/R Files

Billing Manager integrates with your existing infrastructure, updating accounts receivable systems with remittance information, and supports reconciliation processes. Billing Manager includes XML-based API's for integration into backend systems.

New Standards and Best Practices

Java 2 Enterprise Edition (J2EE) has become a standard platform for developing enterprise-class web-based solutions. It is well-suited for internet-based applications because it provides many of the underlying services such as the Java Servlet API (for servicing HTTP requests), EJB (for transaction processing), and Java Message Service (for messaging) among others.

J2EE is a more mature and robust technology and is complex. Internet application developers would fail to realize the many benefits promised by J2EE (such as reusability, extensibility, flexibility, scalability etc.) without having a solid understanding of the corresponding technology, and more importantly, a viable application framework upon which the solution is developed.

Siebel's Billing Manager Architecture is the foundation upon which applications may exploit the J2EE design and development best practices.

One of the guiding principles for the Billing Manager Architecture for web-based application is Jakarta Struts. Its architecture and its application to the Siebel suite of products are based on the MVC design pattern. It is a framework by which integrators may deploy web-based application at record speed, with greater re-usability and extensibility, better quality, and better performance.

References

Here are several sources of additional information on the technologies used in the Billing Manager framework:

- The Jakarta Struts web site: <http://jakarta.apache.org/struts/>
- An article on using Struts1.1 features:
<http://www.onjava.com/pub/a/onjava/2002/10/30/jakarta.html?page=1>
- The book *Programming Jakarta Struts* by Chuck Cavaness
- An article explaining the synchronizer token concept:
<http://www.javaworld.com/javaworld/jvatips/jw-jvatip136.html>
- Four-part tutorial on Tiles:
http://www.onjava.com/pub/a/onjava/excerpt/progjakstruts_14/index1.html
http://www.onjava.com/pub/a/onjava/excerpt/progjakstruts_14/index2.html
http://www.onjava.com/pub/a/onjava/excerpt/progjakstruts_14/index3.html
http://www.onjava.com/pub/a/onjava/excerpt/progjakstruts_14/index4.html
- Log4j Web Site: <http://jakarta.apache.org/log4j/docs/index.html>
- Core J2EE Patterns: *Best Practices and Design Strategies* by Deepak Alur, John Crupi, Dan Malks

Background

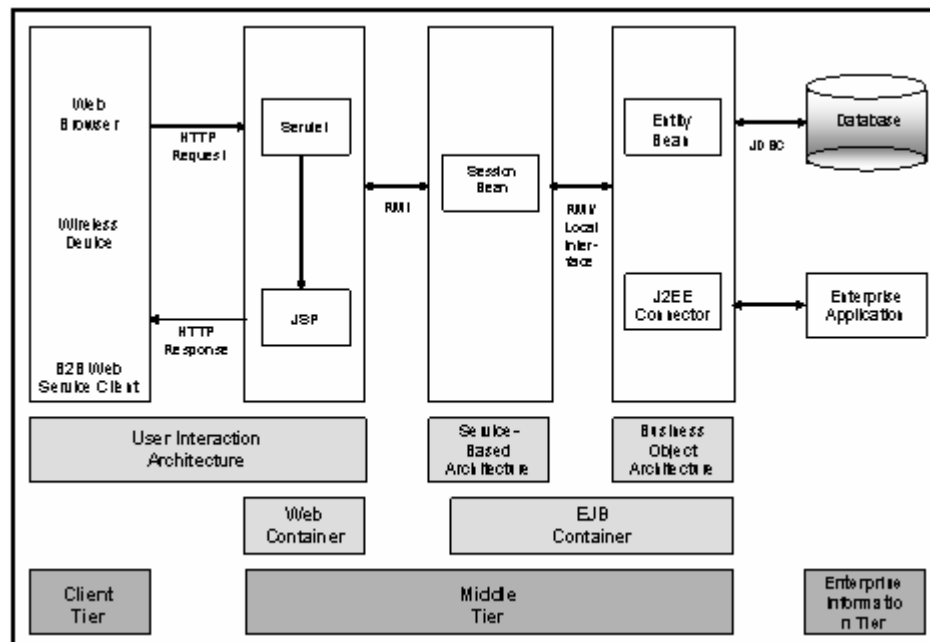
Many web-based applications today, especially those based on J2EE, can be described in terms of their tiers. The application's functionality is separated across these tiers, to provide separation of responsibility and to promote reusability, maintainability, improved scalability and many other benefits.

A brief overview of the J2EE architecture with its multi-tiered components gives the reader a basic understanding of the technology and also describes how the struts components map onto the J2EE application framework.

The J2EE Platform

The J2EE platform provides a component-based approach to implement a multi-tiered software architecture. The components that make up the architecture are executed in run-time environment called containers. Containers are used to provide infrastructure-type services such as memory management, transaction management, security etc. In a web-based environment, the majority of the software resides in two containers, the Web container and the EJB container, running inside of the application server.

The J2EE components are divided into 3 tiers as shown below:



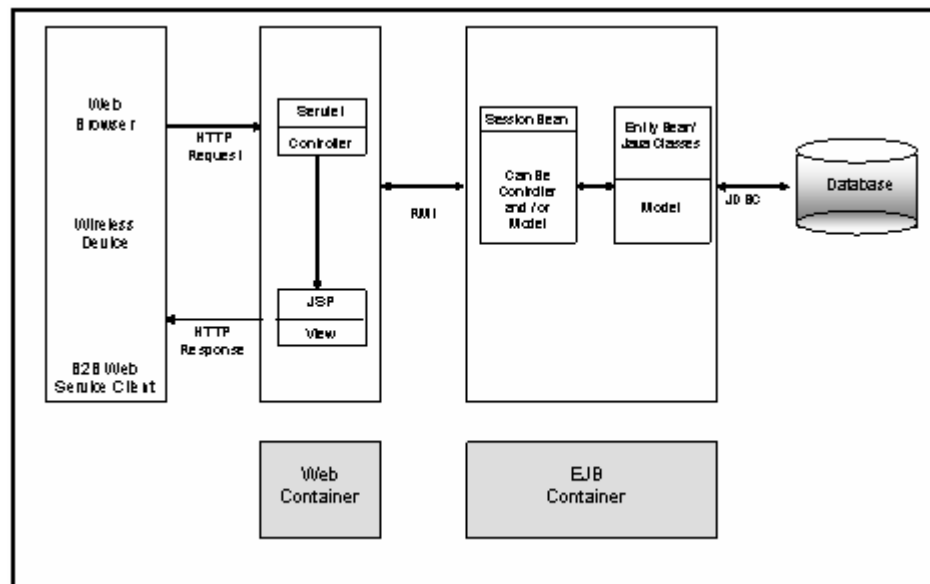
The function of the Web container is to process client requests and generate responses, while the function of the EJB container is to implement the business logic of the application.

The Model-View-Controller Approach

The Model 2 architecture is based on the Model-View-Controller design pattern. MVC is the cornerstone of web-based application development best practices. The patterns are defined as follows:

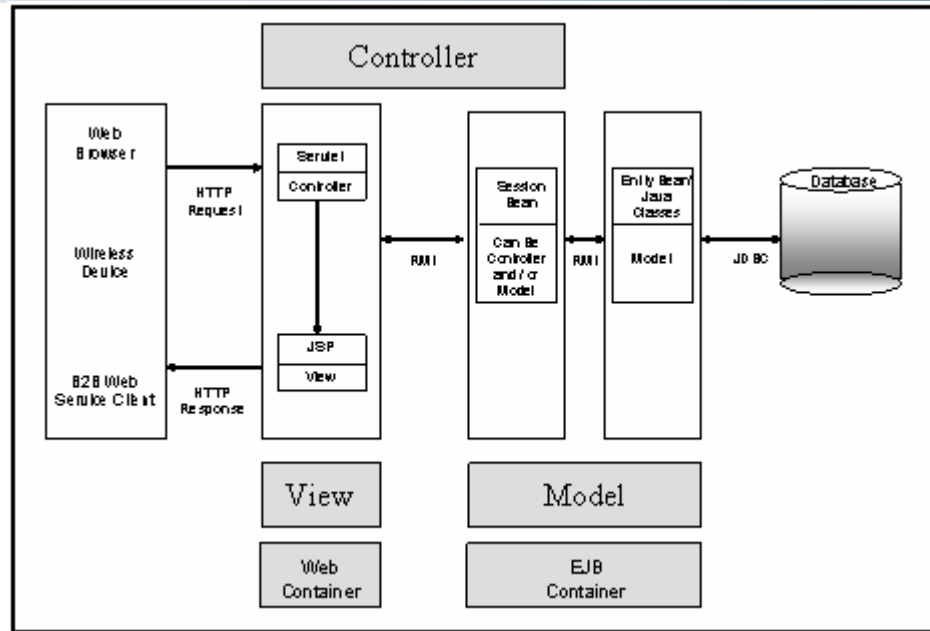
- **View:** The screen presented to the users
- **Controller:** The component that controls the flow and processing of user actions
- **Model:** The application business logic components

The figure below shows a complete picture of how objects in the MVC framework are mapped to the J2EE architecture:



It is important to note that MVC is only a software pattern and does not restrict where components live within the architecture. There are a number of variations of how the MVC pattern can be applied to web-based applications. As can be seen in the figure above, the Controller component can have different functions on the different tiers. A controller component in the Web tier can be used for processing HTTP requests such as form submissions and navigation links. Controller components on the EJB tier can control the flow of the application functionality.

Figure below shows one variation of the MVC pattern in a web-based application:



The Billing Manager framework enables speedy deployment of web applications using the Siebel product line. Billing Manager has been developed using the Jakarta Struts and Tiles frameworks.