

THE SCRIBE MICROSOFT DYNAMICS GP TO MICROSOFT DYNAMICS CRM TEMPLATE

CONFIGURABLE FRONT OFFICE TO BACK OFFICE INTEGRATION WITHOUT CODING



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The Scribe Microsoft Dynamics GP to Microsoft Dynamics CRM Template

TECHNICAL BRIEF

Over the past 10 years and across thousands of customers in the volume CRM market, Scribe has developed an approach to integration that solves the seemingly unsolvable dilemma posed by front to back office integration; how to deliver a highly functional, real-time integration that can be quickly customized to meet the needs of each and every customer. This paper will discuss the challenges posed by alternative integration approaches and present the Scribe solution, and its inherent advantages.

Traditional Alternatives

In the past, customers and partners have been forced to compromise with two inadequate approaches to their front office to back office integration needs:

- **Custom developed solutions** – This is where the customer or implementation partner hard-codes the integration. Because all of the data mappings and business logic have to be built from scratch, customers are typically forced by money and time to dramatically compromise on functionality. These solutions typically are expensive to maintain since they have little or no error detection and management built in and are very difficult to troubleshoot. And what happens when you change or upgrade either your back office or front office systems? You will likely need to rip it out and start over again.
- **Packaged, point solutions** – This is where either the application vendor or a niche software developer creates an integration solution between one front office product and one back office product. Examples of these solutions for Microsoft Dynamics GP (hereinafter referred to as “Dynamics GP”) and Microsoft Dynamics CRM (hereinafter referred to as “Dynamics CRM”) include the Microsoft provided solution using BizTalk and Nolan Bridge. On the surface, these solutions appear to be a good option since they have compelling functionality “out of the box.” The challenges typically arise at implementation when the customer requires customizations to the integration solution to meet their unique business requirements. “Out of the box” with these solutions typically means “black box.” To open up that “black box” requires extensive and expensive consulting services that typically can only be provided by a small, finite group of individuals. The customer along with their implementation partner is not only locked in up front, but is locked in to high costs down the road when they change their processes or upgrade their systems.

The Scribe Advantage

This is where the Scribe Microsoft Dynamics GP and Microsoft Dynamics CRM Template (hereinafter referred to as “Dynamics GP and Dynamics CRM Template) provides an advantage. Scribe’s unique template model provides “out of the box” functionality, built over its industry leading integration tool. This Dynamics GP to Dynamics CRM Template can be quickly extended and customized utilizing the GUI-based mapping and development environment to deliver a solution that meets the unique needs of each and every customer.

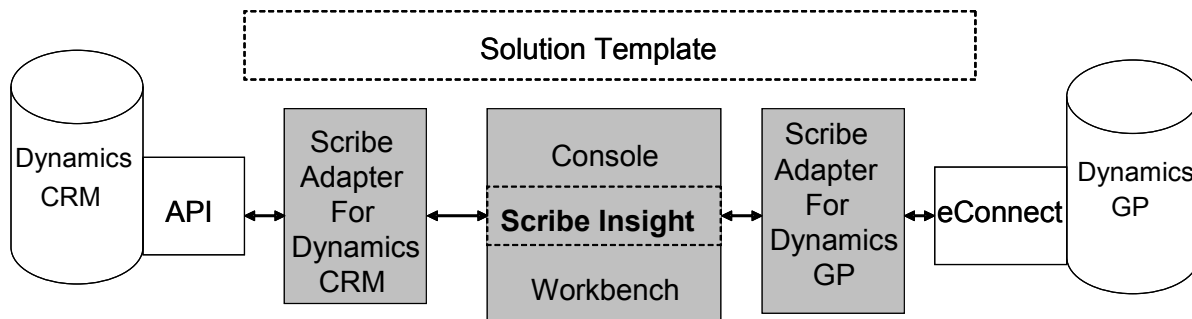
With Scribe’s component architecture, when you upgrade to a newer version of Dynamics GP or Dynamics CRM, you upgrade to a new version of the Scribe Adapter for the upgraded application, and your existing Dynamics GP to Dynamics CRM Template continues to function with little or no disruption. Some application upgrades do require modifications to your integration. If new field mappings or business rules need to be applied, you can quickly make them in the Scribe Workbench, and you’re off and running.

This component architecture also enables customers to implement the Template in phases or pick and choose the elements of the Solution that they require. For example, a customer may not wish to implement order integration initially (or in some cases never) but can still synchronize customer activity (accounts, contacts, invoices) between Dynamics GP and Dynamics CRM. This modularity enables customers to implement the Template “right-sized” to their exact needs.

In addition, since the Scribe Insight product represents the general integration tool for hundreds of Microsoft’s top Dynamics CRM and Dynamics GP partners, there is no shortage of resources to help customers customize the Template for their business. Scribe’s on-line training curriculum and Web Community containing documented best practices resources, enable customers and partners to take full control of their implementations, now and in the future.

The Scribe Integration Template Architecture

The following diagram represents the components of the Scribe Template.



The Scribe technology tool is represented by the shaded boxes in the diagram. This includes the Scribe Insight product with its two graphical components, the Workbench and the Console along with the specific application Adapters.

Scribe Adapters – These components enable the Scribe Insight product to easily read data from and write data to a particular business application. Adapters give each application a consistent look within the Scribe Workbench, shielding the user from having to deal with the particular processing rules of the application. For example, a Scribe Adapter would typically take care of things like primary key generation and standard default values that will not change from implementation to implementation. The specific data mappings and processing rules of the integration that may change are part of the Template.

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

Scribe Console - The Console is the SOAP-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. The Dynamics GP to Dynamics CRM Template operates in a real-time mode. In addition, the Console is where errors are reported and corrected, system monitors and alerts are established for proactive integration management, and business activity monitors that enhance the effectiveness of Dynamics CRM are set up.

Dynamics GP to Dynamics CRM Template - The elements created and set up by the Workbench and Console represent the Dynamics GP to Dynamics CRM Template. Scribe provides the Dynamics GP to Dynamics CRM Template as a highly functional “starting point” that then can be extended and customized via the Workbench and Console to meet each customer’s needs. Scribe regularly updates its Dynamics GP to Dynamics CRM Template and posts it to the Scribe Web Community for download, at no additional cost, for its customers and partners.

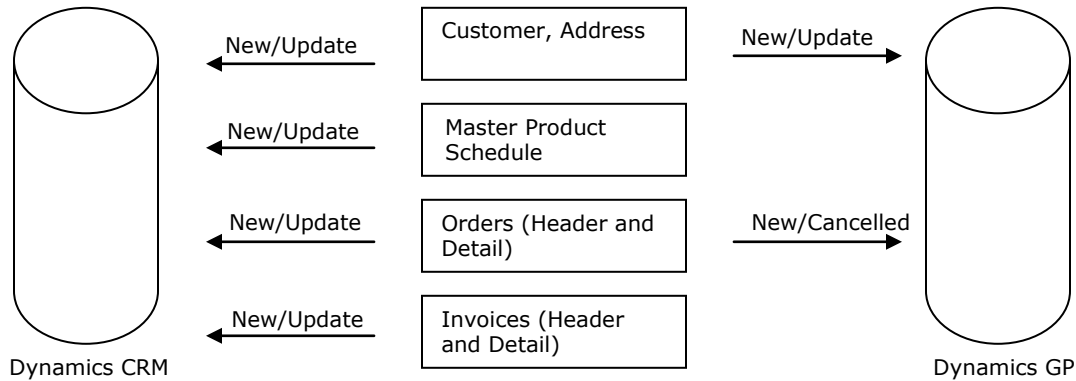
The Scribe Integration Template Architecture Advantage

The Scribe Integration Template is comprised of the Scribe Insight product along with the Adapter for Dynamics CRM and the Adapter for Dynamics GP (which includes the runtime version of eConnect). Maintenance for the aforementioned tool products is required for the first year. By purchasing the Scribe tool, customers receive full access to the Scribe Web Community where they can download the latest Dynamics GP to Dynamics CRM Template. Online self-paced and Webinar-based training can be purchased as well. The customer or partner simply installs the latest Template and can immediately begin customizing the Template to meet their particular needs.

Customers receive another significant benefit from this approach. Since the Template includes the full Scribe Insight migration and integration tool, customers can use the product to integrate with other in-house systems, import leads from their Web site in real-time, load marketing lists, and migrate data from previous customer systems. Scribe provides additional templates to customers for download on the Web Community at no additional charge including ACT! and Goldmine Migrations, automatic update from the donotcall.gov Web service, the Web Leads template, and more. With Scribe, one investment supports all of your CRM data integration needs.

Functionality of the Scribe Template

The Dynamics GP to Dynamics CRM Template from Scribe at a high-level provides the functionality as depicted in the following diagram:



Customer, Address – This data can be created or modified in either Dynamics GP or Dynamics CRM (except for certain fields owned by a system, such as credit limit or credit authorization that are owned by Dynamics GP) and the additions or changes will be synchronized with the other application. Scribe’s match component provides fuzzy account matching to avoid the creation of duplicate accounts and to facilitate an initial synchronization of existing Dynamics GP and CRM environments.

Master Product Schedule – This data is mastered in Dynamics GP and replicated to Dynamics CRM to support the order process needs in CRM.

Orders – Orders are created in Dynamics CRM and may be modified in Dynamics CRM until that order is submitted to Dynamics GP. Updated information about the order is provided to Dynamics CRM from Dynamics GP. Orders that originate in Dynamics GP are provided to Dynamics CRM in a submitted state. Orders that are cancelled in Dynamics CRM are voided in Dynamics GP and vice versa. Transferred orders in Dynamics GP are also included.

Invoices – Invoices are created in Dynamics GP and replicated to Dynamics CRM. Updates to invoices in Dynamics CRM can only be made from Dynamics GP. Posted invoices in Dynamics GP are also included.

For more information regarding the detailed integration, please see the mapping schedule outlined in Appendix A.

Additional Template Features

The Template comes pre-built with business activity monitors that alert sales management and teams about key customer trends and actions including:

- Large order notification
- Low or high order rates
- VIP customer order
- Delayed order shipments

The Template also includes views that support key business intelligence including:

- Product sales by rep or region
- Up-sell/cross-sell analysis
- Order fulfillment efficiency
- Seasonal trend analysis by product

Most Commonly Requested Customizations and Extensions to the Scribe Template

Customers and partners can quickly extend the Template utilizing the Workbench and Console to support additional functionality including:

- Multi-company support (multiple GP company databases)
- Multi-currency support (available via extra price lists in Dynamics CRM)
- Discount Types and Discounts in CRM (volume discounts)
- Contact based orders (B2C)

More substantial customizations and extensions may also be developed by customers and partners utilizing the Workbench and Console including:

- Automatic tax schedule assignment
- Field service
- Project accounting
- Contracts
- Quotes, returns, backorders
- Auto creation of activities – for up-sell, cross-sell, etc.
- Multi-site inventory
- Extended pricing (customer discounting)

Some key differences between the Scribe and Microsoft Integrations

The Scribe Integration Template out of the box includes support for:

- Dynamics GP 10.0, 9.0, 8.0 and 7.x
- Matching on companies
- Contact records in Dynamics CRM created from the address field in Dynamics GP
- Primary, alternate and bill-to addresses handled in a clean/consistent manner
- Company sharing driven by Customer/Relationship Type field (can be changed). Allows Companies to be manually shared before the first order.
- Email info mapped into GP Internet Information (not Send Statement To)

- Pricing method conversion
- Write-in products (for orders in both directions and invoices into CRM)

Capabilities Not Included in the Scribe Template

Scribe has identified certain capabilities that require Adapter for Dynamics CRM enhancements (and template extensions) in order to be fully functional including:

- Substitute item information in Dynamics CRM
- Kits (kits can be sold from Dynamics CRM, however the list of included components is not available in Dynamics CRM)

Support for these may be available in a future product release.

Appendix A:

Scribe Integration Template Mapping: Dynamics GP and Dynamics CRM

Dynamics GP to Dynamics CRM Field Mapping

This section lists the mappings between the Dynamics GP system and the objects in the Adapter for Dynamics CRM. Each table corresponds to a separate Dynamics CRM adapter object. ***It is important to note that the Template is being updated and expanded on a regular basis so this information is subject to change.***

Account Mapping

The following table lists the mappings between the Microsoft Dynamics GP RM00101 table (Customer) and the SY01200 table (Internet Info), and the Adapter for Dynamics CRM Account object.

GP database table	GP field name	Adapter object field
RM00101	CUSTCLAS	accountcategorycode
RM00101	CUSTNMBR	accountnumber
RM00101	ADRSCODE	address1_addresstypecode
RM00101	CITY	address1_city
RM00101	COUNTRY	address1_country
RM00101	FAX	address1_fax
RM00101	ADDRESS1	address1_line1
RM00101	ADDRESS2	address1_line2
RM00101	ADDRESS3	address1_line3
RM00101	ADRSCODE	address1_name
RM00101	ZIP	address1_postalcode
RM00101	CNTCPRSN	address1_primarycontactname
RM00101	SHIPMTHD	address1_shippingmethodcode
RM00101	STATE	address1_stateorprovince
RM00101	PHONE1	address1_telephone1
RM00101	PHONE2	address1_telephone2
RM00101	PHONE3	address1_telephone3
RM00101	UPSZONE	address1_upszone
RM00101	CRLMTAMT	creditlimit
RM00101	HOLD	credithold
		customertypecode (set to default value of 3)
RM00101	PRCLEVEL	defaultpricelevelid
RM00101	COMMENT1 + COMMENT2	description
SY01200	INET1	emailaddress1
RM00101	FAX	fax
RM00101	CUSTNAME	name
RM00101	PYMTRMID	paymenttermscode
RM00101	PHONE1	telephone1
RM00101	PHONE2	telephone2
RM00101	PHONE3	telephone3
SY01200	INET2	websiteurl

SalesOrder Mapping

The following table lists the mappings between the Microsoft Dynamics GP SOP10100 (SOP Transaction Header) and the RM00102 table (Customer Addresses), and the Adapter for Dynamics CRM SalesOrder object. A similar mapping exists between the Dynamics GP SOP30200 table (SOP Transaction Header – transferred/history) and the Adapter for Dynamics CRM SalesOrder object.

GP database table	GP field name	Adapter object field
RM00102	ADRS CODE	billto_addressid
RM00102	CITY	billto_city
RM00102	COUNTRY	billto_country
RM00102	FAX	billto_fax
RM00102	ADDRESS1	billto_line1
RM00102	ADDRESS2	billto_line2
RM00102	ADDRESS3	billto_line3
RM00102	CNTCPRSN	billto_name
RM00102	ZIPCODE	billto_postalcode
RM00102	STATE	billto_stateorprovince
RM00102	PHONE1	billto_telephone
SOP10100	TRDISAMT	discountamount
		discountpercentage (set to default value of 0)
SOP10100	FRTAMNT + RTTXAMT	freightamount
SOP10100	SOPNUMBE	name
SOP10100	PYMTRMID	paymenttermscode
		pricelevelid (derived from a lookup into the Dynamics CRM database)
SOP10100	ReqShipDate	requestdeliveryby
SOP10100	SHIPMTHD	shippingmethodcode
SOP10100	CITY	shipto_city
SOP10100	COUNTRY	shipto_country
SOP10100	FAXNUMBR	shipto_fax
SOP10100	ADDRESS1	shipto_line1
SOP10100	ADDRESS2	shipto_line2
SOP10100	ADDRESS3	shipto_line3
SOP10100	CNTCPRSN	shipto_name
SOP10100	ZIPCODE	shipto_postalcode
SOP10100	STATE	shipto_stateorprovince
SOP10100	PHNUMBR1	shipto_telephone
SOP10100	VOIDSTTS	statecode (set to “Canceled” or “Submitted” based on value in source)
		statuscode (set to the default for the statecode being passed in)
		submitstatusdescription (set to “order was submitted” or “order is shared”)
SOP10100	DOCAMNT	totalamount
SOP10100	SUBTOTAL – TRDISAMT	totalamountlessfreight
SOP10100	MRKDNAMT + TRDISAMT	totaldiscountamount
SOP10100	SUBTOTAL	totallineitemamount
SOP10100	MRKDNAMT	totallineitemdiscountamount
SOP10100	TAXAMNT	totaltax

SalesOrderDetail Mapping

The following table lists the mappings between the Microsoft Dynamics GP SOP10100 table (SOP Transaction Header) and the SOP10200 table (SOP Transaction Item), and the Adapter for Dynamics CRM SalesOrderDetail object. A similar mapping exists between the Dynamics GP SOP30300 table (SOP Transaction Item – transferred/history) and the Adapter for Dynamics CRM SalesOrderDetail object.

GP database table	GP field name	Adapter object field
SOP10200	UNITPRCE * QUANTITY	baseamount
SOP10200	XTNDPRCE	extendedamount
		ispriceoverridden (set to a default value of 1)
SOP10200	NONINVEN	isproductoverridden
SOP10200	MRKDNAMT * QUANTITY	manualdiscountamount
SOP10200	UNITPRCE	priceperunit
SOP10200	ITEMDESC	productdescription
SOP10200	ITEMNMBR	productid
SOP10200	QUANTITY	quantity
SOP10200	QTYCANCE	quantitycancelled
SOP10200	QTYFULFI	quantityshipped
SOP10200	ReqShipDate	requestdeliveryby
SOP10100	SLPRSNID	salesrepid
SOP10200	CITY	shipto_city
SOP10200	COUNTRY	shipto_country
SOP10200	FAXNUMBR	shipto_fax
SOP10200	ADDRESS1	shipto_line1
SOP10200	ADDRESS2	shipto_line2
SOP10200	ADDRESS3	shipto_line3
SOP10200	CNTCPRSN	shipto_name
SOP10200	ZIPCODE	shipto_postalcode
SOP10200	STATE	shipto_stateorprovince
SOP10200	PHONE1	shipto_telephone
SOP10200	TAXAMNT	tax
		uomid (derived from a lookup into the Dynamics CRM database)
		volumediscountamount (set to a default value of 0)

Invoice Mapping

The following table lists the mappings between the Microsoft Dynamics GP SOP10100 (SOP Transaction Header) and the RM00102 table (Customer Addresses), and the Adapter for Dynamics CRM Invoice object. A similar mapping exists between the Dynamics GP SOP30200 table (SOP Transaction Header – posted/history) and the Adapter for Dynamics CRM Invoice object.

GP database table	GP field name	Adapter object field
RM00102	CITY	billto_city
RM00102	COUNTRY	billto_country
RM00102	FAX	billto_fax
RM00102	ADDRESS1	billto_line1
RM00102	ADDRESS2	billto_line2
RM00102	ADDRESS3	billto_line3
RM00102	CNTCPRSN	billto_name
RM00102	ZIPCODE	billto_postalcode
RM00102	STATE	billto_stateorprovince
RM00102	PHONE1	billto_telephone
SOP10100	TRDISAMT	discountamount
		discountpercentage (set to default value of 0)
SOP10100	FRTAMNT	freightamount
SOP10100	SOPNUMBE	name
SOP10100	PYMTRMID	paymenttermscode
		pricelevelid (derived from a lookup into the Dynamics CRM database)
SOP10100	ORIGNUMB	salesorderid
SOP10100	SHIPMTHD	shippingmethodcode
SOP10100	CITY	shipto_city
SOP10100	COUNTRY	shipto_country
SOP10100	FAXNUMBR	shipto_fax
SOP10100	ADDRESS1	shipto_line1
SOP10100	ADDRESS2	shipto_line2
SOP10100	ADDRESS3	shipto_line3
SOP10100	CNTCPRSN	shipto_name
SOP10100	ZIPCODE	shipto_postalcode
SOP10100	STATE	shipto_stateorprovince
SOP10100	PHNUMBR1	shipto_telephone
		statecode (set to "Canceled" or "Active" based on value in source)
		statuscode (set to default value of "New")
SOP10100	DOCAMNT	totalamount
SOP10100	SUBTOTAL – TRDISAMT	totalamountlessfreight
SOP10100	MRKDNAMT + TRDISAMT	totaldiscountamount
SOP10100	SUBTOTAL	totallineitemamount
SOP10100	MRKDNAMT	totallineitemdiscountamount
SOP10100	TAXAMNT	totaltax

InvoiceDetail Mapping

The following table lists the mappings between the Microsoft Dynamics GP SOP10100 table (SOP Transaction Header) and the SOP10200 table (SOP Transaction Item), and the Adapter for Dynamics CRM InvoiceDetail object. A similar mapping exists between the Dynamics GP SOP30300 table (SOP Transaction Item – posted/history) and the Adapter for Dynamics CRM InvoiceDetail object.

GP database table	GP field name	Adapter object field
SOP10200	UNITPRCE * QUANTITY	baseamount
SOP10200	NONINVEN	description
SOP10200	XTNDPRCE	extendedamount
		ispriceoverridden (set to a default value of 1)
SOP10200	NONINVEN	isproductoverridden
SOP10200	MRKDNAMT * QUANTITY	manualdiscountamount
SOP10200	UNITPRCE	priceperunit
SOP10200	ITEMNMBR	productid
SOP10200	QUANTITY	quantity
SOP10200	QTYCANCE	quantitycancelled
SOP10200	QTYFULFI	quantityshipped
SOP10100	SLPRSNID	salesrepid
SOP10200	CITY	shipto_city
SOP10200	COUNTRY	shipto_country
SOP10200	FAXNUMBR	shipto_fax
SOP10200	ADDRESS1	shipto_line1
SOP10200	ADDRESS2	shipto_line2
SOP10200	ADDRESS3	shipto_line3
SOP10200	CNTCPRSN	shipto_name
SOP10200	ZIPCODE	shipto_postalcode
SOP10200	STATE	shipto_stateorprovince
SOP10200	PHONE1	shipto_telephone
SOP10200	TAXAMNT	tax
		uomid (derived from a lookup into the Dynamics CRM database)
		volumediscountamount (set to a default value of 0)

Product Mapping

The following table lists the mappings between the Microsoft Dynamics GP IV00101 table (Item Master) and the IV00105 table (Item Currency), and the Adapter for Dynamics CRM Product object.

GP database table	GP field name	Adapter object field
IV00101	CURRCOST	currentcost
		defaultuomid (derived from a lookup into the Dynamics CRM database)
		defaultuomscheduleid (derived from a lookup into the Dynamics CRM database)
IV00101	ITEMDESC	name
IV00105	LISTPRCE	price
IV00101	ITEMNMBR	productnumber
IV00101	ITEMTYPE	producttypecode
IV00101	DECPLQTY	quantitydecimal
IV00101	STNDCOST	standardcost
		statecode (set to "Inactive" or "Active" based on value in source)
IV00101	ITEMSHWT	stockweight

ProductPriceLevel Mapping

The following table lists the mappings between the Microsoft Dynamics GP IV00107 table (Item Price List Options) and the IV00108 table (Item Price List), and the Adapter for Dynamics CRM ProductPriceLevel object.

GP database table	GP field name	Adapter object field
IV00108	LISTPRCE	amount
		pricelevelid (derived from a lookup into the Dynamics CRM database)
		pricingmethodcode (set to a default value of 1)
IV00107	UMSLSOPT	quantitysellingcode
		uomid (derived from a lookup into the Dynamics CRM database)
		uomscheduleid (derived from a lookup into the Dynamics CRM database)

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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Peter R. Chase is Executive Vice President and founder of Scribe Software Corporation. Scribe is the leading provider of mid-market integration solutions. In his capacity at Scribe, Mr. Chase has advised numerous CRM vendors as they formulated their strategic integration strategies. He has also worked with many Scribe customers to ensure a successful rollout of their enterprise integration solutions.