Guardian Diagnostics System
Monitoring the BI platform

PrecisionPoint Guardian Diagnostic System

Background

PrecisionPoint is a BI and reporting platform designed for **Microsoft Dynamics AX and NAV**. The product is delivered by PrecisionPoint Software as part of a managed service which includes the 24/7 monitoring and support of each of its solution components.

The central component of PrecisionPoint is a financially integrated **SQL Server data warehouse**; the result of a sophisticated ETL process which scopes the entire content of the ERP.

The output reporting data model includes a single Fact table at its heart. This table holds all historical transactions (from across the modules and companies of AX or NAV) in one place. The transaction table is **automatically reconciled with the AX or NAV GL**, thus providing a fully detailed (easily accessed) audit trail from the business' consolidated financial statements back to all source data points.

The core data model serves as the basis for uninterrupted investigative drill down, into or across the financial (or operational) data. It ultimately allows an end user the ability to create cross-business KPIs and reports without requiring complex data table relationship knowledge and the time necessary to utilise that knowledge.

Given the holistic approach of its build process, the creation of the PrecisionPoint data warehouse itself helps to expose data integrity or consistency issues present in the source ERP data at the time that it runs. This is where Guardian comes in.

Guardian

"PrecisionPoint support the system everyday – so you don't need to."

PrecisionPoint Guardian is a server application which facilitates the remote monitoring of the PrecisionPoint database installation. Guardian captures and communicates diagnostic information to the PrecisionPoint customer, it allows the PrecisionPoint support team to pro-actively support the health and integrity of the data warehouse as it grows alongside the ERP.
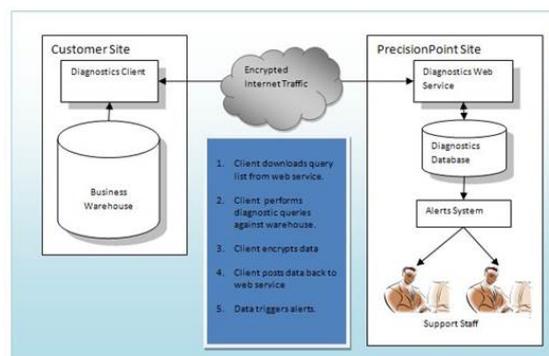
Diagnostics

The Guardian diagnostics system generates system reports on the following:

a) **Disk space monitoring** – to ensure there is space for the SQL databases

b) **Data integrity** - counting any orphaned or missing financial transactions (see below)

c) **Performance** - Processor, Memory, Network card specifications which may be used to diagnose performance issues.

d) **Time** - The length of time taken for the job to complete – to ensure the data warehouse is ready by the time the business users need it.

e) **Success or failure** - Details of any failures in the overnight/on-demand update job
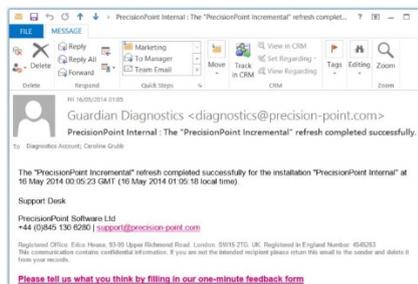
Data Quality – exceptions and balancing rows

The generation of a singular GL-reconciled data model requires an automated process which interrogates the relationships in the ERP data and performs sophisticated matching routines in order to de-duplicate, organise and balance the detailed information into an accurate and auditable parallel environment for reporting and analytics. Where there are data issues present in the source ERP which could prevent the satisfactory completion of this process, PrecisionPoint generates what it terms "exceptions" or "balancing rows".

An example of an "Exception" might be where the audit path from the destination GL-posting back to source module transaction is broken or non-existent at source. Guardian will identify this issue automatically and, as part of PrecisionPoint's managed service, PrecisionPoint support will further identify the date, size, ERP source table and document number of any source module transactions at fault. The support team then begin an investigation of the issue and either resolve the issue or communicate it back to the customer's AX or NAV support team for resolution. "Balancing Row" refers to the temporary GL-balancing row the system will generate to ensure the reporting model always agrees to the GL and the reporting data model is always available. Once the detailed data is investigated and successfully "re-connected", the balancing row will again be replaced by the original source transaction.

All of this means that data quality issues are:

(1) Highly visible in a system which is holistic and transparent

(2) Identified systematically

(3) Investigated and resolved pro-actively

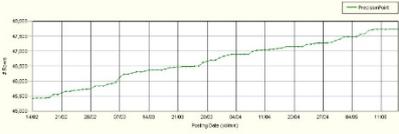## Screenshots:

⊞ Failed Job Steps - Job Failure

Job Name		Step Name
PrecisionPoint		Process Cube

Executed as user: DATACENTER\PrecisionPoint. <return xmlns="urn:schemas-microsoft-com:xml-analysis"><root xmlns="urn:schemas-microsoft-com:xml-analysis:empty"><Messages xmlns="urn:schemas-microsoft-com:xml-analysis:exception"><Warning WarningCode="1092354050" Description="Server: Operation completed with 17318 problems logged." Source="Microsoft SQL Server 2008 R2 Analysis Services" HelpFile="" /></Messages></root></return>. The step failed.
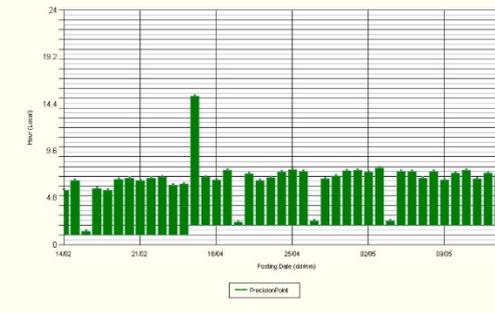
For more information, please contact info@precision-point.com or support@precision-point.com