



IBIS (Integrated Billing Information System)



High Level System Overview

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Rev 1.0

Speedcast Internal use ONLY

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Service Overview

Current Paper is a best effort approach in order to identify and explain IBIS functionality.

What is IBIS

IBIS (Integrated Billing Information System) is an one-stop platform for satellite communication customers (internal and external)

- Cater for the whole distribution chain

IBIS is used at all levels in the distribution Chain. Distribution Partners and Service Providers use it to sell services to their customers; dealers and resellers use it to review their commission; customers use it to monitor and control their traffic.

- Care for our customers

Customers are able to log in to the customer portal, where they can retrieve their invoices (where applicable), keep track of their satellite traffic in real time, configure traffic monitors, and manage their own services. The support system streamlines their interactions with your customer service department.

We can define which actions (such as SIM card activations) can be done by customers themselves, and which ones need to be escalated to our back office.

- Manages entire portfolio

IBIS can cover it all: BGAN, Fleet Broadband, IsatPhone, IsatData Pro, Global Express, Iridium, Thuraya, as well as older services like Inmarsat C, Mini-M etc.

The IBIS mediation system makes sure that the call detail records are loaded automatically in near real time with automatic validation for duplicate records. Graphical tools and alerts assist you in making sure we have collected all call records before producing your invoices:

The mediation platform can easily be extended with additional record formats if needed.

- Includes other services

IBIS is not limited to bill for satellite services only. It can deal with prepaid services, rentals, incidental charges, occasional use, VSAT services, and our own specific value added services.

- Define sophisticated price plans

Price plans can be as simple as just specifying a markup percentage to your provider's prices, or as complex as creating SCAPs, bundles and dependencies on location and time.

IBIS price plans can follow all the pricing structures that are used by providers like Inmarsat, Thuraya and Iridium.

- Add value to invoices

Customers can organize their services in Cost Centers and get their invoice charges split out accordingly. Customers that use SCAPs (a single subscription for multiple terminals) will be delighted with several options to distribute the costs for a SCAP to individual users.

Multiple invoice layouts and traffic export formats can be set up to cater for the needs of your customers.

- Empowers resellers

Customers that act as service providers who need to invoice their own customers, they can be set up in IBIS as re-billers. This gives them a whole billing environment for their own business.

- Points of Presence (PoP) integration

IBIS provide a transparent link to various Speedcast Points of presence hence integrating the activation procedures of a specific service for Inmarsat, Iridium and Thuraya at the moment.

What IBIS is not

The most common misunderstanding between billing and mediation is the arbitrary definition that those two functions are interchangeable. They are not.

Mediation (often referred to as billing) is the function of receiving, analyzing defining and sorting, applying charges and remediating the billable items as well as creating customer reports, upon info received from Satellite operators (usually referred to as CDR's – Call Detail Records).

Billing (often referred as invoicing) is the actual creation of a financial invoice destined to the customers in order to collect cash.

IBIS is neither a financial software neither it is designed to be one. Although it already contains various tools in order to be able to produce a plain invoice directly, there are lawful limitations among various countries (Greece being one of them) that forbid the use of non-government-approved software for that purpose.

Physical Location

IBIS Server runs on Windows 2012R2 Server OS along with Microsoft SQL2017 Standard edition. IBIS is physically located on Australia DC and runs over ESXi virtual instance.

System Maintenance

Server sanity is being managed by the Australian OP's team. Operation system patches are being done intermittently.

System Backup

Backup is being performed via Veeam Software daily.

Internal Access

System is located at IP Address 10.157.3.56 and is being accessed (at least) from the legacy Speedcast network there is in place. Countries with VPN access to HK and SYD have access to the system as well. System has a Web service running and Users are accessing the systems through web browser with proper username/password credentials produced by the Customer Care GR team (CustomerCare.gr@speedcast.com).

External Access

End Users, both internal and external (ie customers and vendor) are accessing IBIS over Internet at <https://ibis.support.speedcast.net> and through a web proxy that has been in place for that purpose in order to avoid a direct Internet connection to the system thus reducing security concerns.

OS level access has been granted to the vendor (Pragmalogic) and they are accessing the system via Forticlient VPN connection in place on Sydney Datacenters.

Middle Access

NAV2015

IBIS currently bridges to NAV2015 with a “read-access” level and thus is able to retrieve customer and contracts base through a scheduled hourly task. Upon reading the updated customer and contracts database from NAV2015 it is able to start activating new contracts for existing customers.

POP's

IBIS is connecting to all three PoP's via VPN connection to the L-Band PoP's in order to facilitate the activation and provisioning process on one hand, and on the other hand is being capable of displaying screens to customers while logged in. Screens produced from the PoP's are network related info with value to the customer and end users.

FTP Access

IBIS is running a local FTP Server in order to i) provide valuable CDR info to the Sigma R&D team, ii) provide data to the billing team (Billing.GR@speedcast.com) and iii) provide data to the PoP's in order to correlate events and logs.

There is an increasing demand for external FTP access to customer.

Conclusions - Identified Immediate Needs

IBIS is the software of choice for Speedcast, and therefore it needs to be maintained as a value added product rather than a plain software.

Immediate Needs to be covered

NAV2017

IBIS needs to be able to access NAV2017 in order to be able to provide, at least, the same level of service it performs with NAV2015 today. Therefore there has to be an analysis among a NAV2017 specialist team, the teams using IBIS and NAV (Customer Care, Finance) and IBIS vendor (Pragmalogic – www.pragmalogic.nl)

Migration creates impact on financial transaction

As IBIS is not a financial tool, there has to be a solid alternative in order to be able to cover existing needs for customers. The most recent example is France migration where the legacy Sat Elite software was also managing credit card payments for PAYBOX. NAV 2015 is no longer being further developed and so there has to be a way to perform such transaction on NAV2017.

It is safe to assume that similar circumstances will appear on other migration efforts (ie a takeovers or different countries being migrated to NAV2017).

FTP External Access

Customers are increasingly request for FTP Access on IBIS in order to get their own files. Therefore there has to be a solution in place that provides a secure FTP access from Internet customers to IBIS data (similar to what's already there for web access).

Regular team meeting in order to identify further needs and evolution of the platform.

There has to be an "IBIS team" that will be regularly interviewing IBIS users in order to identify additional needs and value added requests for customers. At the moment IBIS development works reactively as opposed to a proactive approach.