INGENIUS
INTEGRATED GENERAL INSURANCE SOLUTION

Integrated General Insurance Solution

Available Anywhere, Anytime & Easily...

INGENIUS, P&O Global Technologies Sdn Bhd's latest state-of-the-art and Windows-based general insurance solution, is the result of extensive R&D effort that focused on technical architecture flexibility and efficiency; leverage on the richness in functionalities and features of its well established predecessor, PowerVision, together with the deep understanding of the needs of our customers from the insurance industry over the last decade.

It is a truly innovative product that has been designed and developed to be in line with emerging IT trends and caters to the increasingly competitive insurance business environment that we face in today's global market-place.

Salient Features At A Glance

Designed with the objectives of offering the most sophisticated functionality and yet able to operate in the most user-friendliness manner, **INGENIUS** is packed with many innovative features and some of them are highlighted as below: -

- ingenious 'Two-In-One' Design that supports the co-existence of both GUI-based and character/text-based user interface to cater for different category of user
- Microsoft Windows-Like GUI-Based User Interface for easy navigation within the entire system and shorten learning curve
- Parameter-Driven System Operation allows for easy adaptable to changing business requirement thus minimises modification to application software
- Customer-Centric Database Design provides easy means for data analysis like accumulated risk exposure for timely decision making
- Powerful Cross Referencing & Look-Up Table expedites data capturing process & ensures highest degree of consistency & accuracy

- Compliant with Industry & Statutory Reporting Requirement with built-in flexible extraction and generation features
- Comprehensive Security Access Control that not only ensure integrity of confidential database but also offer flexibility & controlled access
- Multi-Lingual Capability caters for multi-nations operation requirement besides offering additional user-friendliness for different grouping of users

Functional Architecture Design

The overall functional architecture design of this **INGENIUS** has, at its foundation, a number of critical functions that supports a range of key insurance business functional processes such as underwriting, reinsurance, treaty, claims & accounting, and at the same time allows for seamless integration of supplementary functions that can further enhance business operational efficiency.

In summary, the functional architecture design of **INGENIUS** is made up of three distinct layers, namely, the Base Modules layer, the Key Functional Modules layer, and the Add-On Integrated Modules layer as illustrated below: -

- **Code Master**
- **Underwriting**
- **Treaty**
- **Accounting**
- · **Cover Note Control**
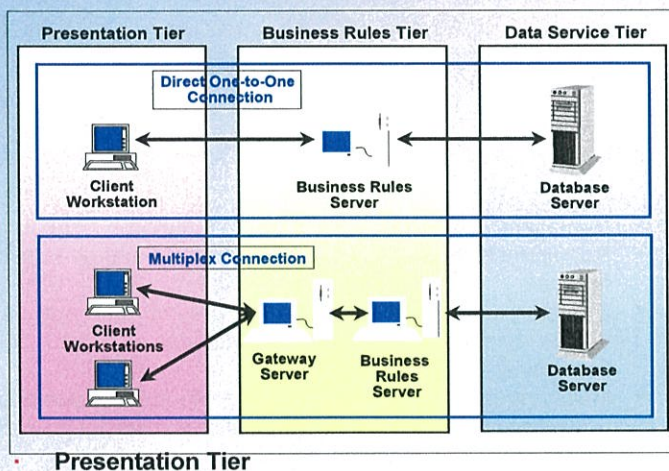- · **Reinsurance**
- · **Claims**

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Benefits of Implementing Ingenious

As mentioned earlier, one of the key deliverables of this **INGENIUS** is technical flexibility and resource efficiency. This is reflected in the technical architecture design where it is developed using the concept of **'3-Tier Open Client/Server'** architecture that consists of Presentation Tier, Business Rules Tier & Data Services Tier coupled with two (2) connection modes between Presentation & Business Rules Tier, namely, Direct One-To-One Connection and Multiplex Connection.

The unique architecture mentioned above is designed to provide flexibility and efficiency for handling millions of transactions and it is being illustrated in the diagram below: -

Presentation Tier

This is where end-users interact with the INGENIUS in terms of data capturing, editing and data display. No business rules, such as data validation and premium calculation are being carrying out here. However, basic field validation process such as mandatory, numeric and date fields are done here to minimize unnecessary traffic communication between Presentation & Business Rules Tier.

This design architecture that isolates business rules from the user-interface program, ensures that should there be any change to the business rules, the user-interface program residing in client workstations located nation-wide, under this Presentation Tier, would not be disturbed.

Business Rules Tier

This Business Rules Tier contains sub-routines (Stored Procedures) that control business processing requirement such as data validation (verify validity of Policy Number & Vehicle Number) and premium calculation.

By separating the Presentation Tier from Business Rules Tier, one significant advantage is that one set of business rule can support more than one set of user-interface mode such as text/character-based, Windows-based and Browser-based concurrently.

Data Services Tier

This Data Services Tier is responsible for the creation of new records/files onto the database after new transaction has been captured from the Presentation Tier and having gone through verification and other business rules functions. It is also responsible for locating and supplying existing records/files residing in database to Business Rules Tier for performing further business rules functions. In short, most of its functions would revolve around Create Data, Write Data, Retrieve Data, Update Data and Delete Data.

By separating the Business Rules Tier from the Data Services Tier, it opens the door for a wide range of ODBC-compliant database management system to be used as the database (or data repository). In another word, INGENIUS is database independent!

As opposed to the traditional 'Direct One-to-One Connection Mode', the availability of 'Multiplex Connection Mode' enable insurance company to spend hundreds of thousand dollar less in terms of database licences as it allows for a 10:1 ratio comfortably, i.e., for every 10 users you need only to purchase 1 database licence.