

Loyalty Points - System

AREA OF COMPETENCES: Enterprise Business Solution

INDUSTRY: Telco

CHALLENGE

Our client required the development, implementation and launch into production of a new Loyalty Points System compliant with his internal business processes. The Loyalty Program allows providing incentives to our customer's subscribers. The system in charge with the administration of the loyalty points was required to be able to generate, manage and present to the subscriber points based on pre-defined parameter driven criteria. The gained points can be redeemed for a variety of benefits, such as for acquisition of terminal equipment and accessories, other wireless products or services, new service activation, free minutes, free monthly fees, free SMS, co-marketing programs (services/goods sold under discount agreements with other companies, etc).

SOLUTION

IP Devel team planned the development of the project based on the client's Loyalty Program specification, building a system to be able to provide incentives to subscribers, regardless of the service they have activated. The Loyalty Points System proposed to administrate the loyalty points generates, manages and presents to the customer points balance based on pre-defined parameter driven criteria.



The system proposed was also able to store subscriber's demographical information, billing information (bill cycle, billing address etc) and information regarding the authorized person to represent the corporate accounts (name, MSISDN, user name, password etc.). Since the subscriber can spend these points in a variety of ways, the Loyalty Points System had to be able to interface with external and internal system applications, to transmit and receive relevant controlling information.

The client's Loyalty Points System has the following key functionalities :

- assigns loyalty points for post-paid, pre-paid and data services at the subscriber, organizational unit, subscriber and account level, both for private subscribers (residential) and corporate accounts.
- stores loyalty points at the level where the loyalty points assignment has been made.
- the system should have the same hierarchy and customer structure as the billing system, in order to be able to validate correct affiliation between billing entities.
- the loyalty points system permits the accumulation (batch, manual, automatic) at different hierarchy and entity level and present the sum of accumulated points accordingly.

- permits points' redemption to the authorized person(s) designated by customer.
- allows activation/deactivation (manual, batch, automatic based on predefined conditions) of accumulation/ redemption of points at any level, based on flags.
- a tracking mechanism supports the assignment process, based on tracking by transaction attributes (specified in the document).
- manages the points expiration policy
- provides authorization levels and audit trail for all points actions
- provides information about the loyalty points balance, loyalty points and transactions history
- offers the possibility to print for a subscriber a transcript of transaction details/history for each loyalty points entity.
- the system user has the possibility to determine the period for printing the records details list.
- the system sends the list to billing printer in order to be packed and send automatically.
- exchanges data in real time/batch with other applications (billing systems for post and pre-paid customers, reporting system, IVR, Public Web Interface, dealer channel, USSD, third parties etc.)
- transfers /consolidates loyalty points
- permits generation of reports for certain users categories
- allows basket based redeem (multiple redeem transactions that can be committed at once).
- supports the access control/rights at user level and users groups;
- complies with local legislation related to personal data confidentiality and customer's security policy/ standards.

On top of developing the new Loyalty Points System, the IP Devel Team had to consider the migration of the old Loyalty Points System which was a client's in-house developed application.

TECHNICAL SOLUTION

- The system exposes APIs for interfacing with external systems
- The solution for RDBMS was Oracle on Linux
- The Applications Server was Bea Weblogic.
- The Operating Systems for web servers and Application Servers was Linux.
- The interfaces to/from Data Warehouse is based on an ETL tool
- Real-time / near real-time interfaces were based on EAI / middleware (IBM Crossworlds / MQ Series / CORBA)
- The system processes batch files (the log files contain the result of batch import/export)
- Public Web Interface, Dealer Web Interface and Internal Web Interface are distinct J2EE applications (might reside on different J2EE AS instances)

ABOUT OUR CLIENT

The customer is the Romanian market leader in GSM telephony and Internet services. The customer has acquired over 3,000,000 subscribers for its GSM and ISP services. Our customer is in the unique position to offer its business customers integrated communications solutions, from mobile voice and data to fixed data and international fixed access. The client's network covers 95% of the Romanian population and offers roaming in 103 countries/areas through 238 operators.