

Release Notes, QuickBooks SDK 4.0

11/02/04

Welcome to the QuickBooks Software Development Kit (SDK) Version 4.0. This software is designed for use with QuickBooks 2005; selected features of this software can be used with QuickBooks 2002, 2003, and 2004 as well.

The system requirements for the QuickBooks SDK are the same as those for the version of QuickBooks that is running. QuickBooks 2005 and 2004 will run on Microsoft Windows 98, 2000, Me, or XP operating systems. QuickBooks 2002 and 2003 will run on Windows NT, 98, 2000, Me, or XP operating systems. (The SDK does not run in unattended mode—that is, with automatic login—on Windows 98, First Edition; it does, however, run in unattended mode on Windows 98, Second Edition.)

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Support for QuickBooks Products

The following table lists the different versions of QuickBooks and the corresponding versions of the qbXML specifications that support them. (*Note: QuickBooks Basic, QuickBooks Simple Start Desktop Edition, or the Canadian QuickBooks Easy Start Edition do not support the SDK.*)

Version of QuickBooks	qbXML Specification Version
QuickBooks 2005 (and Enterprise 5.0) (using QBXMLRP2)	4.0, 3.0, 2.1, 2.0, 1.1, 1.0
QuickBooks 2005 (and Enterprise 5.0) (using QBXMLRP)	2.1, 2.0, 1.1, 1.0
QuickBooks 2004 (and Enterprise 4.0) (using QBXMLRP2)	3.0, 2.1, 2.0, 1.1, 1.0
QuickBooks 2004 (and Enterprise 4.0) (using QBXMLRP)	2.1, 2.0, 1.1, 1.0
QuickBooks 2003 (R7 and above) (and Enterprise 3.0)*	2.1, 2.0, 1.1, 1.0
QuickBooks 2003 (and Enterprise 2.0)*	2.0, 1.1, 1.0
QuickBooks 2002 (R2 and above) (and Enterprise)*	1.1, 1.0
QuickBooks 2002 (R1)*	1.0
QuickBooks Online Edition (v. 11)	4.0, 3.0, 2.1, 2.0
QuickBooks 2005, Canadian Edition (using QBXMLRP2)	CA3.0, CA2.0
QuickBooks 2005, Canadian Edition (using QBXMLRP)	CA2.0
QuickBooks 2004, Canadian Edition (using QBXMLRP2)	CA3.0, CA2.0
QuickBooks 2004, Canadian Edition (using QBXMLRP)	CA2.0
QuickBooks 2003, Canadian Edition*	CA2.0
*Earlier releases of QuickBooks will work with either version of the Request Processor (QBXMLRP2 or QBXMLRP). We recommend you upgrade existing applications to use QBXMLRP2. SDK 3.0 and greater features are available only with QBXMLRP2; in addition, this Request Processor solves some problems found in the older Request Processor.	

The following table lists the different versions of the QuickBooks Foundation Class (QBFC) Library and the versions of the qbXML specification that support them.

QBFC Library	qbXML Specification Version
QBFC4 (including support for QuickBooks Online Edition and Canadian Editions of QuickBooks)	4.0, 3.0, 2.1, 2.0, 1.1, 1.0, CA3.0, CA2.0
QBFC3 (including support for QuickBooks Online Edition and Canadian Editions of QuickBooks)	3.0, 2.1, 2.0, 1.1, 1.0, CA3.0, CA2.0
QBFC2_1 (including support for QuickBooks Online Edition)	2.1, 2.0, 1.1, 1.0
QBFC2	2.0, 1.1, 1.0
QBFC2CA	CA2.0
QBFC	1.1, 1.0

Installation Instructions

IMPORTANT

During SDK 4.0 installation, if the eBay SDK has previously been installed on your system, the SDK 4.0 installer may report a failure registering ebay.SDK.tlb. This error can safely be ignored and the installation will proceed normally.

To install the SDK using the installer, execute *QBSDK40.exe*. The installer also adds a menu (*Start>Programs>QuickBooks SDK 4.0>*) that provides convenient access to SDK tools, samples, and documentation (including the *Onscreen Reference*). You can also access the qbXML Validator and qbXML Test applications through the "Send To" context menu for files.

Registering an Application for QuickBooks Online Edition

Before an application can connect with QuickBooks Online Edition using the SDK, it must be registered with the Intuit Developer Network. To register your application and obtain an application ID, please follow the instructions in Chapter 3 of the *Developer's Guide for QuickBooks Online Edition* and visit <http://appreg.quickbooks.com> to register your application.

Importing the Correct Library

For Visual C++ applications (if you are not using the QBFC Library), you need to import the library named *qbxmlrp2.dll*, which is installed in *C:\Program Files\Common Files\Intuit\QuickBooks*. For Visual Basic applications, select Project > References from within your VB project. Find "QBXMLRP2 1.0 Type Library" in the list and check the box next to it, then click OK. If you don't find the entry in the list, you can browse to it.

Migrating QBFC Applications to Version 4.0

If you want to use SDK 4.0 requests, you will need to change QBFC code to refer to the new QBFC Library. For example, in Visual Basic, replace "QBFC3Lib" or "QBFC3bLib" with "QBFC4Lib."

If you are currently using QBFC and want or need to be able to use the new QBFC dll (*qbfc4.dll*), you may need to make a few changes to your code and recompile even if you continue specifying the 3.0 version of the qbXML spec in the call to *CreateMsgSetRequest*. Specifically, the following change(s) are required:

- Replace any reference to the *QBXMLRPCConnectionType* and its enum values (*unknown*, *localQBD*, *remoteQBD*) with the new SDK 4.0 *ENConnectionType* enum type and its values (*ctUnknown*, *ctLocalQBD*, *ctRemoteQBD*, *ctLocalQBDLaunchUI*, and *ctRemoteQBOE*).
- For QBD, in a *ChargeQuery*, *ORTxnQuery* has been changed to *ORChargeTxnQuery*. (For Canada, *ORTxnQuery* is still used; for QBOE, there is no change because QBOE doesn't support *ChargeQuery*.)
- For QBD, in *InvoiceLineAdd/Mod*, *CreditMemoLineAdd/Mod*, *SalesOrderLineAdd/Mod*, and *SalesReceiptLineAdd*, *ORRate* is changed to *ORRatePriceLevel*. For QBOE, in *InvoiceLineAdd*, *CreditMemoLineAdd*, and *SalesReceiptLineAdd*, *ORRate* is changed to *ORRatePriceLevel*, even though the new *PriceLevelRef* in *ORRatePriceLevel* is not available in QBOE. For Canada, *ORRate* is still used, so no change is needed.

See the *Developer's Guide for the QBFC Library* for additional tips on migrating QBFC applications to a new SDK version.

New or Modified Files of Interest

This release includes documentation, tools, and samples. The following files and directories may be of particular interest to you:

- This release includes .NET Primary Interop Assemblies (PIAs) for QBXMLRP2, QBFC4, QBFC3, and QBFC2.1. These assemblies are included in the redistributable installers and merge modules for each library. If you have previously built a local interop assembly for use with your .NET integrations, please be sure to update them to use the primary interop assemblies included with this release instead.
- *doc\qbxmlrps40.xml*
The sample file containing all qbXML requests and responses.
- *OSR\OnscreenRef*
The Onscreen Reference for SDK 4.0.
- QBOE connector
Installed in the Windows Program Files\common files\Intuit\QuickBooks directory. Provides transparent and easy connectivity to QuickBooks Online Edition. This plugin to the QBXMLRP2 request processor is redistributable via the following installer and merge modules: QBOEConnector.msm (merge module) and QBOEConnector_Installer.exe (installer).
- MS Visual Studio integrated help files located at:[QBSDK4.0]\VSHelpFiles.
- *samples\qbdt\vb\qbxml\DataEvents\QBDataEventSubscriber*
Modified to show how to subscribe to events and specify that you don't want to receive your own events.
- *samples\qbdt\vb\qbxml\DataExtSample*
Modified to show use of IncludeRetElement to limit returned data to only what was specified.
- *samples\qbdt\vb\qbxml\SDKTestPlus3*
Modified to show the new OpenConnection2 method that allows the new connection types (such as the transparent connection to QB Online Edition) and to show how to support the new user authorization preferences feature.
- *samples\qbdt\vb.NET\QBFC\ItemReceipt*
Shows the use of the new ItemReceipt functionality.
- *samples\qbdt\vb.NET\QBFC\PriceLevels*
Shows the use of the new PriceLevel functionality.
- *samples\qbdt\vb\qbfc\MenuEventContext*
Sample code that shows how to add menus to QuickBooks and get information about which forms (if any) are open in QuickBooks at the time the menu is chosen.

- *samples\qbd\vb.NET\qbXML\DotNetEvents*
Shows how to implement the request proxy executable that is required to enable .NET applications to receive QuickBooks events.
- *samples\xmlfiles\CustomerQuery_metadata.xml*: shows the use of the new metadata feature, used to get approximate counts of objects that would be returned in the query, without returning the object data.
- *samples\xmlfiles\TxnDisplayAdd_Invoice.xml*: shows the new prefilling feature. This file causes the display of the QB Create Invoice form, prefilled with a customer name. When the end user tabs out of the Create Invoice form, the remaining customer data will appear in the form as well.

All new samples require QuickBooks 2005, the QBXMLRP2 Request Processor, and the QuickBooks 2005 sample product-based company file. The QBXMLRP2 Request Processor is installed in a variety of ways: automatically by QuickBooks 2005 and by the redistributable QBXMLRP2_Installer.exe installer and QBXMLRP2.msm merge module. The SDK also installs the request processor.

Enterprise Solutions version 5.0 and the SDK

The release of QuickBooks 2005 coincides with a new release of QuickBooks Enterprise Solutions, version 5.0. Enterprise Solutions version 5.0 provides new features and enhancements, one of which is a greater degree of flexibility in assigning user permissions to access QuickBooks, a feature that was provided by Intuit in response to many customer requests.

Enterprise Solutions version 5.0 continues to support and is compatible with the SDK, including the user/permissions enhancements, which should not affect most SDK applications. However, in certain cases, some permissions may work in ways that an SDK application needs to anticipate, in order to provide a good experience for the customer. These are listed in the bulleted items below:

- A user with only AP permission used to be able to see the report for Physical Inventory Worksheet. With Enterprise 5.0, the user now requires view access under inventory.
- A user with all permissions except AP and Sensitive Account previously could see the report PurchaseByVendorSummary but with Enterprise 5.0 cannot see this without view permissions for purchases. (The former ability to see this report was actually a bug, so the new behavior is the proper behavior.)
- A user with with Payroll and Employees access previously could request the TimebyJobDetail report. With Enterprise 5.0, the user cannot access this report without permissions for View access for Time.

- Previously, access to the report Transaction list by Customer was not allowed unless the user had Sensitive Reports permission, but with Enterprise 5.0, this access is allowed.

Documentation

This release includes new SDK manuals in both PDF and HTML. Along with the other major features in the SDK, the manuals and the *Onscreen Reference* can be conveniently accessed through the Start menu.

For best results, use Internet Explorer version 6 or higher to view the *Onscreen Reference*. If you use Netscape Navigator or Mozilla FireFox, for example, you may not be able to view all the information.

Tools

New in the SDK release is an SDK plugin for the Visual Studio 2003 IDE. If you have this version of the IDE and install the plugin, you will see "QuickBooks SDK 4.0" in the table of contents. You will also have F1 access to all QBFC interfaces for the messages and the VB.NET sample code inside Visual Studio.

The **qbXML Validator** tool contains new functionality that allows you to verify qbXML requests that correspond to these combinations:

- 4.0, 3.0, 2.1, 2.0, 1.1, 1.0 for U.S. editions of QuickBooks
- 4.0, 3.0, 2.1, and 2.0 for QuickBooks Online Edition
- CA3.0 and CA2.0 for Canadian editions of QuickBooks

The Validator is installed automatically as part of the SDK installation.

The SDKTest application is located in the `\tools\SDKTest` folder. This useful development tool reads a qbXML request file, sends it to QuickBooks, and returns a response. The command line version of SDKTest is `samples\qbdt\cpp\qbxml\sdktest\sdktest.exe`.

The file `tools\SDKTest\SDKTestPlus3.exe` is an enhanced version of SDKTest that uses QBXMLRP2 and allows the user to control every aspect of the connection to QuickBooks. It supports sending subscription request XML as well as data integration XML. The source code for this tool is in `samples\qbdt\vb\qbxml\SDKTestPlus3`.

The file *tools\SubscriptionManager\SubView.exe* is a tool for viewing and removing application subscriptions from QuickBooks.

Samples

The Samples directory contains a *readme.html* (which can be accessed from *Start > Programs > QuickBooks SDK 4.0 > Samples*). This file lists each sample and provides links to open the project directory, the project itself, and the executable form of the application.

The SDK 4.0 installer verifies that the MSXML4.0SP2 API from Microsoft is installed on your system. If MSXML is not present, the SDK 4.0 installer will install it for you. This API is used by the SDK's Validator tool and several samples.

Downloading MSXML 4.0

If you want to run the sample applications on a system that does not have MSXML installed (for example, if you want to use Remote Data Sharing from a system that does not have the SDK installed), you will need to install MSXML. In addition, if your application is dependent on MSXML Core Services, you will need to redistribute that software in your installer. The MSXML Core Services software is available from [Microsoft](#)

Building the C++ Samples

The `#import "qbxmlrp2.dll"` statement in the C++ samples allows these applications to use the COM interface supported by the QuickBooks SDK. This statement will cause an error when you are building the samples in Microsoft Visual Studio if the Include path is not set to include the location of this DLL. The DLL is installed with QuickBooks and resides in the QuickBooks common directory, currently defined as

C:\Program Files\Common Files\Intuit\QuickBooks. Add this directory to the Include path by choosing the Tools menu, Options command, and the Directories tab in Visual Studio.

UIandEventTest Samples

In order to build the EventHandler C++ sample, you will need to specify the QuickBooks executable path for the sample project. The method for doing this is different for Visual Studio 6.0 and Visual Studio .NET.

For Visual Studio 6.0, select "Options" from the "Tools" menu. Select the "Directories" tab and then select "Executable Files". Add the QuickBooks executable path to the list of directories here.

For Visual Studio .NET, select "Properties" from the "Project" menu. Under the "C/C++" options, select "General" and add the QuickBooks executable path to the "Additional Include Directories". Under the "MIDL" options, also select "General" and add the QB path to "Additional Include Directories".

All of these C++ samples also use *QBXMLRP2.DLL* in the QuickBooks "common" directory. The project files currently specify this path as *C:\Program Files\Common Files\Intuit\QuickBooks*. If this path is different on your machine, you will need to change it in the project files.

Known Problems in VB Sample Applications

The Visual Basic sample applications allow you to view a response from QuickBooks. If you try to view a response that is greater than 32K, you will receive an "Out of memory" error. This happens because the VB sample applications use a TextBox control, which has a 32K limit, rather than a RichTextBox control. In a Windows 98 or Windows Me environment, this can corrupt memory, and the application might not terminate properly.

There is a known issue (not related to qbXML) with the AddReceivePayment sample application. The MS Visual Studio application must be installed before you can run AddReceivePayment, or you will receive the following error message when you run the application: "Class not registered. You need the following file to be installed on your machine. MSSTDFMT.DLL."

How Versioning is Handled in Subscriptions in SDK 4.0

The event data that is returned can potentially differ depending on the qbXML version. For example, in the 4.0 qbXML spec, there is a new tag that could be

returned in the QBXMLevent response called CurrentWindow. If an application is designed for the 3.0 spec but not the 4.0 spec, how is this situation handled? Beginning with SDK 4.0, the spec version that issued the original subscription request determines which data is returned in the response. For example, if your application subscribed using qbXML 3.0 (that is, the qbXML version tag is set like this: `<?qbxml version="3.0"?>`), then the QBXMLevent data that is returned is the data from 3.0, that is, you don't receive additional data made available in 4.0. If you needed that data, you would resubscribe using a qbXML 4.0 subscription request.

In addition, suppose you have a current subscription issued using qbXML 3.0. To delete that subscription, you have to issue a SubscriptionDel request with the qbXML version tag set to 3.0. The reason for this is that you might want to keep 3.0 spec subscriptions for backwards compatibility.

Using Payroll Reports

If your application is accessing a company file that is currently signed up for a subscription to a payroll service, you can generate payroll reports and query PayrollNonWageItems.

To test this feature, you can use one of Intuit's sample company files (even though it will not be signed up for a subscription to a payroll service). Please be aware that QuickBooks will record an artificial creation date to any test data that you add to a sample company file.

Using Remote Data Sharing (RDS)

This release includes a redistributable version of Remote Data Sharing 3.0. RDS 3.0 works only for applications using QBXMLRP2. Please note that RDS 3.0 does not support event notification or user interface extensions.

Beginning with SDK 3.0, the Remote Data Sharing (RDS) server supports automatic login mode, also called *batch mode*. In this access mode, QuickBooks is installed but not running on the machine with the RDS server. Instead, the QuickBooks user authorizes the RDS server to log in automatically to the desired set of company files. Subsequently, remote applications can access any of these company files.

Applications using the older Request Processor (QBXMLRP) should use RDS 2.1.

Known Bugs and Workarounds

- During SDK 4.0 installation, you may see a message informing you that the UI and eBay sample could not be installed. You can safely ignore and dismiss this message as it has no effect and the installation will proceed successfully.
- The bug mentioned in this workaround is fixed in SDK 4.0. However this workaround is included here for those applications that need to work with older QuickBooks versions for which the bug fix is not available. In previous versions of the SDK, if you send an InventoryAdjustmentAddRq with a ValueAdjustment that contains only a NewValue element, then the resulting QuantityDifference will incorrectly get set to "blank", which QuickBooks interprets as "1". The workaround for this is to include the NewQuantity element in the request, setting the value to the same as the previous quantity on hand for that inventory item.
- If you use DeliveryPolicy in both a DataEventSubscription and a UIEventSubscription, you could set one to DeliverAlways and the other to DeliverOnlyIfRunning. In that case, QB will cache your application's COM pointer if the first event for this application in a company file session is associated with the DeliverAlways policy.
- If a user installs a copy of Convertible QuickBooks 2005 but does not select one of the available editions (Premier, Accountant, Contractor edition, etc), and an SDK application is subsequently started, QuickBooks will prompt the user to select an edition. The application's call to BeginSession will fail while QuickBooks is being configured for the selected edition. The workaround is to have the user finish the process of selecting the desired edition and then restart the SDK application.
- In Enterprise 5.0, if a user name has been used by an SDK application for auto-login purposes, and the Administrative user deletes that user name, there is no warning dialog posted to alert the administrative user, unlike prior releases, and unlike current behavior in other QuickBooks 2005 editions. However, if the user is deleted, the SDK application will fail gracefully the next time it attempts to auto-login, and the appropriate error message is displayed so the user can have the administrative user add that user name.
- QuickBooks Canada does not currently return values stored in the Company Data Extension fields. The bug affects QuickBooks Canada version 2004 and 2005.

Bugs Fixed in This Release

- Starting with SDK 4.0, the SDK now prevents applications from setting rate/ratepercent on sales tax items, to be consistent with the QuickBooks UI where it is not possible to set rate/ratepercent on sales tax items. However, in order to support existing applications that do not send 4.0 or greater requests, the old behavior will continue to be in effect.
- Prior to SDK 4.0, the "unused credit" in the ReceivePaymentRet object returned the available credits for the given customer job AND its children. In SDK 4.0 and after, the ReceivePaymentRet object returns only the available credits (unused credits) for the given customer job only, not the children.
- In prior releases of the SDK, the requestID was not getting encoded correctly if it contained ", ' , & , > , or < , or their escaped equivalents. This has been fixed in SDK 4.0.
- Starting with SDK 4.0, modifications to the Notes field will result in a mod event for the object containing the Note.
- In previous releases, transactions containing ItemInventoryAssembly could not be modified. This is fixed in this release.
- The SDK used to return Internal Error if setting the DiscountPct on a DateDrivenTerms ever failed. Now the status code 3210 "Other validation error" is returned instead.
- Previously, if an attempt was made to change a parent object in multiuser mode and this element or its descendants has been used in a transaction, the error returned was "parent reference not found". Now, the error returned is "not allowed in multiuser mode."
- In previous SDK versions, if you were logged in as a user without sensitive accounting permission and specified IncludeLinkedTxns on a transaction query (for example, InvoiceQueryRq), then you would not receive the link info, even if you had permissions to access that particular linked transaction data. Furthermore, the error would be written only silently to the log file. In this SDK release, under this same scenario, you will get the linked transaction data.
- "Sensitive report" permissions are no longer required in transaction queries.
- In prior SDK releases, the SDK was not able to set the quantity to 1 on a line containing a fixed asset item. Both of these bugs have been fixed in

this release. Now, a line item quantity can be empty or 1 for fixed asset items.

- In previous SDK releases, a request for adjusting only the inventory value also increases the quantity on hand for the item. This has been fixed in this release so that the quantity difference is zero when only a NewValue is provided in the SDK request. See "Known Bugs and Workarounds" for information on solving this problem for previous versions of QuickBooks.
- Previously, for subscriptions using the DeliverOnlyIfRunning policy the application's COM pointer was cached once the user starts the app. Consequently even if the application were terminated from its own UI, QuickBooks would continue sending events to the application. This has been fixed in this release.
- Previously, for a subscription callback application, when its path was read from the registry, incorrect data was being read. For example if there are any flags in the registry entry, such as "c:\some dir\callback.exe" -f -g, the flags were being read as part of the path. Now, these flags are ignored.
- Prior to SDK 4.0, if you used CustomSummaryReportQueryRq but did not specify the ReportAccountFilter, then by default the account filter used was "All accounts," which is not the default filter used in the QuickBooks UI. The default account filter for 4.0 requests is "All income/expense accounts." Notice that if you specify a request lower (e.g., 3.0 or 2.1) than 4.0, then the old default is used, in order to avoid breaking existing applications.
- In previous SDK releases, the SalesOrderMod operation was not allowed for Quickbooks Pro, even though this modification was allowed in the QuickBooks Pro UI. This operation is now supported in QuickBooks Pro. However, notice that SalesOrderAdd continues to be disallowed for Pro because this functionality is available only with Premier and greater editions.
- This release fixes some memory leaks that could potentially occur in some SDK applications under previous releases of the SDK.
- Prior to Enterprise 5.0, an Enterprise user with all permissions except AP and Sensitive Account previously could see the report PurchaseByVendorSummary. This bug has been fixed. The user in Enterprise 5.0 cannot see this report without view permissions for purchases.

Changes to the qbXML Specification

- For the element <DueNextMonthDays>, the SDK now enforces the validation constraints. Now, if you use an invalid INTTYPE for <DueNextMonthDays> such as 0 or 32 then you will get back a data validation error.

If You Have Questions . . .

For IDN support, please visit <http://developer.intuit.com/support>.

For community support, visit <http://idnforums.intuit.com>.

Related AlphaGeek Technical Articles on New Features

For information on the new SDK 4.0 A/P Transaction Linking features, as described in the AlphaGeek column on A/P Transaction linking, [click here](#).

For information on the new SDK 4.0 Price Levels feature, as described in the AlphaGeek column on Price Levels, [click here](#).

For information on the new SDK 4.0 Authorization Preferences feature, as described in the AlphaGeek column on Application Authorization, [click here](#).

For information on the QBOE connector, integration of SDK 4.0 with the Visual Studio .Net help system, generic transaction queries, and limited responses, [click here](#).

Summary of New Features

This summary is divided into two parts. The first part provides an overview of the changes to QuickBooks SDK in Release 4.0. The second part provides a detailed listing of changes at the message and element level.

Note: The new features listed below apply to QBOE only if explicitly stated.

Part One: Overview of Changes in SDK 4.0

Several highlights of this release have already been described in these Release Notes. These highlights include

- New support for PriceLevels: PriceLevelAdd/Mod/Query
- New support for ItemReceipt: you can now add and modify ItemReceipts, and you can link a new Bill or ItemReceipt with a PurchaseOrder (A/P transaction linking)
- A generic transaction query and associated filters that you can use to implement your own version of the QB Advanced Find functionality, and query across all QB transaction types.
- Enhancements to user authorization. A new QBAuthPreferences property of the RequestProcessor allows application to request (from the user):
 - read-only access to a particular company file
 - unattended mode access
 - personal data accessQuickBooks subsequently displays an authorization form that contains the requirements specified in the new QBAuthPreferences property (new behavior in QuickBooks itself).
- Enhancements to integration with QB UI:
 - ability to launch QB transaction creation forms prefilled with data, such as customer, vendor, etc, as appropriate to the transaction type.
 - ability to launch QB in the foreground in unattended mode, showing its UI, with a specified company file open
 - ability to detect context data such as which QB form is open, if any, when the user clicks your custom menu
 - extend the existing ListDisplayAdd/Mod functionality to include Account and Item forms
- Enhancements to subscription to data events:
 - ability to block subscribed-to data events if you generated them in your application.
 - ability to automatically handle qbXML versions in the various subscription requests (see the Event Notification chapter in the Concepts manual for

more information)

- Ability to limit response data to a specific element or set of elements (supports top-level elements or aggregates)
- Ability to query for the number of objects that may be returned in a particular query (metaData)
- A variety of enhancements to the SDK runtime for QBOE:
 - A QBOE connector that handles all of the special communication required by QB Online Edition. This eliminates the special coding that was formerly required by desktop applications, greatly simplifying the porting or creating of applications that work with QBOE.

-Added the following support for SalesReceiptAdd, InvoiceAdd, and CreditMemoAdd:

- Added the DiscountLineAdd/Ret aggregates
- Added the SalesTaxLineAdd/Ret aggregates
- Added the ShippingLineAdd/Ret aggregates

-Added the IsTaxable Boolean type to the following:

- InvoiceLineAdd/Ret
- SalesReceiptLineAdd/Ret
- CreditMemoLineAdd/Ret

-Added support for APAccountRef in the following:

- BillAdd/Ret
- VendorCreditAdd/Ret

-Added the ability to link to transactions in BillAdd.

- This release adds one Report Item filter and four Report Transaction filters. It adds the AllExceptFixedAsset filter to the ReportItemFilter and the BuildAssembly, Paycheck, PayrollLiabilityCheck, and YTDAdjustment filters to the ReportTxnTypeFilter.
- The UI for the Validator tool has been improved. It now supports longer error messages and the error messages can now be copied into the Windows clipboard.

Transaction Query Filter Support in QuickBooks Online Edition

Beginning with SDK 4.0, QBOE supports an enhanced list of transaction query filters. The *Onscreen Reference* lists and describes the filters that are provided for transaction queries in QBOE.

However, notice that these query filters are not yet implemented, but are expected to be fully implemented shortly after the release of QuickBooks 2005. Any developers who need to use these query filters are encouraged to contact [IDN Support](#).

Part Two: Details of Changes in SDK 4.0

The following sections contain details on new request and response messages as well as on new and changed elements within response aggregates. See the updated *Onscreen Reference* for complete listings of all messages. Also see the example file *qbxmlops40.xml*.

Table 1: New Requests/Responses in SDK 4.0

Request	Category
ItemReceiptAdd	Transaction
ItemReceiptMod	Transaction
TransactionQuery	Transaction
PriceLevelAdd	List
PriceLevelMod	List
PriceLevelQuery	List

Table 2: Elements Added to Requests in SDK 4.0

The following items are not listed in the tables because they are almost universal and would obscure other important changes if they were listed separately:

- IncludeRetElement has been added to nearly all requests
- The metaData attribute has been added to most Query requests
- The RefNumberCaseSensitive element ,has been added to most Query requests

Request	Element Added	Category
CustomerAdd	PriceLevelRef	List
CustomerMod	PriceLevelRef	List
InvoiceAdd	PriceLevelRef	Transaction
InvoiceAdd	IsTaxable (QBOE only)	Transaction
InvoiceAdd	DiscountLineAdd (QBOE only)	Transaction
InvoiceAdd	SalesTaxLineAdd (QBOE only)	Transaction
InvoiceAdd	ShippingLineAdd (QBOE only)	Transaction
InvoiceMod	PriceLevelRef	Transaction
SalesOrderAdd	PriceLevelRef	Transaction
SalesOrderMod	PriceLevelRef	Transaction
SalesReceiptAdd	PriceLevelRef	Transaction
SalesReceiptAdd	IsTaxable (QBOE only)	Transaction
SalesReceiptAdd	DiscountLineAdd (QBOE only)	Transaction
SalesReceiptAdd	SalesTaxLineAdd (QBOE only)	Transaction
SalesReceiptAdd	ShippingLineAdd (QBOE only)	Transaction
CreditMemoAdd	IsTaxable (QBOE only)	Transaction
CreditMemoAdd	DiscountLineAdd (QBOE only)	Transaction
CreditMemoAdd	SalesTaxLineAdd (QBOE only)	Transaction
CreditMemoAdd	ShippingLineAdd (QBOE only)	Transaction
CreditMemoMod	PriceLevelRef	Transaction
ChargeQuery	PaidStatus	
BillAdd	LinkToTxnID	Transaction
BillAdd	LinkToTxn	Transaction
VendorCreditAdd	LinkToTxn	Transaction
CheckAdd	LinkToTxn	Transaction
CreditCardChargeAdd	LinkToTxn	Transaction

CreditCardCreditAdd	LinkToTxn	Transaction
TxnDisplayAdd	EntityRef	UI

Table 3: Elements Added to Responses and Response Aggregates in SDK 4.0

Response/Resp. Aggregate	Element Added	Category
PreferencesQuery	PriceLevels	
CustomerAdd	PriceLevelRef	Transaction
CustomerMod	PriceLevelRef	Transaction
InvoiceAdd	IsTaxable (QBOE only)	Transaction
InvoiceAdd	DiscountLineRet (QBOE only)	Transaction
InvoiceAdd	SalesTaxLineRet (QBOE only)	Transaction
InvoiceAdd	ShippingLineRet (QBOE only)	Transaction
InvoiceMod	IsTaxable (QBOE only)	Transaction
InvoiceMod	DiscountLineRet (QBOE only)	Transaction
InvoiceMod	SalesTaxLineRet (QBOE only)	Transaction
InvoiceMod	ShippingLineRet (QBOE only)	Transaction
InvoiceQuery	IsTaxable (QBOE only)	Transaction
InvoiceQuery	DiscountLineRet (QBOE only)	Transaction
InvoiceQuery	SalesTaxLineRet (QBOE only)	Transaction
InvoiceQuery	ShippingLineRet (QBOE only)	Transaction
SalesReceiptAdd	IsTaxable (QBOE only)	Transaction
SalesReceiptAdd	DiscountLineRet (QBOE only)	Transaction
SalesReceiptAdd	SalesTaxLineRet(QBOE only)	Transaction
SalesReceiptAdd	ShippingLineRet(QBOE only)	Transaction
SalesReceiptQuery	IsTaxable (QBOE only)	Transaction
SalesReceiptQuery	DiscountLineRet (QBOE only)	Transaction
SalesReceiptQuery	SalesTaxLineRet(QBOE only)	Transaction
SalesReceiptQuery	ShippingLineRet(QBOE only)	Transaction
CreditMemoAdd	IsTaxable (QBOE only)	Transaction
CreditMemoAdd	DiscountLineRet (QBOE only)	Transaction
CreditMemoAdd	SalesTaxLineRet (QBOE only)	Transaction
CreditMemoAdd	ShippingLineRet(QBOE only)	Transaction
CreditMemoMod	IsTaxable (QBOE only)	Transaction
CreditMemoMod	DiscountLineRet (QBOE only)	Transaction
CreditMemoMod	SalesTaxLineRet (QBOE only)	Transaction
CreditMemoMod	ShippingLineRet(QBOE only)	Transaction
CreditMemoQuery	IsTaxable (QBOE only)	Transaction
CreditMemoQuery	DiscountLineRet (QBOE only)	Transaction
CreditMemoQuery	SalesTaxLineRet (QBOE only)	Transaction

CreditMemoQuery	ShippingLineRet(QBOE only)	Transaction
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Table 4: Enumeration Changes in SDK 4.0

Enum Type	Enum Value Added	Category
ListDisplayAdd	Item, Account	UI

Table 5: Summary of Changes to Reports in SDK 4.0

Filter Added	Report or Filter Type
AllExceptFixedAsset	ReportItemFilter
BuildAssembly, Paycheck, PayrollLiabilityCheck, and YTDAdjustment	ReportTxnTypeFilter