

# Corporate Profile and Capabilities



*The Quality Advantage*



**BrainRoots**  
Solutions

# Company Profile

BrainRoots Solutions (Pvt.) Ltd. is an IT Product and Consulting Organization promoted by IIT/IIM alumnus, focusing on **Mediation, AAA, and Convergent Billing & Customer Care**. BrainRoots has been listed in the **Deloitte. Technology Fast 500 Asia Pacific ranking**. BrainRoots is also ISO 9001:2000 (KPMG) certified.



We have developed proficiency in developing Solutions for prepaid calling cards, PIN Management, Vendor Management, Bandwidth management, Content Based Billing, Conditional Access TV and Gaming.

BrainRoots has strategic partnerships with the following:

PORTAL

**Fiorano**  
Enabling change at the speed of thought



**IBM**



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SOLUTIONS

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- BrainRoots has extensively worked on the J2EE Architecture. Our products in the Telecom space are built on the J2EE Framework. BrainRoots has experience in live deployments on:
  - Sun Solaris, Linux Redhat
  - Oracle, MySQL, DB2, PostGres
  - Capabilities in the J2EE Framework include deep experience in:
    - Struts
    - EJBs
    - XML
- Other areas of expertise
  - IBM Tivoli, Open LDAP, Netscape SuiteSpot
  - C/C++ Capabilities, PERL

Within the Telecom Implementation space, BrainRoots has implemented several disparate and legacy system integrations through the use of appropriate Middleware products. BrainRoots has live implementation experience in the following:

- **MQSeries** – This was the middleware implemented by a provider in Philippines, who is providing Fixed Line, Broadband services. The EAI platform was used in making their disparate systems talk to each other using XML tags.
- **Vitria BusinessWare** – This was the middleware of choice for a large Japanese Telco. This was used primarily as an Order Management and Provisioning engine for interfacing with a BSS system downstream.
- **Fiorano Tifosi** – BrainRoots is an implementation partner for Fiorano. Fiorano is a market leader in the Java Messaging Bus space, and is promoting its EAI product Tifosi in the Middleware space.

# Application Servers

BrainRoots has live experience with a number of Java Application Servers. These have been used to deploy our own solutions as well as third-party solutions.

- **WebSphere** – BrainRoots' own BSS platform UltraBill, has been successfully deployed and benchmark tested on Websphere. A number of our team members have experience on deploying and tuning applications on Websphere. There is 1 live deployment on Websphere.
- **Pramati** – UltraBill has also been deployed on Pramati Servers, and tuned to optimally utilize hardware resources to deliver high performance and stability. There are 2 live deployments on Pramati.
- **Tomcat** – BrainRoots has extensively worked with Tomcat in the past, both on our platforms and third party solutions. Tomcat was deployed by a large carrier in Mumbai for its Customer GUIs, and BrainRoots successfully executed the Stability and Performance Tuning of Tomcat to handle large loads of online customer requests

BrainRoots has extensive experience with integration of third-party OSS/BSS systems.

- **Infranet** – BrainRoots is a prime implementation partner for Portal. We have done over 10 implementations of pre-paid or post-paid BSS systems on Infranet. We have a strong consulting team of 10+ consultants in this platform.
- **Kenan** – BrainRoots has limited experience on the Kenan platform. Currently, we have a resource pool of 2 resources who have worked on BPM.
- **InterConnect** – BrainRoots has implemented the Interconnect system for a large Philippines carrier. This included setting up Rate Plans for each partner, Hubbing, Refile, Invoicing, Settlements, CDR Bashing.
- **CDR Collection and Enrichment** – For the same carrier in Philippines, we undertook the complete process of CDR collection, Enrichment and Normalization (E.164 Number Formats, Time Zones etc) through the IntegRate platform of Portal Software.
- **Xacct** – BrainRoots has limited experience on working with Xacct. The interface with Xacct and BSS was implemented for a carrier in Singapore where the Xacct platform had to be interfaced with the BSS.

BrainRoots has created many Interfaces between disparate systems including real-time interface with IN platform and BSS, interface with Payment Gateways, and Interface with the legacy A/R systems.

- **Interface with Vitria** – For a Japanese client, we built a real-time interface between Vitria and the downstream BSS for exchanging provisioning information.
- **Interface with Credit Card Payment Gateways** – BrainRoots has built interfaces with a number of Payment Gateways for real-time CC transaction. This has been done for 5+ implementations in different places.
- **Interface with SMSC** – BrainRoots has implemented a real-time interface between the SMSC (short Message service centre) and BSS for a large provider in Australia. This was done to enable pre-paid and real-time SMS billing.
- **Interface with Ericsson IN platform and Ericsson MMSC** – A leading Telco in New Zealand required real-time billing of pre-paid MMS. For this, a solution was deployed for real-time rating from the Ericsson MMSC to the BSS. The rated events were exported in real-time from the BSS to the IN platform which would be able to deduct pre-paid balances in real-time.

# Data Mining and Reporting

- **Scenario Analysis** – For a VoIP provider in New Delhi, we give reports on the potential benefits of new Price Plans. The current traffic is rated in multiple ways (current Price Plans as well as proposed new Plans) to check their impact on revenues. This scenario analysis is also conducted for varying pulse rates, and is used by the Marketing function to fine-tune the plans they sell to their end customers.
- **MIS Reports** – BrainRoots has worked on a number of reporting platforms, including Crystal Reports. We also have our own Java based reporting engine with graphs and bar charts to view and analyze trends. These reports include Ageing Reports, Usage Reports, Customer Profiling (High, Medium, Low usage and customer shifts from one to the other segment).



# Products and Services

BrainRoots is best described as high technology focused company with a wealth of business, software and telecommunication professionals, having extensive industry exposure, making it globally competitive.

## **UltraBill™**

- Post-paid (CDR based) and Pre-paid (through AAA) convergent billing system; targeted at ISP, VoIP, Mobile, Broadband, CATV, Utilities, Gaming, Financial Services.

## **UltraRadius™**

- Radius AAA, Cisco and Ascent VSA implemented; Automatic Disconnection implemented. UltraRadius is RFC 2865/2866 compliant Radius. It is 100% java based, platform independent, multi-threaded product tuned for performance.

## **UltraConnect™**

- InterConnect solution for InterCarrier Settlement (CDR based)

## **UltraController**

- Linux based Bandwidth Manager

# PROVEN EXPERTISE IN THE BILLING DOMAIN



## Infranet Installation for GMO, Japan

GMO Wanted to start a new service in area of broadband services. The service would provide ADSL along with the dial up and email. Additionally, they also wanted to migrate their existing services to Infranet.

## InterConnect Installation for ILD service



Data Access (NOW, India) has gone in for the ILD service. BrainRoots Solutions undertook the complete installation and customization of InterConnect Billing. This project had several business requirements that were fulfilled for Data Access.

## LDAP installation for Data One, Singapore



BrainRoots implemented their LDAP as well as Pricing-plan functionalities. This customization involved creating price plans based on the number of mailboxes taken by each corporate user, and also requires LDAP authentication for the same.

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## BrainRoots Solutions Pvt. Ltd.

X 17 Hauz Khas

New Delhi 110016

Telephone +91 11 26516367

Telefax +91 11 26516242

Email: [info@brainroots.com](mailto:info@brainroots.com)

[www.brainroots.com](http://www.brainroots.com)

Japan Office

6-21-13, 803, Nishi Kasai,

Edogawa-ku 134-0088

Phone: 03-5679-7832

Mobile : 090 4922 4230

