A BREAKTHROUGH IN
MICROSOFT DYNAMICS® GP INTEGRATION

SCRIBE ADAPTER FOR MICROSOFT DYNAMICS GP WITH eConnect

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A Breakthrough in Microsoft Dynamics GP Data Integration

TECHNICAL BRIEF

Two events have dramatically expanded the possibilities for integrating Microsoft Dynamics GP into a business enterprise; (1) the release of the eConnect product by Microsoft Dynamics GP, and (2) the creation of the Scribe Adapter for Microsoft Dynamics GP (utilizing eConnect) that enables Microsoft Dynamics GP to take advantage of the Scribe Insight product, a powerful integration tool designed exclusively for mid-market companies.

eConnect for Microsoft Dynamics GP is an API that enables developers to send, publish, and request data and transactions in Microsoft Dynamics GP via various middleware components that use published eConnect XML schemas. These middleware components can be accessed by developers via various methods including COM/.NET, message queuing, Web services, stored procedures, and XML. At the core of eConnect is a set of SQL Server stored procedures that are accessed via the above methods. These stored procedures encapsulate the application business logic and data validation rules that previously were only accessible via the Microsoft Dynamics GP user interface.

eConnect has been optimized to support a broad range of automated integration processes, from single transaction, real-time interactions through large, batch data loads. It is a highly flexible interface that enables developers to support a wide variety of integration scenarios. The creation of eConnect has dramatically simplified the task of interfacing or exchanging information with Microsoft Dynamics GP from external applications. eConnect on its own, however, does not provide all of the tools required for companies to quickly and effectively integrate Microsoft Dynamics GP into a company’s unique application environment. There still remains the need to define, execute, and manage the specific integration rules and data mappings between Microsoft Dynamics GP and other external systems. This is where Scribe Insight comes in.

Scribe Insight: The Integration Tool
The Scribe Adapter enables Microsoft Dynamics GP (hereinafter referred to as “Dynamics GP”) to take advantage of Scribe Insight. For example, many customers and partners are using the Scribe Insight tool to seamlessly integrate Microsoft Dynamics CRM with Dynamics GP. Scribe Insight is a market leading integration tool optimized specifically for mid-market companies. Scribe Insight’s architecture is solely driven by one key fact; the integration needs of mid-market companies are just as unique and sophisticated as large companies, but these companies have a fraction of the budget and IT staff of their bigger counterparts. They also need to deal with a rapidly evolving technology environment while attempting to keep up with ever changing business needs. What mid-market companies need is a powerful, yet easy to use, integration tool that enables them to quickly deploy integration solutions and rapidly evolve them as the business needs and underlying technology environment dictate. Scribe Insight has delivered this essential capability for thousands of mid-market companies. With the addition of the Scribe Adapter for Microsoft Dynamics GP (hereinafter referred to as “the Scribe Adapter for Dynamics GP”) with eConnect, the power of the Scribe Insight tool is now broadly available to Dynamics GP customers.
The following diagram represents the Scribe Insight tool and the Scribe Adapter for Dynamics GP with eConnect.

The major Scribe technology elements, along with the Scribe Adapter for Dynamics GP, are represented by the shaded boxes in the diagram. These elements are the Scribe Insight product with its two graphical components, the Workbench and the Console, its Services (or run-time engine) and the Solution Templates developed by Scribe, its partners, and its customers:

**Scribe Workbench** - The Workbench is the graphical design environment where all the integration rules and data mappings are established, at both the object and field level. These mappings and integration rules are then saved as metadata in a portable template file that drive the integration process at run-time.

**Scribe Console** - The Console is the Web service-based automation and management environment where the events that initiate an integration process (as defined in the template file) are established. These events can be established in real-time, via queuing or polling, or in batch, via a schedule or file transfer, depending on the needs of the customer. In addition, the Console is where errors are viewed and corrected, system monitors and alerts are established for proactive integration management, and business activity monitors that enhance the effectiveness of your Dynamics GP application are defined.

**Scribe Services** - The Services is the run-time engine of Scribe Insight represented by a set of Windows services. The Services detect real-time and scheduled events and execute the appropriate integration processes. The Services also detect real-time business events and raise alerts to individuals or groups via email or text message.

**Solution Template** - The components defined by both the Workbench and Console represent a solution template. An example of a Solution Template is Scribe’s Solution for Microsoft Dynamics CRM to Dynamics GP. A Solution Template is a highly functional “starting point” that then can be extended and customized via the Workbench and Console to meet each customer’s needs. Solution Templates may also be developed as a set of components, enabling companies to re-use common components across multiple integrations. For example, Scribe provides a template component that represents a “best practice” for identifying if a company record already exists so that duplicate customer records are not created in an integration process. Utilizing a standardized component across a number of integrations eliminates effort and provides a consistent result across all systems. Scribe regularly updates its Solution Templates and posts them to its Web community for download, at no additional cost, for its customers and partners.
The Tie that Binds
The final piece to this puzzle is the Scribe Adapter for Dynamics GP with eConnect. This .NET technology component enables Scribe Insight to easily read data from and write data to Dynamics GP. The adapter provides an abstracted and simplified view of the Dynamics GP object structure within the Scribe Workbench. Workbench users can perform sophisticated integration actions against objects within Dynamics GP in just a few clicks of the mouse.

Embedded within the Adapter is a run-time version of the eConnect libraries. There is no need for a customer to purchase eConnect separately to utilize the Scribe Adapter. The Scribe Adapter for Dynamics GP currently supports a list of the most commonly integrated objects within Dynamics GP. This list continues to expand as customer demand dictates. The list of currently supported objects is outlined at the end of this paper.

The Scribe Adapter for Dynamics GP supports the insertion, update, and deletion of data and transactions within Dynamics GP via the eConnect API. A key feature within the Scribe Workbench that is supported by the Adapter is step control. Step control provides the ability to perform multiple operations against multiple objects within one integration process. It provides the ability to control how the objects are processed based upon the results of operations from previous steps. For example, in an order integration process, a new “company” and “address” could be added if they do not exist in Dynamics GP followed by one “Order Header” record and multiple “Order Detail” records. And with its built-in automatic foreign key assignment and rollback capabilities, step control fully maintains the transactional and referential integrity of the integration process across these multiple objects. In our Order example, the address and order would be related to the company from the earlier step and if the mark down in the header exceeded the detail line items, the entire transaction could be rolled back and logged as an error.

A key component of the Adapter for Dynamics GP is the GP Publisher. The GP Publisher allows for the capture of newly changed data from Dynamics GP to be utilized in an integration process. For example, the GP Publisher can capture changes to customer or order records made in Dynamics GP for immediate updating in a front office system. This net change capability is critical to support efficient two-way real-time integration processes.

Additional capabilities supported by the Adapter for Dynamics GP and Scribe Insight include:

- **The capture of the detailed error messages provided by eConnect** – there are over 4,400 unique eConnect error messages that are fully exposed within Scribe’s advanced error reporting and management module, allowing for the quick diagnosis and resolution of error conditions.
- **The need to map only changed fields** – the Scribe Workbench supports precise field mapping and filtering rules that mean you only need to map those fields that have changed.
- **Record matching on any field or combination of fields** – the Scribe Workbench supports advanced matching capability for record updating that support lookups on any field, or
combination of fields. This ensures that the proper records are updated and that duplicate records are not created.

- **Specialized data transformation functions** – in addition to over 150 standard, built-in data transformation formulas, there are a number of Dynamics GP specific formulas including functions for phone number and date formatting as well as the automatic generation of unique customer numbers.

- **Support for Business Activity Monitoring or BAM** – business events can be captured within Dynamics GP and business users can be proactively notified via email or text message, enabling them to take proactive action. For example, a monitor can notify a sales manager when a customer has been placed on credit hold, allowing them to quickly address the issue with the customer.

The Unparalleled Business Advantage
Scribe Insight and the Dynamics GP Adapter offer customers groundbreaking advantages over alternative approaches to integration with Dynamics GP, including:

- **Breadth of Capability** – The Scribe tool supports a wide range of needs including:
  - The initial migration of data from legacy systems
  - The occasional, ad-hoc loading of data
  - Scheduled or batch integration of data from legacy systems and other applications, such as 3rd party billing or web order entry systems
  - Real-time integration with front office and other business applications
  - Data cleansing, standardization, and mass update
  - Business Activity Monitoring to monitor business events and proactively notify users of recommended actions

Companies save money and gain great efficiencies by learning and standardizing on one tool to meet a broad range of needs. In addition, Scribe Insight goes beyond integration with Dynamics GP.

- **Flexibility and Power** – With Scribe, a company can get exactly what they need from their integration. With the power and flexibility of Scribe, combined with an easy to use interface, companies can quickly fashion an integration to meet their unique business needs...no compromise required.

- **Adaptability and Upgradeability** – Scribe takes the pain out of upgrading or changing an integration process. With Scribe’s component architecture, changes in the technology environment have minimal impact on the integration process itself. For example, if a customer upgrades their Dynamics GP environment, unless there are schema or business rule changes that affect the integration process itself, the upgrade will have no effect on the Solution Template. It is as simple as upgrading the Adapter. If there is a schema or integration rule change, it is a simple matter of a few mouse clicks in the Scribe Workbench.

- **Openness** – Scribe Insight is an open integration tool that can integrate Dynamics GP with a broad range of environments including Web sites, legacy systems, packaged applications, message brokers, and databases. Out of the box, Scribe provides connectivity to SQL, ODBC data sources, flat files, message queues, and XML documents/messages. Scribe also provides Adapters for many of the leading mid-market CRM applications including Microsoft CRM, SalesLogix, salesforce.com, Pivotal, Onyx, ACT!, and Goldmine.
Scribe Adapter for Dynamics GP

Supported eConnect Objects

**Analytical Accounting**
- AA Distribution

**Bank Reconciliation**
- BR Bank Deposit Header
- BR Bank Deposit Line
- BR Bank Deposit Post
- BR Bank Transaction Dist
- BR Bank Transaction Header
- BR Bank Transaction Void
- BR Get Next Number

**Shared Master**
- Customer
- Customer Address
- Vendor
- Vendor Address
- Note
- Internet Information
- Batch Header
- MDA Quantity

**General Ledger**
- GL Account
- GL Fixed Allocation
- GL Get Next Number
- GL Transaction Header
- GL Transaction Line
- GL Variable Allocation

**Receivables**
- RM Get Next Number
- RM Transaction
- RM Distribution
- RM Tax Detail
- RM Cash Receipt
- RM Apply

**Payables**
- PM Get Next Number
- PM Transaction
- PM Distribution
- PM Tax Detail
- PM Manual Check

**Inventory**
- Item
- Item Currency
- Item Vendor
- Item Price List Header
- Item Price List Line
- Item Site
- IV Get Next Number
- IV Transaction Header
- IV Transaction Line
- IV Transaction Lot
- IV Transaction Serial
- IV Transaction Bin
- IV Transfer Header
- IV Transfer Line
- IV Transfer Lot
- IV Transfer Serial
- IV Transfer Bin
- IV Bin to Bin Transfer

**Scribe Integration**
- SCRIBESHADOW

**Sales Order Processing**
- SOP Get Next Number
- SOP Transaction Header
- SOP Transaction Line
- SOP Transaction Payment
- SOP Transaction Void
- SOP Distribution
- SOP Commission
- SOP Tracking Number
- SOP User Defined
- SOP Line Lot
- SOP Line Serial
- SOP Line Tax Detail
- SOP Line Bin
- SOP Process Hold
- SOP To POP Link

**Purchase Order Processing**
- POP Get Next Number
- POP Transaction Header
- POP Transaction Line
- POP Receipt Header
- POP Receipt Line
- POP Distribution
POP Receipt Line Lot
POP Receipt Line Serial
POP Receipt User Defined
POP Receipt Line Tax

Field Service
FS Note
Service Call
Service Call Equipment

Fixed Assets
FA Account Group
FA Asset
FA Asset Book
FA Asset Class
FA Asset Insurance
FA Asset Lease
FA Asset User Data
FA Book
FA Book Class
FA Insurance Class
FA Lease Company
FA Location
FA Note
FA Physical Location
FA Retirement
FA Structure

Project Accounting
PA Account
PA Change Order Budget
PA Change Order Fee Schedule
PA Change Order Fee Detail
PA Change Order Fee Header
PA Change Order Get Next Number
PA Change Order Header
PA Contract
PA Contract Billing Cycle
PA Employee Expense Header
PA Employee Expense Line
PA Employee Expense Tax

PA Get Next Number
PA Miscellaneous Log Header
PA Miscellaneous Log Line
PA Note
PA Project
PA Project Access
PA Project Billing Cycle
PA Project Budget
PA Project Equipment
PA Project Fee
PA Project Fee Schedule
PA Timesheet Header
PA Timesheet Line

Payroll
Employee
Employee Address
Employee Benefit
Employee Benefit Based on Code
Employee Deduction
Employee Deduction Based On Code
Employee Local Tax
Employee Pay Code
Employee State Tax
Employee Tax
UPR Batch
UPR Computer Check
UPR Manual Check Header
UPR Manual Check Line
About Scribe Software Corporation
Scribe Software is an established leader of data integration solutions worldwide. With over 900 partners and 12,000 customers, Scribe has proven its ability to deliver cost-effective, reliable solutions that give both its customers and partners a competitive advantage in business today. Scribe’s no coding, graphical user interfaces make configuring and managing integrations in the cloud, on-premise or anywhere in between quick and easy. As a Microsoft President’s Award winner, Scribe had demonstrated expertise in all Microsoft offerings. Additionally, Scribe’ expertise includes Salesforce.com, Oracle, JD Edwards and SAP, among others. Scribe delivers data integration solutions that work. For more information about Scribe please visit www.scribesoft.com.

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