

Batch Posting Service Toolkit for Microsoft Dynamics GP (build 14)

Introduction

Batch Posting Service Toolkit for Microsoft Dynamics® GP is a Dexterity® integrated software tool which contains a series of service procedures which can be used to retrieve lists of batches and post individual batches within Microsoft Dynamics GP. There are also service procedures to allow for the creation, editing and deletion of batches and for transferring of Sales Order Processing batches. These procedures can be called via Service Based Architecture Web Services (for Version 14.0 or later only), from Visual Studio development system using Visual Basic® or Visual C#® languages, or from Dexterity using the sanScript language.

Compatibility information

Each build of the tool is only compatible with the version of Microsoft Dynamics GP it was created for.

Contents of the Batch Posting Service Toolkit for Microsoft Dynamics GP Archive

Below is a table of the files included with the installer:

File or Folder Name	Description
PostServ.cnk	Tool chunk file (self installing application Dexterity dictionary)
PostServ.pdf	User guide documentation (this document)
PostServ.txt	Version history.
PostServ_Licence.doc	End User License Agreement
Application.PostingServices.dll	Visual Studio Tools Assembly for Tool
Application.PostingServices.xml	Visual Studio Tools XML descriptions for Intellisense
WinthropDC.BatchPostingServiceToolkit.dll	Visual Studio Tools Addin for Registration and system features (in Addins folder)
Application.PostingServices.Metadata.dll	Visual Studio Tools Assembly for Web Services (for Version 14.0 or later only)
Application.PostingServices.Metadata.xml	Visual Studio Tools XML descriptions for Web Services (for Version 14.0 or later only)
WinthropDC.BatchPostingServiceToolkit.BusinessObject.dll	Visual Studio Class Library for uses with Web Services (for Version 14.0 or later only)

Installing Batch Posting Service Toolkit for Microsoft Dynamics GP

1. Batch Posting Service Toolkit is installed by downloading the installer and executing it. Follow the onscreen instructions to install the product files into the Microsoft Dynamics GP application folder.

Uninstalling Batch Posting Service Toolkit for Microsoft Dynamics GP

1. Batch Posting Service Toolkit is uninstalled from its About window (Help >> About Dynamics GP >> Additional >> About Batch Posting Services. Then it can be uninstalled from Windows.

Batch Types Supported

The table below shows the support Batch Sources from each of the Microsoft Dynamics GP application series.

Application Series	Transaction Source	Batch Source
Financial	General Entry	GL_Normal
	Clearing Entry	GL_Clearing
	Quick Entry	GL_Business
	Budget Transactions	GL_Budget
Sales	Receivables Transaction Entry	RM_Sales
	Cash Receipts Entry	RM_Cash
	Invoicing Entry	Invoice Entry
	Sales Transaction Entry	Sales Entry
Purchasing	Payables Transaction Entry	PM_Trxent
	Manual Payment Entry	PM_Payment
	Receivings Entry	Rcvg Trx Entry
	Invoice Matching Entry	Rcvg Trx lvc
	Purchase Returns Entry	Ret Trx Entry
Inventory	Transaction Entry	IV_Trxent
	Transfer Entry	IV_Trans
	Assembly Entry	ASMENT
Project Accounting	Timesheet Entry *	PA_TS
	Employee Expense Entry	PA_EE
	Equipment Log Entry	PA_EL
	Misc. Log Entry	PA_ML
	Inventory Transfer Entry	PA_IV
	Billing Entry	PA_BL
	Revenue Recognition Entry	PA_RR

- * Project Accounting Timesheet Entry is not posted to payroll when posted from Batch Posting Service Toolkit.

Testing in Microsoft Dynamics GP

A testing window can be opened in Microsoft Dynamics GP to test the retrieval and posting of Batches. Use Shortcuts to add the following window:

Product: Batch Posting Service Toolkit
Series : System
Window : ServicePostBatch

Build 10 adds a second testing window can be opened in Microsoft Dynamics GP to test the creation, getting, updating and deletion of Batches. Use Shortcuts to add the following window:

Product: Batch Posting Service Toolkit
Series : System
Window : ServiceCreateBatch

Build 14 adds a third testing window can be opened in Microsoft Dynamics GP to test the transferring of Sales Transaction Entry Batches. Use Shortcuts to add the following window:

Product: Batch Posting Service Toolkit
Series : System
Window : ServiceTransferBatch

Calling from Service Based Architecture

Be aware that posting a batch with a large number of transactions or with transactions with a large number of lines can take time to process. If the batch takes too longer to process the web service call might timeout and the batch posting may be incomplete.

It is highly recommended to make sure that all batches can be posted within 10 minutes to avoid timeout issues.

You will need to also increase the SendTimeout setting in the GP Configuration Database and restart the server. The following SQL Statement will increase the Timeout to 10 minutes.

```
UPDATE [GPCONFIGURATION].[dbo].[SBAppSetting]
SET Value='00:10:00'
WHERE [Key] = 'SendTimeout'
```

See this BPST Portal (<https://winthropdc.com/BPST>) article for help getting SBA functional:

<https://winthropdc.wordpress.com/2020/02/19/bpst-getting-service-based-architecture-sba-working/>

Services Available

Following are three sections for how the services can be called as Web Services, from Visual Studio or from Dexterity.

Web Services Available

Below is a list of the web services available to be called from the Batches object (for Version 14.0 or later only).

Name:	ServicePostBatch		
URI Template:	/PostingServices/System/Batches({Source};{Number})		
Header Value:	GP-Custom-Action=Post		
Request Type:	POST		
Description:	This call will post the specified batch in Microsoft Dynamics GP.		
Returns:	Nothing.		
Parameters:	Source	(String)	Batch Source
	Number	(String)	Batch Number
URL Example:	https://domain.com/gpservice/Tenants(DefaultTenant)/Companies(Fabrikam,%20Inc.)/PostingServices/System/Batches(Source;Number)?GP-Custom-Action=Post		

Name:	ServiceGetBatchList		
URI Template:	/PostingServices/System/Batches({Source})		
Request Type:	GET		
Description:	This call will return a list of Batch Numbers for the specified Batch Source in Microsoft Dynamics GP.		
Returns:	List(String) List of Batch Numbers for specified Batch Source.		
Parameters:	Source	(String)	Batch Source
URL Example:	https://domain.com/gpservice/Tenants(DefaultTenant)/Companies(Fabrikam,%20Inc.)/PostingServices/System/Batches(Source)		

Web Services Available (Build 10 onwards)

Below is a list of the web services available from Build 10 onwards to be called from the Batches object (for Version 14.0 or later only).

Name:	ServiceCreateBatch		
URI Template:	/PostingServices/System/Batch({Source};{Number};{Comment};{Checkbook})		
Request Type:	CREATE		
Description:	This call will create the specified batch in Microsoft Dynamics GP.		
Returns:	Nothing.		
Parameters:	Source	(String)	Batch Source
	Number	(String)	Batch Number
	Comment	(String)	Batch Comment (optional)
	Checkbook	(String)	Checkbook ID (optional)
URL Example:	https://domain.com/gpservice/Tenants(DefaultTenant)/Companies(Fabrikam,%20Inc.)/PostingServices/System/Batch(Source;Number;Comment;Checkbook)		

Name:	ServiceDeleteBatch		
URI Template:	/PostingServices/System/Batch({Source};{Number})		
Request Type:	POST		
Description:	This call will delete the specified empty batch in Microsoft Dynamics GP.		
Returns:	Nothing		
Parameters:	Source	(String)	Batch Source
	Number	(String)	Batch Number
URL Example:	https://domain.com/gpservice/Tenants(DefaultTenant)/Companies(Fabrikam,%20Inc.)/PostingServices/System/Batch(Source;Number)		

Name: ServiceGetBatch

URI Template: /PostingServices/System/Batch({Source};{Number})

Request Type: GET

Description: This call will retrieve an object containing the data of the specified batch in Microsoft Dynamics GP.

Returns: WinthropDC.BatchPostingServiceToolkit.BusinessObject.Batch Object.

Parameters: Source (String) Batch Source
 Number (String) Batch Number

URL Example: [https://domain.com/gpservice/Tenants\(DefaultTenant\)/Companies\(Fabrikam,%20Inc.\)/PostingServices/System/Batch\(Source;Number\)](https://domain.com/gpservice/Tenants(DefaultTenant)/Companies(Fabrikam,%20Inc.)/PostingServices/System/Batch(Source;Number))

Name: ServiceUpdateBatch

URI Template: /PostingServices/System/Batch({Source};{Number})

Request Type: UPDATE

Description: This call will update an object containing the data to the specified batch in Microsoft Dynamics GP.

Returns: Nothing

Parameters: Source (String) Batch Source
 Number (String) Batch Number

PayLoad: WinthropDC.BatchPostingServiceToolkit.BusinessObject.Batch Object.

URL Example: [https://domain.com/gpservice/Tenants\(DefaultTenant\)/Companies\(Fabrikam,%20Inc.\)/PostingServices/System/Batch\(Source;Number\)](https://domain.com/gpservice/Tenants(DefaultTenant)/Companies(Fabrikam,%20Inc.)/PostingServices/System/Batch(Source;Number))

Notes: It is recommended to always use ServiceGetBatch to populate the Batch Object with existing data before making changes and calling ServiceUpdateBatch. It is the developer's responsibility to ensure that business rules for the data are not broken.

Web Services Available (Build 14 onwards)

Below is a list of the web services available to be called from the SOPBatches object (for Version 18.2 or later only).

Name:	ServiceTransferBatch		
URI Template:	/PostingServices/System/SOPBatches({Source};{Number};{Options};{ItemShortage};{KitShortage})		
Header Value:	GP-Custom-Action=Transfer		
Request Type:	POST		
Description:	This call will Transfer the specified SOP batch in Microsoft Dynamics GP using the options provided.		
Returns:	Nothing.		
Parameters:	Source	(String)	Batch Source
	Number	(String)	Batch Number
	Options	(Int)	Transfer Options
	ItemShortage	(Short)	Item Shortage Option
	KitShortage	(Short)	Kit Shortage Option

URL Example:

[https://domain.com/gpservice/Tenants\(DefaultTenant\)/Companies\(Fabrikam,%20Inc.\)/PostingServices/System/SOPBatches\(Source;Number;Options;ItemShortage;KitShortage\)?GP-Custom-Action=Transfer](https://domain.com/gpservice/Tenants(DefaultTenant)/Companies(Fabrikam,%20Inc.)/PostingServices/System/SOPBatches(Source;Number;Options;ItemShortage;KitShortage)?GP-Custom-Action=Transfer)

Transfer Options use bits to select Checkboxes:

- + 1 {Quotes: Transfer to Invoice}
- + 2 {Quotes: Transfer to Invoice Include Totals}
- + 4 {Quotes: Transfer to Order}
- + 8 {Quotes: Transfer to Order Include Totals}
- + 16 {Orders: Transfer to Invoice}
- + 32 {Orders: Transfer to Invoice Include Totals and Deposits}
- + 64 {Orders: Transfer to Back Order}
- + 128 {Orders: Transfer to Back Order Include Totals and Deposits}
- + 256 {Back Orders: Transfer to Invoice}
- + 512 {Back Orders: Transfer to Invoice Include Totals and Deposits}
- + 1024 {Back Orders: Transfer to Order}
- + 2048 {Back Orders: Transfer Order Include Totals and Deposits}
- + 4096 {Invoices: Transfer to Back Order}
- + 8192 {Invoices: Transfer to Back Order Include Totals}

Item Shortage Options:

- 1 = Override Shortage
- 2 = Sell Balance
- 3 = Back Order Balance
- 4 = Back Order All
- 5 = Cancel Balance
- 6 = Cancel All
- 7 = None

Kit Shortage Options:

- 1 = Override Shortage
 - 2 = Sell Balance
 - 3 = Back Order All
 - 4 = Cancel All
 - 5 = None
 - 6 = Allocate Available Components
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Visual Studio Calls Available

Below is a list of the Visual Studio calls available to be called in the PostingServices object. Note different parameters for some calls for versions 12.0 and earlier.

Name: ServicePostBatch

Description: This call will post the specified batch in Microsoft Dynamics GP.

Qualified Name: PostingServices.Procedures.ServicePostBatch

Returns: Nothing.

Parameters: Source (String) Batch Source
 Number (String) Batch Number

Invoke Example: //Add reference to Microsoft.Dexterity.Svc.Foundation.dll
 using Microsoft.Dexterity.Applications.PostingServicesDictionary;
 PostingServices.Procedures.ServicePostBatch.Invoke(Source, Number)

Name: ServiceGetBatchList

Description: This call will return a list of Batch Numbers for the specified Batch Source in Microsoft Dynamics GP.

Qualified Name: PostingServices.Procedures.ServiceGetBatchList

Returns v14+: List(String) List of Batch Numbers for specified Batch Source.

Parameters v14+: using System.Collections;
 using System.Collections.Generic;

Source (String) Batch Source
 BatchList List<System.String> Returned collection of Batch Numbers

Returns v12-: List of Batch Numbers for specified Batch Source.

Parameters v12-: Source (String) Batch Source
 BatchList LISTBOX Returned list of Batch Numbers

Invoke Example: //Add reference to Microsoft.Dexterity.Svc.Foundation.dll
 using Microsoft.Dexterity.Applications.PostingServicesDictionary;
 PostingServices.Procedures.ServiceGetBatchList.Invoke(Source, BatchList)

Visual Studio Calls Available (Build 10 onwards)

Below is a list of the Visual Studio calls available to be called in the PostingServices object from Build 10 onwards. Note different parameters for some calls for versions 12.0 and earlier.

Name: ServiceCreateBatch

Description: This call will create the specified batch in Microsoft Dynamics GP.

Qualified Name: PostingServices.Procedures.ServiceCreateBatch

Returns: Nothing.

Parameters:

Source	(String)	Batch Source
Number	(String)	Batch Number
Comment	(String)	Batch Comment (optional)
Checkbook	(String)	Checkbook ID (optional)

Invoke Example: //Add reference to Microsoft.Dexterity.Svc.Foundation.dll
using Microsoft.Dexterity.Applications.PostingServicesDictionary;
PostingServices.Procedures.ServiceCreateBatch.Invoke(Source, Number, Comment,
Checkbook)

Name: ServiceDeleteBatch

Description: This call will delete the specified empty batch in Microsoft Dynamics GP.

Qualified Name: PostingServices.Procedures.ServiceDeleteBatch

Returns: Nothing.

Parameters:

Source	(String)	Batch Source
Number	(String)	Batch Number

Invoke Example: //Add reference to Microsoft.Dexterity.Svc.Foundation.dll
using Microsoft.Dexterity.Applications.PostingServicesDictionary;
PostingServices.Procedures.ServiceDeleteBatch.Invoke(Source, Number)

Name: ServiceGetBatch

Description: This call will retrieve an object containing the data of the specified batch in Microsoft Dynamics GP.

Qualified Name: PostingServices.Procedures.ServiceGetBatch

Returns v14+: WinthropDC.BatchPostingServiceToolkit.BusinessObject.Batch Object.

Parameters v14+:

Source	(String)	Batch Source
Number	(String)	Batch Number

Returns v12-: BatchData Composite Object.

Parameters v12-:

Source	(String)	Batch Source
Number	(String)	Batch Number

Invoke Example: //Add reference to Microsoft.Dexterity.Svc.Foundation.dll
using Microsoft.Dexterity.Applications.PostingServicesDictionary;
PostingServices.Procedures.ServiceGetBatch.Invoke(Source, Number, BatchObj)

Name: ServiceUpdateBatch

Description: This call will update an object containing the data to the specified batch in Microsoft Dynamics GP.

Qualified Name: PostingServices.Procedures.ServiceUpdateBatch

Parameters v14+:

Source	(String)	Batch Source
Number	(String)	Batch Number
BatchObj	(WinthropDC.BatchPostingServiceToolkit.BusinessObject.Batch)	

Parameters v12-:

Source	(String)	Batch Source
Number	(String)	Batch Number
BatchObj	(BatchData)	

Invoke Example: //Add reference to Microsoft.Dexterity.Svc.Foundation.dll
using Microsoft.Dexterity.Applications.PostingServicesDictionary;
PostingServices.Procedures.ServiceUpdateBatch.Invoke(Source, Number, BatchObj)

Notes: It is recommended to always use ServiceGetBatch to populate the Batch Object with existing data before making changes and calling ServiceUpdateBatch. It is the developer's responsibility to ensure that business rules for the data are not broken.

Visual Studio Calls Available (Build 14 onwards)

Below is a list of the Visual Studio calls available to be called in the PostingServices object from Build 14 onwards (for Version 18.2 or later only).

Name: ServiceTransferBatch

Description: This call will Transfer the specified SOP batch in Microsoft Dynamics GP using the options provided.

Qualified Name: PostingServices.Procedures.ServiceTransferBatch

Returns: Nothing.

Parameters:	Source	(String)	Batch Source
	Number	(String)	Batch Number
	Options	(Int)	Transfer Options
	ItemShortage	(Short)	Item Shortage Option
	KitShortage	(Short)	Kit Shortage Option

Invoke Example: //Add reference to Microsoft.Dexterity.Svc.Foundation.dll
 using Microsoft.Dexterity.Applications.PostingServicesDictionary;
 PostingServices.Procedures.ServiceTransferBatch.Invoke(Source, Number, Options,
 ItemShortage, KitShortage)

Transfer Options use bits to select Checkboxes:

- + 1 {Quotes: Transfer to Invoice}
- + 2 {Quotes: Transfer to Invoice Include Totals}
- + 4 {Quotes: Transfer to Order}
- + 8 {Quotes: Transfer to Order Include Totals}
- + 16 {Orders: Transfer to Invoice}
- + 32 {Orders: Transfer to Invoice Include Totals and Deposits}
- + 64 {Orders: Transfer to Back Order}
- + 128 {Orders: Transfer to Back Order Include Totals and Deposits}
- + 256 {Back Orders: Transfer to Invoice}
- + 512 {Back Orders: Transfer to Invoice Include Totals and Deposits}
- + 1024 {Back Orders: Transfer to Order}
- + 2048 {Back Orders : Transfer Order Include Totals and Deposits}
- + 4096 {Invoices: Transfer to Back Order}
- + 8192 {Invoices: Transfer to Back Order Include Totals}

Item Shortage Options:

- 1 = Override Shortage
- 2 = Sell Balance
- 3 = Back Order Balance
- 4 = Back Order All
- 5 = Cancel Balance
- 6 = Cancel All
- 7 = None

Kit Shortage Options:

- 1 = Override Shortage
 - 2 = Sell Balance
 - 3 = Back Order All
 - 4 = Cancel All
 - 5 = None
 - 6 = Allocate Available Components
-

Dexterity Calls Available

Below is a list of the Visual Studio calls available to be called from the PostingServices object.
Note different parameters for some calls for versions 12.0 and earlier.

Name: ServicePostBatch

Description: This call will post the specified batch in Microsoft Dynamics GP.

Returns: Nothing.

Parameters: in 'Batch Source' Source;
in 'Batch Number' Number;

Call Example:
call with name "ServicePostBatch" in dictionary 7818, Source, Number;

Name: ServiceGetBatchList

Description: This call will return a list of Batch Numbers for the specified Batch Source in Microsoft Dynamics GP.

Returns v14+: List(String) List of Batch Numbers for specified Batch Source.

Parameters v14+: using System.Collections;
using System.Collections.Generic;

in 'Batch Source' Source;
out List<System.String> BatchList;

Returns v12-: List of Batch Numbers for specified Batch Source.

Parameters v12-: in 'Batch Source' Source;
out LISTBOX BatchList;

Call Example:
call with name "ServiceGetBatchList" in dictionary 7818, Source, BatchList;

Dexterity Calls Available (Build 10 onwards)

Below is a list of the Visual Studio calls available to be called from the PostingServices object from Build 10 onwards. Note different parameters for some calls for versions 12.0 and earlier.

Name: ServiceCreateBatch

Description: This call will create the specified batch in Microsoft Dynamics GP.

Returns: Nothing.

Parameters: in 'Batch Source' Source;
in 'Batch Number' Number;
in 'Batch Comment' Comment;
in 'Checkbook ID' Checkbook;

Call Example:
call with name "ServiceCreateBatch" in dictionary 7818, Source, Number, Comment, Checkbook;

Name: ServiceDeleteBatch

Description: This call will delete the specified empty batch in Microsoft Dynamics GP.

Returns: Nothing.

Parameters: in 'Batch Source' Source;
in 'Batch Number' Number;

Call Example:
call with name "ServiceDeleteBatch" in dictionary 7818, Source, Number;

Name: ServiceGetBatch

Description: This call will retrieve an object containing the data of the specified batch in Microsoft Dynamics GP.

Returns v14+: WinthropDC.BatchPostingServiceToolkit.BusinessObject.Batch Object.

Parameters v14+: using WinthropDC.BatchPostingServiceToolkit.BusinessObject;
in 'Batch Source' Source;
in 'Batch Number' Number;
out Batch BatchObj;
BatchObj = new Batch();

Returns v12-: BatchData Composite Object.

Parameters v12-: in 'Batch Source' Source;
in 'Batch Number' Number;
out BatchData BatchObj;

Call Example:
call with name "ServiceGetBatch" in dictionary 7818, Source, Number, BatchObj;

Name: ServiceUpdateBatch

Description: This call will update an object containing the data to the specified batch in Microsoft Dynamics GP.

Parameters v14+: using WinthropDC.BatchPostingServiceToolkit.BusinessObject;
in 'Batch Source' Source;
in 'Batch Number' Number;
inout Batch BatchObj;
BatchObj = new Batch();

Parameters v12-: in 'Batch Source' Source;
in 'Batch Number' Number;
inout BatchData BatchObj;

Call Example:
call with name "ServiceUpdateBatch" in dictionary 7818, Source, Number, BatchObj;

Notes: It is recommended to always use ServiceGetBatch to populate the Batch Object with existing data before making changes and calling ServiceUpdateBatch. It is the developer's responsibility to ensure that business rules for the data are not broken.

Dexterity Calls Available (Build 14 onwards)

Below is a list of the Visual Studio calls available to be called from the PostingServices object from Build 14 onwards (for Version 18.2 or later only).

Name:	ServiceTransferBatch
Description:	This call will Transfer the specified SOP batch in Microsoft Dynamics GP using the options provided.
Returns:	Nothing.
Parameters:	in 'Batch Source' Source; in 'Batch Number' Number; in long Options; in integer ItemShortage; in integer KitShortage;
Call Example:	call with name "ServiceTransferBatch" in dictionary 7818, Source, Number, Options, ItemShortage, KitShortage;

Transfer Options use bits to select Checkboxes:

- + 1 {Quotes: Transfer to Invoice}
- + 2 {Quotes: Transfer to Invoice Include Totals}
- + 4 {Quotes: Transfer to Order}
- + 8 {Quotes: Transfer to Order Include Totals}
- + 16 {Orders: Transfer to Invoice}
- + 32 {Orders: Transfer to Invoice Include Totals and Deposits}
- + 64 {Orders: Transfer to Back Order}
- + 128 {Orders: Transfer to Back Order Include Totals and Deposits}
- + 256 {Back Orders: Transfer to Invoice}
- + 512 {Back Orders: Transfer to Invoice Include Totals and Deposits}
- + 1024 {Back Orders: Transfer to Order}
- + 2048 {Back Orders : Transfer Order Include Totals and Deposits}
- + 4096 {Invoices: Transfer to Back Order}
- + 8192 {Invoices: Transfer to Back Order Include Totals}

Item Shortage Options:

- 1 = Override Shortage
- 2 = Sell Balance
- 3 = Back Order Balance
- 4 = Back Order All
- 5 = Cancel Balance
- 6 = Cancel All
- 7 = None

Kit Shortage Options:

- 1 = Override Shortage
 - 2 = Sell Balance
 - 3 = Back Order All
 - 4 = Cancel All
 - 5 = None
 - 6 = Allocate Available Components
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