SmartFill

For Dynamics GP 2015
Documentation dated April 8, 2015

4/8/2015

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Rockton Software SmartFill

Table of Contents

Introduction

Rockton Software is pleased to bring SmartFill to the Microsoft Dynamics GP community. SmartFill is the next generation successor to the popular Lookup Pro enhancement to assist user data entry within Dynamics GP.

Many customers using Dynamics GP often use non-intuitive numbering schemes for their Vendor and Customer IDs. For instance, "V1234" may refer to a vendor by the name of "Bob's Fruit Stand." Data-entry personnel often know the vendor is "Bob's Fruit Stand" but have to go through several steps to find the Vendor ID.

SmartFill allows you to enter the first few characters of the Vendor or Customer Name into the ID field (or other key fields as described below), and then intelligently seeks out the best match. In our example, typing "BOB" in the Vendor ID field will find "Bob's Fruit Stand" by name, find the ID "V1234", and then replace "BOB" with "V1234." Data entry then continues normally.

SmartFill capabilities also include:

- Providing a short list of all name matches that meet the entered Name/ID. In the above example, if more than one Vendor in the company started with the letters "BOB" then all vendors with this match will be displayed in a shortened list by name and ID.

- Intelligent searching of existing IDs. For instance, if the user does know the Vendor ID, then it can be entered. SmartFill knows that it is a vendor ID and will not assume it is a name.

- If no matches for a Name or ID are found, SmartFill assumes the ID is new.

- Works with any field in the Dynamics GP core product. Customers, Vendors, Items, Accounts, Employees and many other fields are automatically SmartFill enabled when you install. Or you can easily set it up to work on different fields, even in Third Party products.

- Allows both **Begins With** and **Contains** lookups. For instance, if you searched for all Vendors that **Began With** the letters "co" you would get names like "Coopersville Market" and "Coal Town Industries". However, if you use the **Contains** feature, you would get these **Begins With** names as well as "ABC Company" and "Garden Incorporated" because these names **Contain** the sequential letters "co".

- You can now specify alternate fields in which to define your lookup. For instance, instead of Customer Name for customer lookups, you can now use Phone Number, Contact Name, part of an address, or any other string field in the Customer table.

What's in This Manual

This manual contains the basic instructions needed for the installation and use of Rockton Software's SmartFill. You will find instructions for:

- Installation
- Navigation
- Setting up SmartFill

If you do not find the information you need in the following documentation, please contact Rockton Software (see page 6).

Symbols and Conventions

To help you use this documentation more effectively, we have included the following symbols to highlight important information:

This symbol points out suggestions and important notes that assist you in installing and using SmartFill.

The warning symbol alerts you to situations in which you should proceed with caution. Notes highlighted with a warning symbol relate to information that affects your entire system—please read carefully!

- Keyboard keys, specific buttons, file names and menu paths are shown in bold print, such as the **Move Right** button, the **OK** key or the **setup.exe** program.

- Window titles and captions are shown in quotes, such as the "Maintenance" window.

Customer Technical Support

Technical support from Rockton Software is simple. With an active maintenance agreement, support is unlimited and available to Resellers and Customers alike. We can communicate via telephone, fax, email, web conference, or other means if possible. Beyond FAQs and product manuals available on our website, we prefer for all customers to utilize their Reseller for support, as it is usually most efficient and the customer's Reseller is more familiar with all third party products on site and the specifics of the customer's needs. However, we will also provide direct support as requested. Without an active maintenance agreement, no technical support is offered.

As always, user input into improving this product, constructive feedback or technical ideas are always appreciated and highly encouraged. At Rockton, we want to hear your input. So drop us a line whenever you feel like it.

You can reach us by contacting technical support from Rockton Software by phone at (877) 476-2586 or e-mail support@rocktonsoftware.com. You can also visit www.rocktonsoftware.com for more information on Rockton products, including a Frequently Asked Questions section.

Enjoy!

System Requirements

The system requirements for installing and using SmartFill follow those of Microsoft Dynamics GP. The following table lists the specific hardware and software requirements that pertain to SmartFill:

Server Operating System	One of the following: • Microsoft Windows Server 2012 x64 Essentials, Standard, or Datacenter Edition • Microsoft Windows Server 2012 R2 x64 Essentials, Standard, or Datacenter Edition • Microsoft Windows Server 2008 R2 x64 Enterprise or Standard Edition SP1 or later • Microsoft Windows Server 2008 Enterprise or Standard Edition SP2 or later • Microsoft Windows Server 2008 x32 Enterprise or Standard Edition SP2 or later • Microsoft Windows Small Business Server 2008 x32 Premium Edition SP2 or later
Client Operating System	One of the following: • Microsoft Windows 8 or 8.1 Professional or Ultimate Editions • Microsoft Windows 7 Professional or Ultimate Editions
Available hard disk space	5 Meg in the Dynamics GP install folder; 5 Meg in the DYNAMICS database
Minimum available RAM	2 GB (more recommended)
Microsoft SQL Server	One of the following: • SQL Server 2014 Standard or Express Editions • SQL Server 2012 Standard or Express Editions
Microsoft Dynamics GP	One of the following: • Version 2015
Adobe Acrobat Reader	Adobe XI, X, 9.0, 8.0, 7.0, or 6.0

Installation

⚠ *Please read these instructions in their entirety before installing this software.*

Workstation Installation Instructions

1. Extract **all of the files and folders** in the zip file you downloaded to a folder where you can access it from all workstations that you are going to install.

2. From each computer on which you wish to install SmartFill, run the SmartFill setup file (**SmartFillSetup.exe)**.

   ⚠ *It is recommended that you are not running any other Windows programs when installing this program*

3. Select the folder where Dynamics GP is installed.

   ⚠ ***Important!*** *Install SmartFill to the same directory where Dynamics GP is installed. If the default directory on the SmartFill Installation Wizard window is not the same as the Dynamics GP installation directory, modify the default directory.*
   If you enter this incorrectly, SmartFill will not function!

4. Click the Install button. This will copy the **SmrtFill.cnk** file and any other files as appropriate. It will also install any other components that are necessary to run SmartFill. On some installations, you may have to reboot your system.

5. Verify that the Status shows "Installed Successfully." for each item listed. Then click the Exit button on the setup window.

6. Include the new chunk file code into Dynamics GP by launching Dynamics GP.

   The following message may appear: "New code must be included in the DYNAMICS.SET dictionary. Do you wish to include new code now?" Click **Yes**.

   This process will modify your DYNAMICS.SET file to include information relating to SmartFill, and the **SMRTFILL.cnk** file will create a **SMRTFILL.DIC** file.

You should now exit Dynamics GP to complete the installation process for each workstation. If this is the first workstation in your network on which you are installing SmartFill, continue with the following section.

First Workstation Instructions

If this is the first workstation on which you are installing, complete the following steps.

⚠ *You will need to complete these steps only once for your system. You do not need to perform these steps in each company.*

1. First, complete steps 1 thru 6 from the previous section.
2. Log in as any User that has sufficient SQL Server rights to be able to create Tables**.** This user must either be in the 'sysadmin' fixed server role or the 'db_owner' role for the DYNAMICS database.

3. Log into any company. Since SmartFill maintains data at the system level, it is only necessary to install the software in one company. If you don't have a registration key, we recommend that you log into the Dynamics GP lesson company.

⚠️ *If you are evaluating the software and do not yet have a registration key, this product will only work in the Dynamics GP lesson company. To obtain a registration key, contact Rockton Software or your authorized reseller.*

4. Next, the SmartFill Install Welcome window will open. Note the status message. This indicates whether you will be installing from scratch or upgrading from an earlier build.
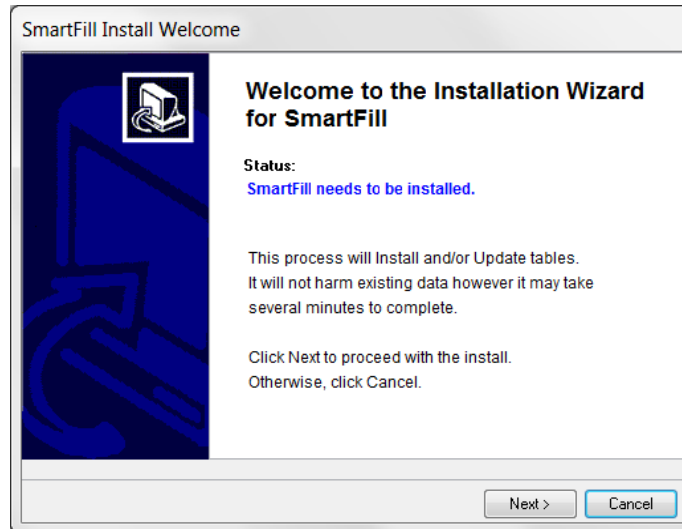
5. Click the Next button to review the License Agreement.

6. Mark the **Accept License Agreement** check box, then click the Next button to launch the Install Progress dialog. You may see some informational messages as the installation continues. Take note of these and click OK or respond to them as necessary.
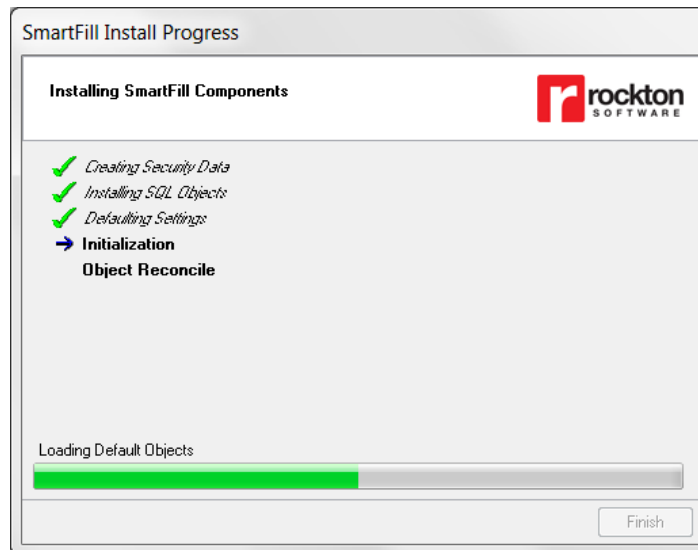
7. When the installation has completed, press the Finish button. The SmartFill Install Status window will open. Take note of any messages on the Install Status window and click OK.

8. If you have not previously entered a valid registration key, the following window will open:
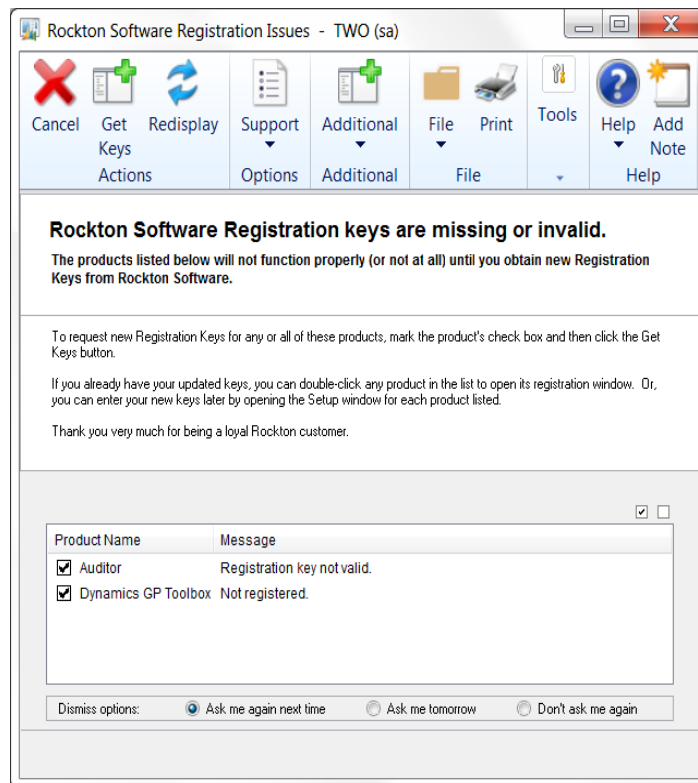
This will show any Rockton products that are not currently registered. If you wish, you can click the Get Keys button to have your registration keys loaded automatically.

If you wish to enter your registration keys manually, you can do so on the SmartFill Setup window. Choose the Registration task and the SmartFill Registration window will open. Carefully enter the Registration Key and press the OK Button.
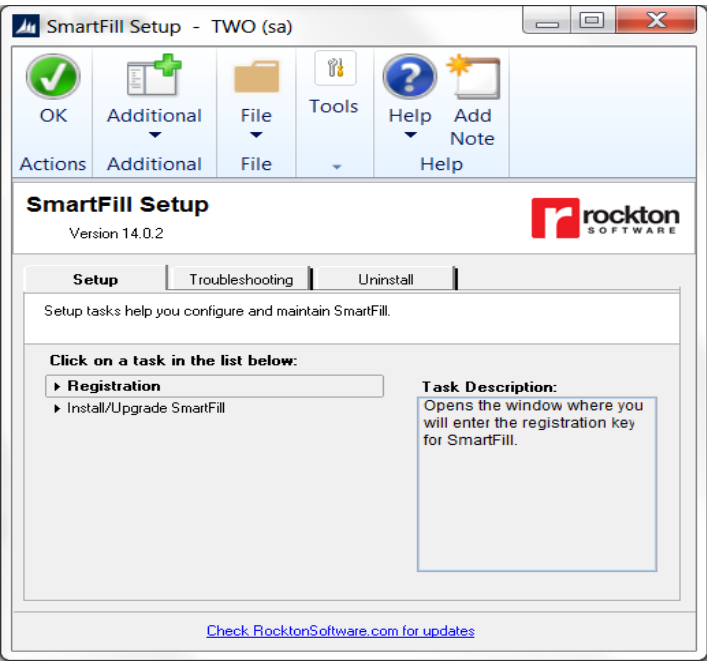
9. In some cases, you may see this window:
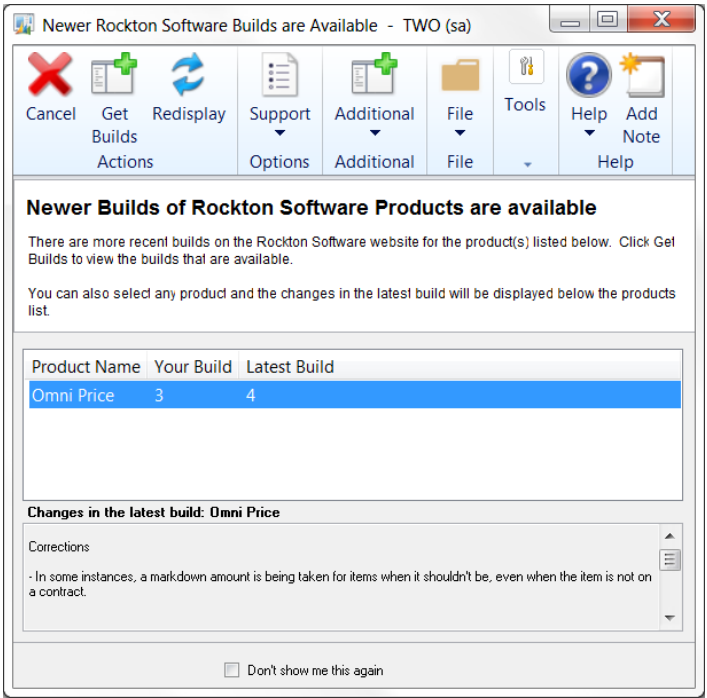
This will show any installed Rockton products for which there are newer builds available on our website. Click Get Builds to download and install any updates.

This completes the installation process for the first workstation.

This product is not required on all workstations. Workstations can choose to use or not use this product without affecting other users or the system.

Removing SmartFill

These steps will completely remove SmartFill from workstation and server:

1. Log in to Dynamics GP as any User that is either in the 'sysadmin' fixed server role or the 'db_owner' role for the DYNAMICS database.
2. Open the SmartFill Setup window and select the Uninstall Tab. Then select the Complete Uninstall task to completely uninstall from the server, or select Workstation Uninstall to simply remove it from the current workstation.
3. Click OK on the message to close Dynamics GP.
4. Delete the following files from the Dynamics GP install folder (you may not find all of them):

SMRTFILL.DIC	SMRTFILL.VBA	SMRTFILL.cnk
SmartFill Manual.pdf	Changes to SmartFill.txt	SMRTFILL.chm
spSmartFill.sql	SF_FieldMappings.txt	SF_StartupTriggers.txt
QuickInstallTip.txt	Any .txt files that start with SmartFill	

5. Delete the following files from the Dynamics GP Data folder (you may not find all of them):

FRMS4551.DIC	RPTS4551.DIC

6. If you chose Complete Uninstall in step 2, then log on to Dynamics GP as a User that has access to the Security windows. Remove the SMARTFILL ADMIN Security Role and the ADMIN_SMARTFILL_01 Security Task.

Manually uninstalling

The following steps can also be used to manually remove SmartFill:

Manually uninstalling from a Workstation

Perform this process on each workstation where you want to remove SmartFill.

1. Edit the Dynamics.set file (located in the Dynamics GP installation directory) to remove the SmartFill entries. There are three steps to this:
   a. The first line in the file should be a number. Subtract 1 from this number.
   b. Remove these two lines:
      ```
      4551
      SmartFill
      ```
   c. The bottom part of the file contains several path names. Remove the ones that reference the following dictionaries: SMARTFILL.DIC, FRMS4551.DIC and RPTS4551.DIC.
2. Delete the following files from the Dynamics GP install folder (you may not find all of them):

SMRTFILL.DIC	SMRTFILL.VBA	SMRTFILL.cnk
SmartFill Manual.pdf	Changes to SmartFill.txt	SMRTFILL.chm
spSmartFill.sql	SF_FieldMappings.txt	SF_StartupTriggers.txt
QuickInstallTip.txt	Any .txt files that start with SmartFill	

3. Delete the following files from the Dynamics GP Data folder (you may not find all of them):

FRMS4551.DIC	RPTS4551.DIC

Manually uninstalling from the Server

Perform this process to completely remove SmartFill from the system.

1. Open SQL Enterprise Manager.
2. Drop all tables in the DYNAMICS database that are named SFxx, (xx is the table number).
3. Drop all stored procedures in the DYNAMICS database whose names start with zDP_SFxxYYY (where xx is the table number and YYY is one of 11 possible suffixes).
4. Perform step 6, above, to remove Security Tasks and Roles.
5. If you are using the optional stored procedure, spSmartFill.sql, then remove it.

Using SmartFill

After logging into a company, SmartFill will automatically begin working.

Whenever you open a window, SmartFill will register special triggers automatically for the window to operate. No user intervention is required. The concept is the similar for all lookups, but here is an example of what to expect.

1. Open the Cash Receipts window in the test company (Transactions >> Sales >> Cash Receipts).
2. Place your cursor in the Customer ID field. Type the letter "B". Tab or move out of the field. (DO NOT press the lookup button).
3. A shortened list of customers will appear, all of which start with the letter B.
4. Press Cancel on the Make a Selection window.
5. With your cursor in the Customer ID field, modify your entry to be "BER". Tab or move out of the field again.
6. This time, the ID for Berry Medical Center, BERRYMED0001 fills in automatically. This is because there is one and only one match that starts with BER. Tell me that isn't cool!

Enabling or Disabling Features

To get the most out of SmartFill, you may want to use different features of the product. You can set up your product by using the SmartFill Objects Window. This will be discussed in detail later in this document.

Navigation

A SmartFill menu is added to the Setup menu in Dynamics GP. You will be able to access most of SmartFill's functionality from this menu.

However, you may find it more convenient to use the SmartFill Toolbar for day-to-day usage. The toolbar includes these two buttons:

-   SmartFill Setup menu

-   SmartFill Objects

Limited Users in Dynamics GP will typically only be able to use Inquiry and Reporting functionality. There may also be cases where other types of windows may also be available to a Limited User because they are necessary to perform the basic functionality of this product.

Adding a Limited User to this product's ADMIN security role may result in some Administrator functions becoming visible for that user. Accessing these functions will typically result in a message indicating that the user does not have security privileges to the window that performs that function.

Backup and Restore

All SmartFill data is stored in the DYNAMICS database. Therefore, whatever process you normally use to backup this database will also automatically backup all SmartFill data. Similarly, restoring this database will restore SmartFill data as well.

In some instances, you may use the optional spSmartFill stored procedure if you choose to have some objects set as Custom SQL. This stored procedure would then be found in each Company's database. A typical backup and restore of these databases will include this stored procedure as well.

SmartFill Security Settings

Security in SmartFill can be administered via the following Security Items:

- SMARTFILL ADMIN Security Role

  Used to set access to an Administrator of SmartFill

- ADMIN_SMARTFILL_01 Security Task

  Contains all windows necessary to setup and administer SmartFill. Typical Users do not need to have access to these windows.

- DEFAULTUSER Security Task

  Contains all the windows that are required for the average User to be able to use SmartFill. No setup or administration windows are included.

Customization

SmartFill has been built using Microsoft Dexterity. Therefore, you can use the tools typically available to a Dexterity developer (Modifier, Report Writer, etc.) to customize and extend it. Refer to the Microsoft documentation on these tools for more information.

System Administrators

Certain users of this software will have the ability to perform functions that the average user cannot. These functions may include but are not limited to installation, setup, and configuration of advanced features. We will refer to these users as "System Administrators". This may also be abbreviated to Administrators, or just Admins.

In SmartFill, an Administrator is defined as any user that is in either the SMARTFILL ADMIN or POWERUSER Security Role.

About SmartFill window

You can get to this window by first going to Help > About Microsoft Dynamics GP… From the Additional menu, choose About SmartFill.

Description

The About SmartFill window shows the version of SmartFill that you have loaded, along with the phone number to use to contact Rockton Software, and a link to our website. In addition, it also provides a convenient means of navigating to the SmartFill Registration window.

Rockton Software Registration Issues window
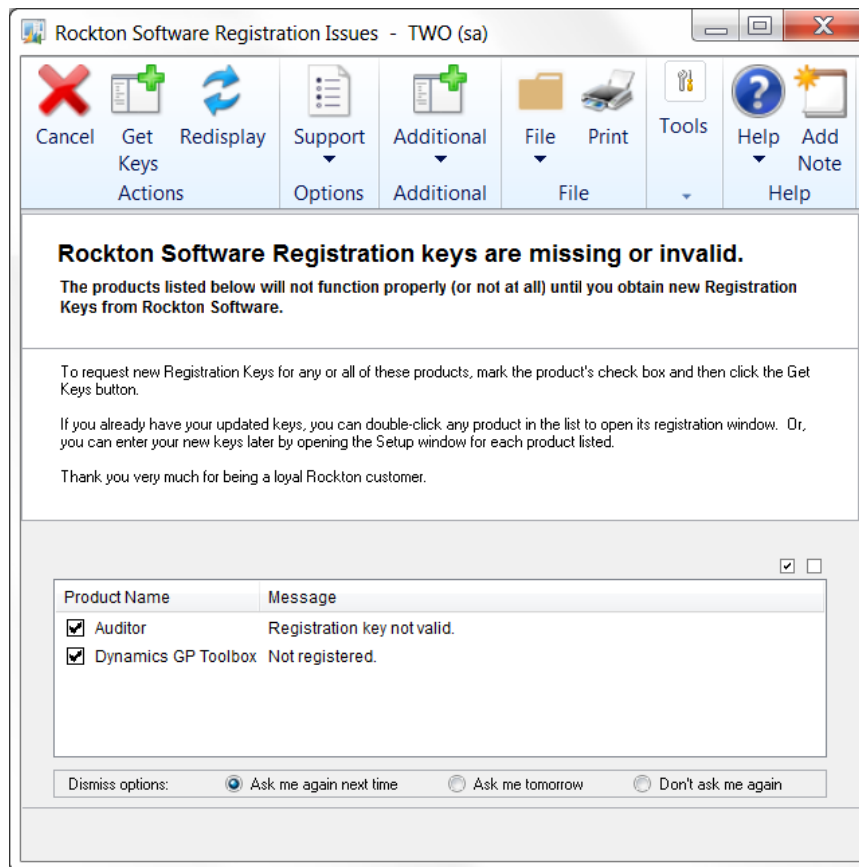
This window opens automatically if any Rockton products are not properly registered:

- when you exit the Dynamics GP Registration window.
- when a System Administrator logs in.
- after completing the Installation Wizard.

Description

Whenever you close the Dynamics GP Registration window, the registration keys for all Rockton products that you have installed will be verified. If any are found to be invalid (for instance, because the User Count or Site Name has changed since the last time the Rockton keys were updated), then this window will open automatically. The box at the bottom of the window will list each Rockton product that requires new registration keys,

You can contact Rockton Software over the Internet to obtain new keys for the products listed. If you do not have any valid registration keys on file for any of the products listed, then you will be given temporary registration keys that will expire in about a month.

To retrieve your reg keys, simply mark the check box for each product that requires new keys, and then click the Get Keys button. This will automatically try to register each product selected. If keys cannot be obtained, you will see a message that indicates there was a problem. You can then click on that message in the list and your Internet browser will open, showing you details of what the problem was and how to resolve it.

You can also view or enter your keys manually by double-clicking each product in the list above. This will open the Registration window for that product.

SmartFill Registration window

You can get to this window in one of three ways:

- Go to Help > About Microsoft Dynamics GP and choose Additional > About SmartFill. Then choose the Register button.

- Go to Microsoft Dynamics GP > Tools > Setup > SmartFill > SmartFill Setup. From the drop-down, choose Registration and choose the Process button.

- Click the Administration navigation button to open the Administration Area Page. Then select SmartFill Setup from the SmartFill sub menu. From the drop-down, choose Registration and choose the Process button.
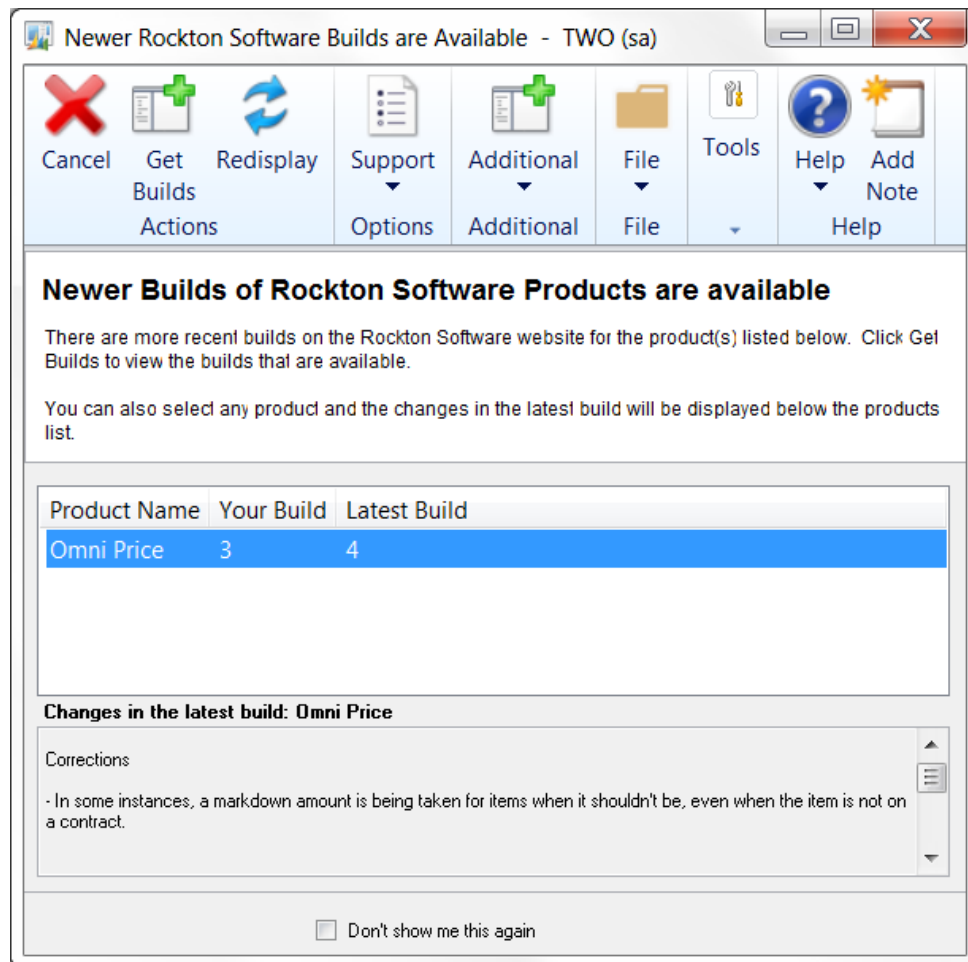
Description

SmartFill is an inexpensive, fee-based product. You can test out SmartFill fully without a registration key. To use SmartFill in any other company, simply submit a registration request to Rockton Software along with payment. Visit **www.rocktonsoftware.com** for more information.

You can enter your registration key into the SmartFill Registration window once you have registered your product. The registration key will need to be entered only once for a network. Any number of users can use SmartFill at a site, in that it does not matter if some users are using SmartFill and some are not.

Tab off the Registration Key field after entering your key. If your key is valid, a "Thank You for Registering" message will be displayed. If not, you will see the words **Key is Invalid** to the right of the Expiration Date.

If your key is invalid, first verify that you have not mistyped anything. If you received your keys in an email, it may be helpful to copy the keys from the email and paste them into the Registration Key field to avoid typing mistakes. If you still see this message, contact Rockton Support to verify that the Site Name, User Count and Dynamics GP version have not changed since you received your registration keys. If necessary we will generate new keys and resend them to you.

Newer Rockton Software Builds are Available window

This window opens automatically when a System Administrator logs in if any Rockton products are found to have newer builds available for download on www.rocktonsoftware.com.
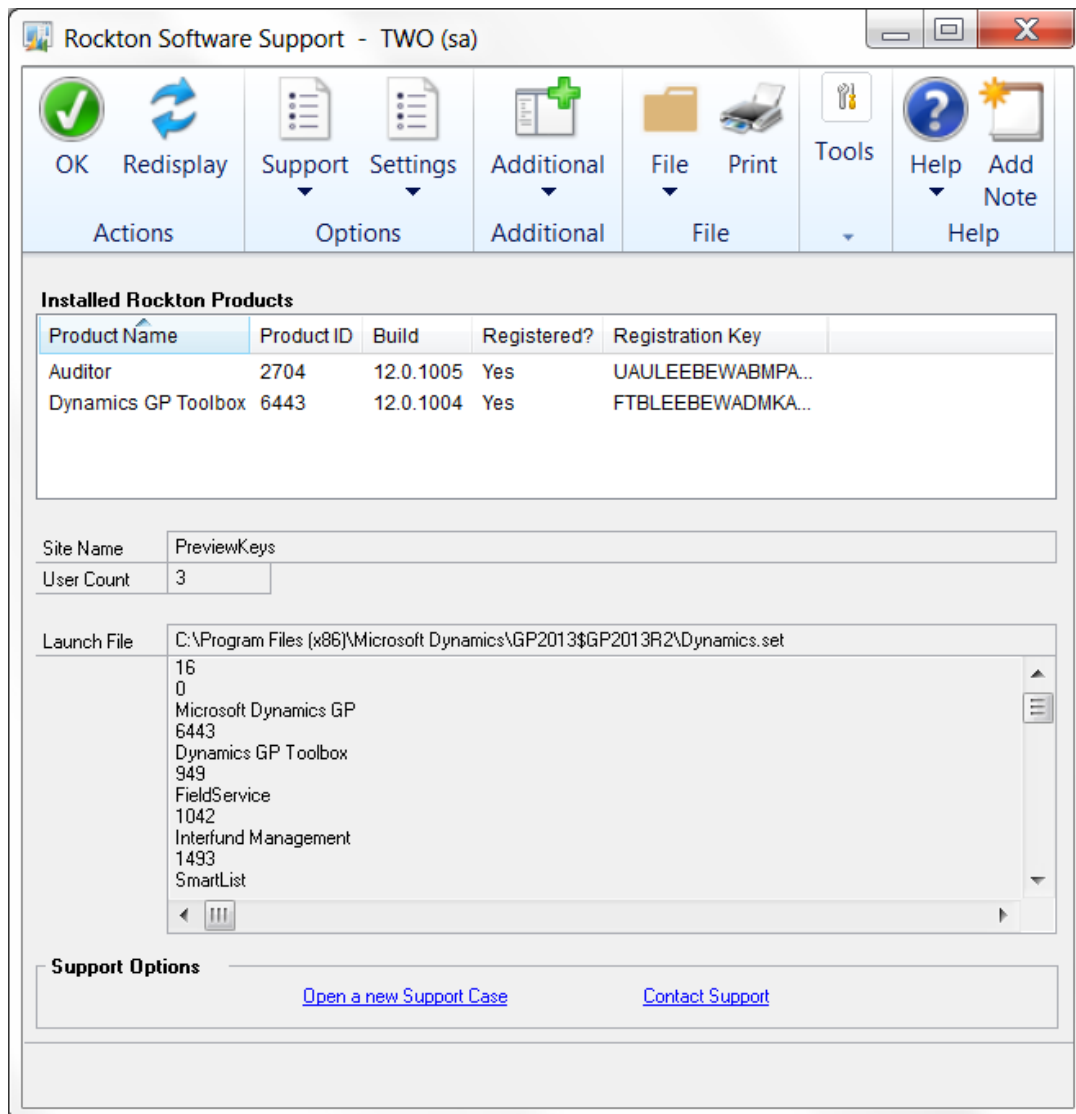
Description

Whenever an Administrator logs in, the system will check to see if any of the installed Rockton products have updates available on the Rockton Software website. If all products are up-to-date, then this window will not open. Otherwise, the products that have updates available will be listed here.

You will see the build that you currently have installed, as well as the Latest Build available on our website. If you select any of the products listed, you will see the changes for that build in the box at the bottom of the window.

If you want to download any of the latest builds, click the Get Builds button and your Internet browser will open to the Downloads page on our website. Here you will see all of the latest builds for each of our products and each version of Dynamics GP for which they are available. If you don't want to download at this time, click the Cancel button.

If you don't want to be notified of new builds any more, mark the "Don't show me this again" check box and you won't be notified of a new build again until the next time you install a Rockton product.

Rockton Software Support window

This window can be opened by clicking the Help icon (⬚) and then choosing Rockton Software Support from the drop-list.

Description

This window will mostly be used by Rockton Support to get some high-level information about your system to assist in troubleshooting problems. You may also find some of the information presented here to be useful in your own troubleshooting.

Another important feature of the Rockton Software Support window is the Support Options section at the bottom of the window. You can create a support case over the Internet by clicking the **Open a new Support Case** link. This will open the Create Rockton Support Case window, where you can enter details of your problem. Or, if you wish to speak to someone in support first, or do your own research about your situation, you can click the **Contact Support** link and your Internet browser will be opened to our Technical Support page. Here, you will find various options for support including Manuals, FAQs, How-To Videos, Support contact information as well as other options.

Create Rockton Software Support Case window

This window is opened when you click the Open a new Support Case link at the bottom of the Rockton Software Support window.

Description

The Create Rockton Support Case window allows you to instantly open a new support case with Rockton Software. First, select the Product about which you have a question or problem. Then enter the rest of the information requested and click the Create button and your information will be transmitted to Rockton Software via the Internet. You can even include file attachments with the Add Attachment (**+**) button or remove them with the Remove Attachment button (✗).

SmartFill Setup window

The SmartFill Setup window allows you to perform miscellaneous setup and maintenance tasks.
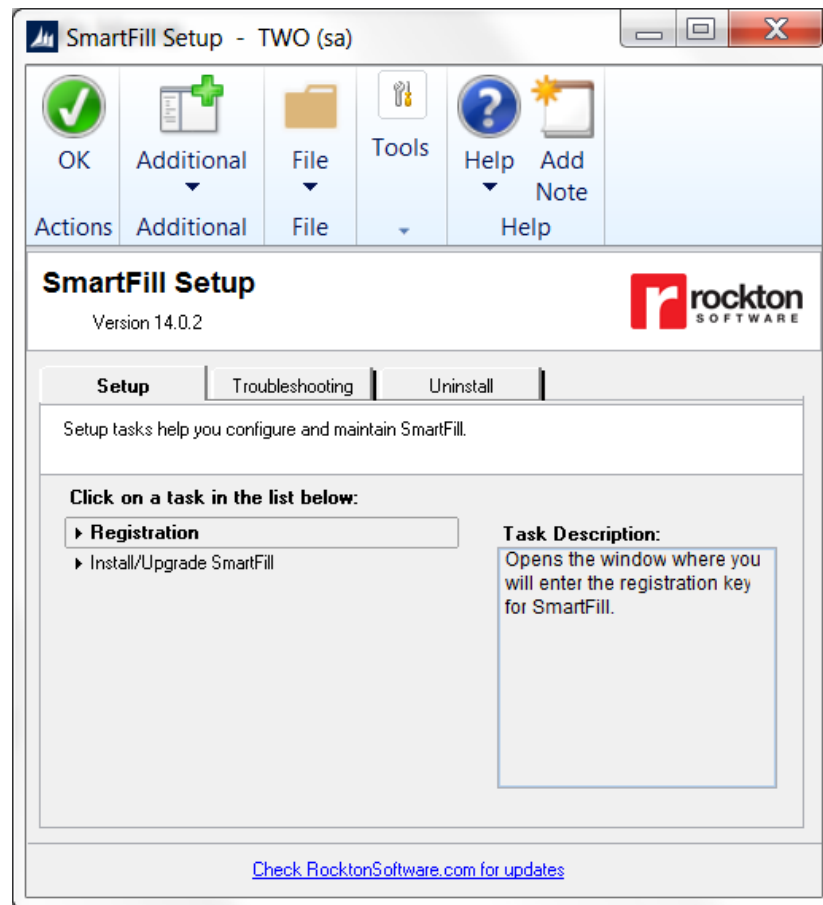
You can get to this window in one of two ways:

- Go to Microsoft Dynamics GP > Tools > Setup > SmartFill > SmartFill Setup.
- Click the Administration navigation button to open the Administration Area Page. Then select SmartFill Setup from the SmartFill sub menu.

Description

The SmartFill Setup window gives you access to all of the tasks you will need to configure and maintain the system. It contains three tabs:

- Setup
- Troubleshooting
- Uninstall

You can see a brief description of each task by moving your cursor over any of the tasks in the list. To select a task, simply click on the task name.

Clicking the "Check RocktonSoftware.com for updates" link will take you to the Downloads web page for this product. Here you can verify that you are installing the latest build.

The tasks available for each tab are described in the following tables:

Setup tab

Setup tasks help you configure and maintain SmartFill.

Task	Description
Registration	Opens the window where you will enter a registration key.
Install/Upgrade SmartFill	Installs the software, or upgrades it from a previous version. This may take several minutes. It will also set table permissions to all users in the system database. You can perform this task multiple times without causing any problems. **Note:** You must be logged in as a User that is in the 'sysadmin' fixed server role or the 'db_owner' role for the DYNAMICS.

Troubleshooting tab

These tasks are for troubleshooting only. You may be asked to use them by Rockton Support.

| Task	Description
Object Reconcile	Opens the SmartFill Object Reconcile window, where you can run a report that lists any conflicting Objects that are currently loaded.
Re-add Security Data	Adds Security Roles and Tasks for SmartFill, if they have been deleted. **Note:** You must be logged in a User that has access to run the Install/Upgrade option (as described above) or a User that has Security access to both the Security Role Setup and Security Task Setup windows in order to use this option.
Move to First Position	Moves SmartFill to the first position in the launch file after Dynamics GP.
Remove from Launch File	Removes SmartFill from the launch file.
Reset Menus	Removes SmartFill from the Menu Master table. Afterwards you will need to exit Dynamics GP and log in again to see the refreshed menus.
Create Startup Triggers File	
Enable Script Logging	Enables script logging, beginning with the next time you log into Dynamics GP from this workstation.
Debug Mode	This option may gather diagnostics, create log files, open the Code window or other things that may be helpful to Rockton Support. In addition, this option adds the SmartFill Trigger Status option to the Additional menu of every window that you open in Dynamics GP.

Uninstall tab

These tasks can be used to uninstall SmartFill from the system or just from this workstation.

Task	Description
Workstation Uninstall	Removes SmartFill from the launch file. Also removes settings from the Defaults file.
Complete Uninstall	SmartFill tables will be removed from the database(s) and the product will be removed from the launch file.

SmartFill Objects window

The SmartFill Objects is the main window from which you will configure SmartFill.
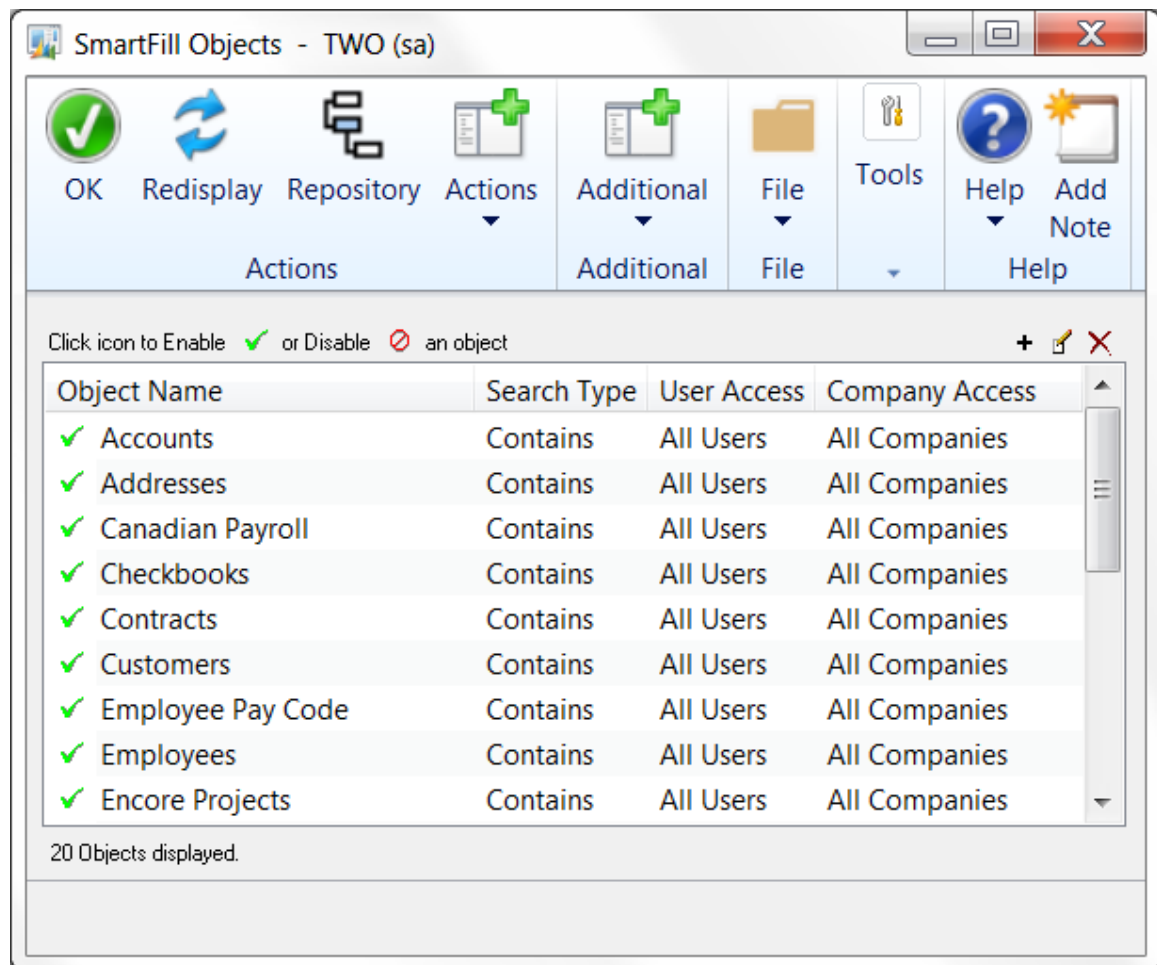
You can get to this window in one of two ways:

- Go to Microsoft Dynamics GP > Tools > Setup > SmartFill > Objects.

- Click the Administration navigation button to open the Administration Area Page. Then select Objects from the SmartFill sub menu.

Description

The SmartFill Objects window lists which Objects (Customers, Vendors, Employees, etc.) you have loaded. From this window, you can Add (+), Edit (✎), or Delete (✗) Objects by clicking the appropriate button at the upper-right. You can also Enable (✔) or Disable (⊘) an Object by clicking the icon to the left of the Object's name. In addition, the Actions button gives you several other actions that can be taken on an Object.

You can double-click an object in the window (or highlight the line and press the Edit button) to open the SmartFill Object Maintenance Details window for the selected Object. This window also opens if you click the Add button. Details on how to use the SmartFill Object Maintenance Details window can be found later in this document.

The options on the SmartFill Objects window are described in the following table:

Option	Description
New button	Create a new SmartFill Object definition. Keep in mind that you will also need to set up the Repository for this object. This is discussed in the **Creating Your Own SmartFill Objects** section, later in this manual.
Edit button	Opens the SmartFill Object Maintenance Details window.
Delete button	Deletes the selected Object(s) and the associated Repository entries.
Redisplay button	Redisplays this window.
Repository button	Opens the SmartFill Repository window.
Actions button	
Import Object(s)	Allows you to add new Objects by importing a text file that contains the Object definition.
Import Field Mappings	Allows the importing of Field Mapping definitions.
Export Object	Allows you to create text file(s) that contains the selected Object or Objects' definition(s). These can then be imported at another site.
Export Field Mappings	Allows the exporting of Field Mapping definitions.
Object Access	Opens the SmartFill Object Access window, where you can set User or Company Access for that Object.
Options	Opens the SmartFill Options window, where you can set system-wide options.
Object Reconcile	Opens the SmartFill Object Reconcile window, where you can run a report that lists any conflicting Objects that are currently loaded.
OK button	Closes this window.

SmartFill Object Access window

Allows you to assign User or Company access to a SmartFill Object.

You can get to this window in one of two ways:

- From the SmartFill Objects window, click the Actions button and then choose Object Access.

- From the SmartFill Object Details Maintenance window, click the Access button.
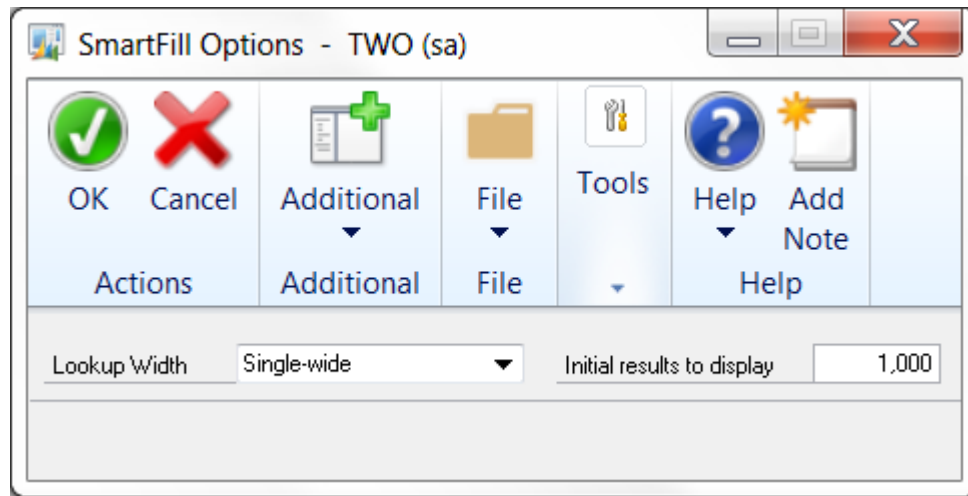
Description

User Access tells SmartFill which users should have this Object enabled. If you have some users that do not want SmartFill functional, you can specify which users are using the object here. By default everyone in the system will benefit from every SmartFill Object.

Similarly, Company Access is where you assign the Companies that have this Object enabled.

SmartFill Options window

This window allows you to set system-wide options.

To get to this window, first open the SmartFill Objects window. Then, click the Actions button and choose Options.

Description

Lookup Width is used to select the size of the window that opens when you do a SmartFill lookup. You have three options: Single-wide, One and a Half-wide, and Double-wide. If your users have their Windows display settings set to a higher resolution, you may wish to use one of the wider lookup windows so they will be able to see more data. However, remember that changing this setting will affect all objects, for all users, system-wide.

Initial results to display determines how many results will initially be loaded into the Make a Selection window before SmartFill starts to load the remaining results in the background. This value defaults to 1000, which should be fine in most cases. However, setting this value to a lower number could help make the window display faster in cases where system performance is not adequate enough to quickly display the first 1000 results.

SmartFill Object Maintenance Details window

When you edit an object or add a new one, this maintenance window will open.

You can get to this window in one of two ways:

- First go to Microsoft Dynamics GP > Tools > Setup > SmartFill > Objects. Then double-click an object, or select the object and choose the Edit button.

- Click the Administration navigation button to open the Administration Area Page. Then select Objects from the SmartFill sub menu. Now double-click an object, or select the object and choose the Edit button.

Description

The Name of the SmartFill Object and Object ID appear in the upper-left. The Object ID is generated automatically and cannot be changed. The Object Name can be changed as desired. You may, for instance, wish to use the term Debtors instead of Customers.

You can choose to disable this Object by clicking the Disabled checkbox in the upper-right of the window. The Search Type field lets you choose a Begins With or Contains Search. Alternatively, you can choose the Custom SQL option and write your own SQL stored procedure to return data any way you can imagine.

The following table lists the Object Definition fields on this window. It is technical, and requires some understanding of how Dynamics GP and other products work in a technical manner. If you have any questions, please contact support for assistance.

Field	Description
Product	Specify the product that contains the normal lookup feature that you are replacing or supplementing.
Lookup Form Name	Specify the technical form that does a typical lookup on a related field so that SmartFill can be disabled when performing a traditional lookup. If you don't specify a lookup form, when performing a typical non-SmartFill lookup in Dynamics GP, SmartFill will try to override the selection and will cause users to experience frustration with selecting a desired record. By specifying this form, SmartFill will temporarily disable itself while the selected traditional lookup window is open.
Table Name	This is the technical table name from which you are searching and displaying fields. It must exist in the Product specified above.
Secondary Tables button	This button opens the SmartFill Object Secondary Tables window, where you can link additional tables to this Object.
Return Field	This is the field you want returned once a selection is made from a lookup. Typically, this would also be the first column in the column list below. SmartFill also uses this field to examine if what you typed into an ID field is actually a valid value for the field.
Return Datatype	Specify the Return Field's data type. SmartFill behaves differently for Accounts vs. Strings. The Return Field will usually be String.
Advanced button	Opens the SmartFill Object Advanced Settings window, described later in this document.

The Lookup Fields area lets you select up to 10 columns to search and display in a given SmartFill Object. If you need additional options, use a Custom SQL Search Type.

Field	Description
Clear button	Clears all fields on that line.
Table Name	This is the name of the table that contains the field that you want to display or search on. The drop-down lists the Primary Table of the Object as well as all Secondary Tables that have been selected. You can also choose <Calculated Field>, which will allow you to combine multiple fields into one.
Field Name	This is the field name in the table selected. The drop down will list the fields from the selected table. If you have chosen <Calculated Field> for the Table Name, then the drop down will list all of the Calculated Fields that are currently defined for this Object. You can also select the <New Calculated Field> item to create a new one. The Edit Calculated Field button at the top of this column can be used to review or make changes to an existing Calculated Field.
Display Name	This is the name that appears for this field if it is marked to display. You may have a field named "User Defined 1" and you may want to make it display "Hire Date" depending on how you use that field.
Search	Check this box for this field to be searched during a SmartFill lookup.
Display	Check this box if you want this field to be displayed in the lookup list should there be more than one valid match.

The Save button at the top of the window will save any changes made to the Object and close the SmartFill Object Maintenance Details window. The Delete button will delete the currently displayed Object and close the window. The Cancel button will discard any changes that you made while you were on this window.

The Filters button opens the SmartFill Object Filters window, which is described in detail later in this document. This is where you specify additional criteria to use when performing a SmartFill lookup. For instance, you can choose to show only active Customers in the Customers Object. This would be accomplished by setting a Filter to only show Customer records where the Inactive field is No.

The Access button opens the SmartFill Object Access window, where you can set User or Company Access for the displayed Object.

The Repository button opens the Repository Maintenance window, showing the Repository records for the displayed Object.

Object Preview

The Preview area of the window allows you to do the following:

1. Test your SmartFill Object before you deploy it.
2. Set the column sizes for each field that will appear in the lookup.
3. Set the Default Sort Column.

You can test an Object that you are working on by entering a search value in the Test Search field and clicking the Search button (🔍). This will perform a SmartFill search as you have defined it on the SmartFill Object Maintenance Details window and display the results in the list at the bottom of the window.

To set column sizes for each column, simply drag the column handles at the end of each column to the position where you would like to see it in the lookup. SmartFill will remember these settings when you save the Object.
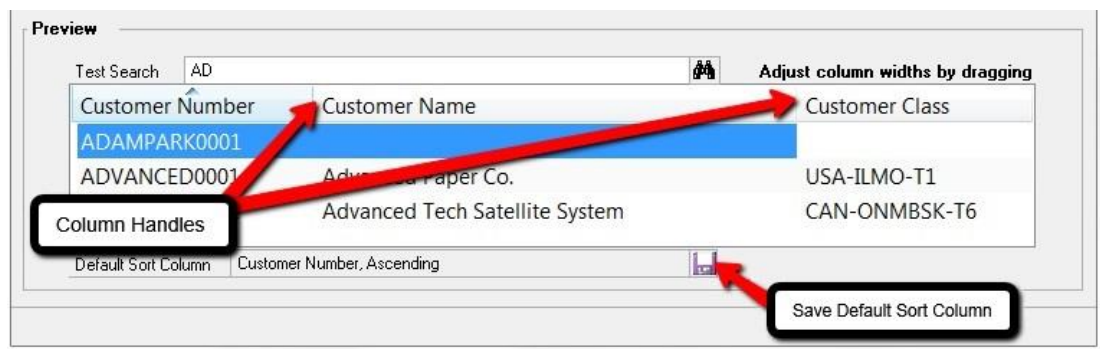
The Default Sort Column is the column by which the Make a Selection window will be sorted when it is first displayed. The User can sort by another column by clicking on a column header, but each time the window is displayed it will always default to the column selected here for this Object. To set the Default Sort Column, simply click on the column heading, then click the Save Default Sort Column button. If you click on the same column heading a second time, that column will now be sorted in descending order. Whether the column is sorted ascending or descending is also saved here.

SmartFill Object Advanced Settings window
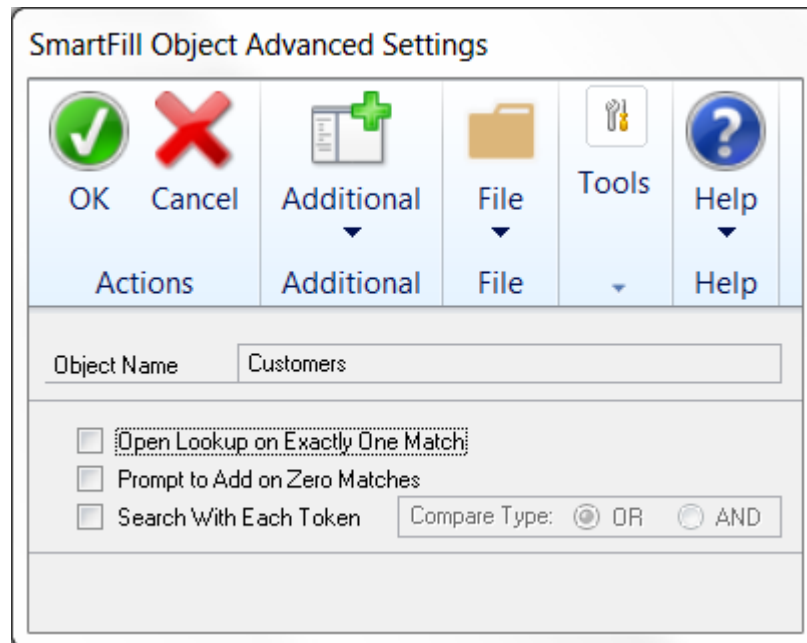
Advanced Settings can be used to fine tune how SmartFill behaves in certain specific situations. The following table describes each one:

Field	Description
Open Lookup on Exactly One Match	By default, when SmartFill attempts to do a lookup, if it only finds one match it will simply display the record associated with that match. Selecting this checkbox will cause the Make a Selection window to always open, even if only one match was found.
Prompt to add on Zero Matches	By default, when SmartFill attempts to do a lookup, if it does not find any matches it will treat the value that you typed as if you had intended to add a new record. Selecting this checkbox will give you the option of treating it as though it was a new record, or cancelling the lookup so that you can make changes to the value you originally entered.
Search With Each Token	This checkbox adds power to your searches. A Token is an individual word separated by a space in the search value. If this box is not checked, and you typed in "blue widget" into an ID field, SmartFill would search for matches of "blue widget". If this box is checked, and you select AND for Compare Type, SmartFill will search for matches of "blue" in addition to matches of "widget". If you choose OR for Compare Type, SmartFill will search for matches of *either* "blue" or "widget".

SmartFill Object Secondary Tables window

You can get to this window in one of two ways:

- First go to Microsoft Dynamics GP > Tools > Setup > SmartFill > Objects. Next, double-click an object, or select the object and choose the Edit button. Then select the Secondary Tables button next to the Table Name.

- Click the Administration navigation button to open the Administration Area Page. Next, select Objects from the SmartFill sub menu. Now double-click an object, or select the object and choose the Edit button. Then select the Secondary Tables button next to the Table Name.

Description

This is where you can specify additional tables for your SmartFill Object. Secondary tables must be linked to the Object's main table (or *Primary Table*) by at least one field. You define how to connect the records in one table to those in the other by creating one or more Links. A Link is a field in the Primary Table and another one in the Secondary Table whose values must be equal to connect records in the two tables.

When this window first opens, if there are already Secondary Tables assigned, they will be in the Secondary Tables list box at the top of the window. Highlighting one of these tables will display the Links associated with it in the Links list box at the bottom of the window. This gives you the opportunity to change or delete these links.

Adding a new Secondary Table

When you select the Add Secondary Table button, a lookup will open where you can select another table from any product that is currently loaded. Once you select this table, the SmartFill Object Link window will automatically open.
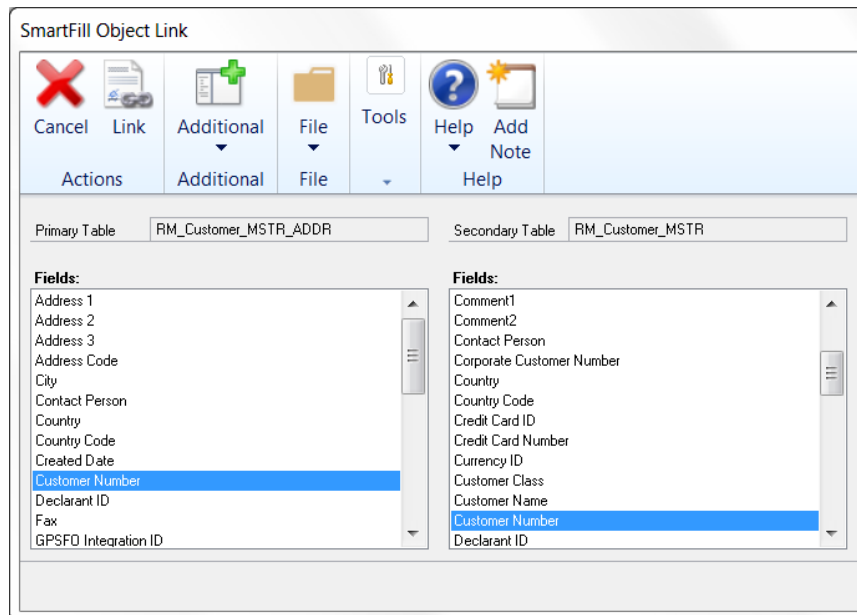
You first select a field from the Primary Table in the left list box. You may notice that the list of Secondary Table fields in the right list box might then become smaller. This is because you can only link fields that have the same data type (e.g., string, integer, etc.). Therefore only the fields in the Secondary table that have a data type that matches the field you selected in the Primary Table will now be displayed.

Once you select both fields, simply click the Link button. The window will then close and the new link will show in the Links list box at the bottom of the Secondary Tables window. If you need to add another Link for this table, just click the Add Link button above the Links list box.

You also have the option of specifying whether SmartFill should include all records from the main table or only those records that also have a record in the Secondary table. You do this by double-clicking one of the Secondary Tables listed on the SmartFill Object Secondary Tables window. This will open the SmartFill Object Secondary Table Options window, where you can select which records to include.
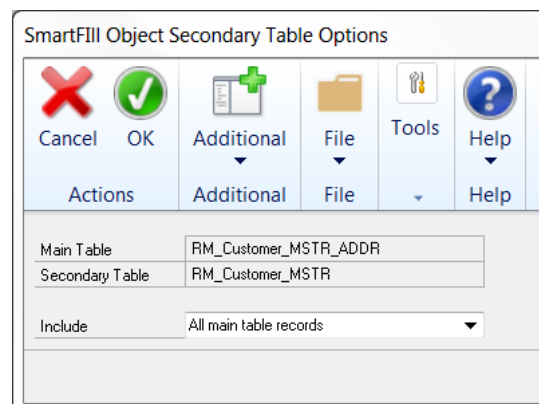
SmartFill Object Calculated Fields window

You can get to this window in one of two ways:

- From the SmartFill Object Maintenance Details window, select <Calculated Field> in the Table column. Next, select a field from the list of Calculated Fields in the Field Name column. Then choose the Edit Calculated Field button.

- From the SmartFill Object Maintenance Details window, select <Calculated Field> in the Table column. Next, select <New Calculated Field> in the Field Name column.

Description

Calculated Fields are fields that you define. These fields can then be used to display values in the SmartFill Make a Selection window that are not stored in a table field on the database. They can be combinations of table fields or constant values. If each of the items you are combining is a numeric field, then you can perform basic arithmetic operations on them as well. It should be noted, however, that you cannot search against a Calculated Field.

When creating a Calculated Field, you first specify a Name and Datatype. The Datatype can be String or Number. For String fields, you can optionally choose to format the Calculated Field as a Phone Number or Social Security Number. For Number fields, you also have the option of formatting as Currency or as a Number with no decimals (this is useful for displaying Quantities).

A Calculated Field is composed of up to five sub-fields, plus the operation that specifies how to combine a given sub-field with the next one. The sub-fields can be either constant values or fields from one of the tables specified for the Object. You do not have to specify all five sub-fields, but you must at least specify one of them.

There are seven different types of constants that you can use: String, Account Number, Integer, Currency, Yes/No, Date and Time. Any of these can be used if the Calculated Field's Datatype is String. However, if the Datatype is Number, then only Integer and Currency constants can be used.

For Number Calculated Fields, you can choose Addition, Subtraction, Multiplication or Division for the Operation to be performed. Normal arithmetic order precedence will be in effect. For instance, if you specify:

> sub-field1 + sub-field2 X sub-field3

it will be evaluated as:

> sub-field1 + (sub-field2 X sub-field3).

In the case of String Calculated Fields, you will not be able to select the Operation field (it will always be "Addition", which is equivalent to concatenation for strings).

Click the OK button to close this window and save any changes that you made, or click the Cancel button to discard those changes
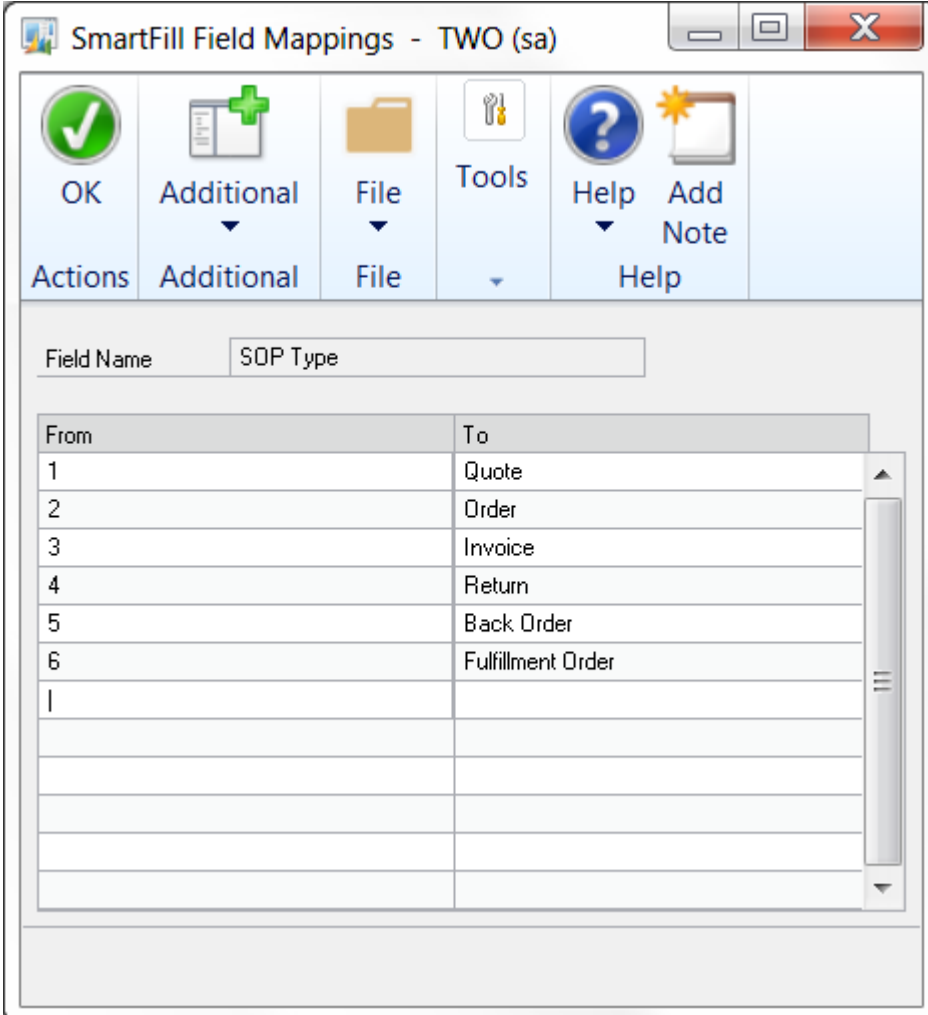
Field Mapping

There may be times when you want to display a table field that has certain pre-defined values. For instance, for the field SOP Type, the value 1 corresponds to "Quote"; the value 2 corresponds to "Order", etc. It would make a lot more sense to the User if you could display "Quote" and "Order", instead of the values 1 and 2, right? This can be accomplished by using Field Mapping.

Field Mapping is available only for table fields (i.e., it is not available for constant values). The only types of fields that can be mapped are ones that have a string datatype, a Boolean datatype or a numeric datatype that is not a Currency type. For instance, Integers and Drop-down List fields can use Field Mapping; Date fields and Currency fields cannot.

To display the mapped values for a given field, instead of the values that are found on the database, choose the Use Field Mapping check box. You then may need to specify what these mappings are, if they are not specified already.

To define the values that will be mapped, click the Mapping button. This will open the SmartFill Field Mappings window.

The Field Name will be prefilled from the Calculated Fields window.

The From column should contain the values that will be found for this field on the database. In the To column, you should enter the values that you want to display on the Make a Selection window.

When you are done, click OK to close this window.

SmartFill Object Filters window

You can get to this window by first going to the SmartFill Object Maintenance Details window. Then select the Filters button at the bottom of the window.

Description

Filters are how you specify additional criteria to use when performing a SmartFill lookup. For instance, in the example above, there is a Filter defined on the Customers Object to only show Active Customers.

You can specify up to four additional criteria for each Object. Any criteria that are specified must all be met in order for SmartFill to search a given record.

The idea behind setting up a Filter is that you want the Object to only search for records that meet certain criteria. Think of each of these criteria as having the form:
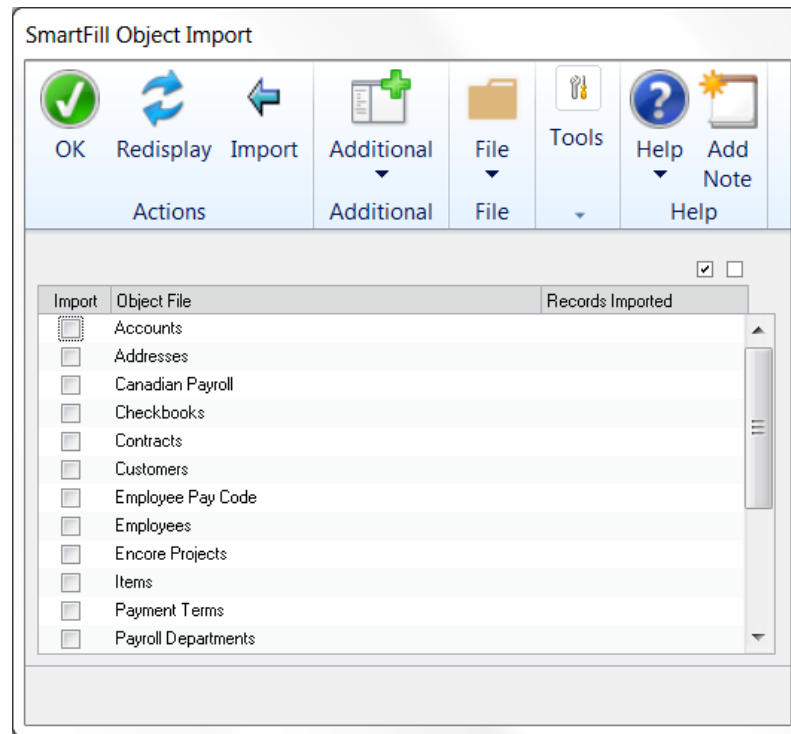
        <Table Field> <Operation> <Value>

In the above example:

        < Table Field> is the 'Inactive' field on the RM_Customer_MSTR table

        <Operation> is "Equals"

        <Value> is "No".

To setup a Filter, first choose a table from the Table name column. You will be able to select any table (Primary or Secondary) that has been defined for this Object. Next, choose the Table Field for which you want to supply an additional condition. This drop-down will contain all of the fields for the table that you selected in the Table Name column.

Now, choose an Operation. This is how you will compare the Table Field to the Value. The available operations are: Equals, Is Greater Than, Is Less Than, Is Greater Than or Equal, Is Less Than or Equal, Does Not Equal, Begins With or Contains.

Finally, enter the Value to which you want to compare the Table Field.

When you are done, click OK and the Filter will be activated for this Object.

Importing New SmartFill Objects

This window allows you to import new SmartFill Objects.

You can get to this window in one of two ways:

- First go to Microsoft Dynamics GP > Tools > Setup > SmartFill > Objects. Then click the Actions button and choose Import Object(s).

- Click the Administration navigation button to open the Administration Area Page. Then select Objects from the SmartFill sub menu. Now click the Actions button and choose Import Object(s).

Description

SmartFill is designed to be as easy to set up as possible. So when you first install it, all of the Object text files (named SmartFill***.txt, where *** is the Object name) are automatically imported into the Repository when you first install SmartFill. However, there may be times when you obtain new Object text files that you want to install. The SmartFill Object Import window is provided for this purpose.

When the SmartFill Object Import window opens, it will list all of the Object text files that it finds in the folder where Dynamics GP is installed. Any Objects that are not currently installed will have the Import checkbox pre-checked. Click the Import button and the new Objects will be installed and ready to use. No additional setup is necessary!

*You may also choose to Import any of the existing Objects. If you do this, SmartFill will give you the option of making a **copy** of the selected Object, or replacing the existing one. This may be useful when you want a lookup to work one way for one set of Users or Companies, but another way for a different set. You can then customize each Object accordingly and assign the appropriate User and Company access to each one.*

Make a Selection window

The Make a Selection window is SmartFill's lookup window.

This window opens when you enter a value in a field that has a SmartFill lookup attached to it, and then tab out of the field.

Description

The Make a Selection window lists the results of a SmartFill search. This window opens after tabbing off of a SmartFill-enabled field in which you have entered some value. The value that you have typed is what is used to perform the search defined by the SmartFill Object attached to that field.

You can resize this window and SmartFill will remember that size the next time you open this window for that Object. Also, you can sort the displayed columns by clicking on the column headings.

Customer Lookup Example

In the above example we are doing a Customer lookup, as defined by the Customers Object. As you can see, the name of the SmartFill Object (in this case Customers) is displayed above the results list. The following discussion will use this specific example, however the concepts apply to any SmartFill lookup.

One way this window may have been invoked is by entering "AD" in the Customer Number field on the Customer Maintenance window and then tabbing out of the field. As you can see in the image above, "AD" is in the Search field in the upper left, and all of the Customers that contain AD in the Customer Name field are shown in the list. If the Customer you are looking for is shown, you can select it and click the Select button and this Customer will be displayed on the Customer Maintenance window.

If you can't find the Customer you want in the list, there are a few things you can do. You can simply change the Search field to a different value and the search will begin again as if you had entered that search value back on the Customer Maintenance window in the first place. Of course, you can also click the Cancel button to return to Customer Maintenance where you can enter a different search value there as well. Either approach will yield the same results.

Let's say that the number of results is too large for you to effectively find the Customer you are looking for. In this case, you can narrow down the search results by entering a value in the Subset Search field. This will reduce the list to only those items from the original search that contain the Subset Search value in at least one of the displayed columns. It may sometimes take a little longer to perform a Subset Search, but it is often still very helpful in sorting through large result sets.

The Temporary Disable button is used in certain circumstances when you want to enter a new Customer Number (or Item Number or Vendor ID, etc.) that just happens to be found in some search field for one or more Customers that already exist on file. In this case SmartFill will not know that you are trying to enter that as a new Customer, so it will perform a search and display the results back to you.

When this happens, click the Temporary Disable button. Choose either **Just This Time** or **For This Window** from the button's drop-list. This will close the Make a Selection window and take you back to the window from which you came. SmartFill will now be disabled, either just for that one entry, or for the entire time that you have that window open. This will allow you to enter the new Customer.

The Filters button will be enabled if the Object or Repository record contains Filters. This may sometimes be useful in determining why SmartFill showed you the results that you got.

SmartFill Trigger Status window

You can open this window when SmartFill is in Debug Mode by going to Additional > SmartFill Trigger Status, or by pressing Ctrl+Q, from any Dynamics GP window.

Description

The SmartFill Trigger Status window is used for debugging problems with SmartFill lookups. It shows all of the SmartFill lookups that are active on the current window and its child windows (a child window is typically one that you can only by choosing a menu option or button on the parent window). You can temporarily register or unregister triggers by checking or unchecking the box in the Tag column. You can also use the Register All Triggers and Unregister All Triggers buttons at the upper-right of the triggers list to act on all of the displayed triggers.

If you want to add, modify, or delete triggers, you can do that by modifying the Repository. Click the Repository button on this window and you will see the Repository records associated with each of these triggers. From here you can make whatever permanent changes that you need to make. These changes will then be reflected the next time you open the Dynamics GP window that you were originally working with.

Appendix A - Modifying the Repository

Allows an Administrator to enhance or modify the way lookups work in SmartFill.

You can get to this window in one of three ways:

- Go to Microsoft Dynamics GP > Tools > Setup > SmartFill > Repository.

- Click the Administration navigation button to open the Administration Area Page. Then select Repository from the SmartFill sub menu.

- From the SmartFill Objects window, click the Repository button.

Description

SmartFill has a flexible and modifiable repository of lookups used in the system. Some background on how SmartFill works will be useful at this time.

Each time a form is opened, the repository is checked to see if any Lookups are defined for the form. If so, *Dexterity triggers* are registered to handle the processing of the specified fields, windows, and forms.

If a SmartFill lookup is not behaving as you expect it to, you can research its setup in the Repository. You can modify or delete existing repository records and add new ones.

Use the Search field to narrow down the list. Whatever you enter here will be compared to the Form Name, Window Name, Field Name and Comment. If none of these fields contains the Search value you entered, then that record will not be displayed.

Using the New button (✚), you can add a new lookup to a window. If you do add several repository records, please export the repository when you are finished and email it to support@rocktonsoftware.com. As more records are added, the collective database of registered lookups can be shared in the larger Dynamics GP community.

The Modify button (🖋) will open the Modify Repository Record window. This window is described in more detail below.

The Delete button (✖) will remove the selected record or records from the Repository.

The Discover button will open the SmartFill Field Discovery window. This window is described in more detail in the **Creating Your Own SmartFill Objects** section, below.

Modify Repository Record window

The Modify Repository Record window is where you can change things about the way a particular lookup works, including specifying that a Filter should be used.

Repository Filters are for specifying additional criteria to use when performing a SmartFill lookup. They are similar to Object Filters, except that Repository Filters only apply to the way the lookup works *on this window*. Also, with Repository Filters, you have the option of specifying a window field for the **Value** part of the condition. This is useful when you only want to search for records that correspond to some other field that you have selected on a given window (for instance only searching for Items that belong to the Vendor that was selected on a Purchase Order transaction). For more information on how Filters work, review the section on the SmartFill Object Filters window.

Advanced Options

Register this trigger on Startup Some third party products will contain customizations that interfere with the normal function of SmartFill. In these cases, it will appear as though the SmartFill lookup is not functioning at all, even though it is present in the Repository. Checking this box will often resolve this situation.

SmartFill must be loaded before the other third party product for this option to work. You can ensure this by using the Move to First Position task on the Troubleshooting tab of the SmartFill Setup window, or by manually editing the launch file.

We also recommend that you exit Dynamics GP after checking this box.

Skip running change script for this field In rare cases, a SmartFill lookup might result in an error message once the user tabs off of the field to which the lookup returned. In these cases, marking this check box will usually resolve this situation.

Appendix B - Creating Your Own Objects

You can create new SmartFill objects so you can do lookups on Dynamics GP fields that currently have no lookup available. You can also create lookups for Third Party applications that do not currently have any SmartFill objects defined for them.

This can be a complex procedure, so in this document we will offer only a general description of the steps that would need to be performed. You can always call us for Technical Support if you have any questions.

Creating a new SmartFill Object basically entails two major components: *Defining a New Object*, and *Setting Up the Repository*. Each of these components will be briefly described below:

Defining a New Object

1. Open the SmartFill Objects window (Microsoft Dynamics GP > Tools > Setup > SmartFill > Objects) and press the New button. See the section called **SmartFill Object Maintenance Details** for more about this window.
2. Give the Object a name that has not already been used.
3. Select the lookup type (Begins With, Contains or Custom SQL).
4. Select the Product that contains the field that you want to look up.
5. Select the Lookup Form Name. This is the form that is used when the standard lookup is invoked for this object. For Customers, the form to select here is Customer_Lookup.
6. Select the Table Name of the master table that is used to define this field. Using Customer Number as an example, you would select RM_Customer_MSTR here.
7. Select any Secondary Tables that you want to attach to this Object. Do this by clicking the Expansion button next to the Table Name.
8. Select the Return Field and Return Datatype.
9. Select the fields that will show in the lookup.
10. Mark the Search column for at least one field. Also, make sure that the total of the Width column is exactly 100%.
11. Assign access to the appropriate Users and Companies.
12. Click the Save button to save the new Object.

Now that you have created the Object definition, you must tell SmartFill how you want lookups to behave and on each window where they will be active. This information is stored in the Repository. As you can imagine, finding every window where your lookup field exists can be quite an arduous task. However, SmartFill provides a powerful search tool to help you to determine every occurrence of a given search field, even ones that have non-standard names! We refer to this process as *Field Discovery*.

Setting Up the Repository for a New Object

1. Open the SmartFill Field Discovery window (from the SmartFill Repository window, click the Discover button) to find all occurrences of the Return Field.

   ⚠️ *If this is the first time you have entered this window, you may be asked to build the Field / Datatype Database. This is required in order to perform this function. However, note that it could take several minutes.*

2. Select the Product where you want to search for the Object's Return Field.
3. Select the new SmartFill Object you created above.
4. Select a field to Insert to the Selected Fields box. You can optionally enter a string in the Name Contains field to narrow down the list of Fields. You can do this multiple times to select several fields (i.e. Customer Name, Customer Number, etc.). Or, you can Insert All.
5. Click the Discover button.
6. In the Discoveries box, choose to Accept each valid occurrence of the Return Field that has been found. Click the Accept button to move them to Accepted Discoveries, or click Accept All to move all of the fields in the Discoveries box.
7. Click the Commit Button.

Perform steps 4-7 as many times as needed to find all instances of the Return Field.

Appendix C - Adding Lookups to an Existing Object

You can extend the lookup capabilities of existing SmartFill Objects to other Third Party products. The procedure is similar to the previously described procedure of adding new Objects.

This can be a complex procedure, so in this document we will offer only a general description of the steps that would need to be performed. If you need more assistance, you can always call us for Technical Support.

Because your Object is already created, adding a lookup to an existing SmartFill Object only requires the *Setting Up the Repository* step. Since the procedure is slightly different than for creating a new Object, it is described below:

Setting Up the Repository for an Existing Object

1. Open the SmartFill Field Discovery window (Microsoft Dynamics GP > Tools > Setup > SmartFill > Repository; then hit the Discover button) to find all occurrences of the Return Field.

    ⚠️ *If this is the first time you have entered this window, you may be asked to build the Field / Datatype Database. This is required in order to perform this function. However, note that it could take several minutes.*
2. Select the Product where you want to search for the Object's Return Field. For instance, if you want to add the Customer Lookup to the Extended Pricing windows, choose Extended Pricing here.
3. Select the SmartFill Object to which you want to add lookup functionality. For the example above, choose the Customers Object.
4. Select a field to Insert into the Selected Fields box. Optionally, you can enter a string in the Name Contains field to narrow down the list of Fields. You can do this multiple times to select several fields (i.e. Customer Name, Customer Number, etc.). Or, you can insert All.
5. Click the Discover Fields button.
6. In the Discoveries box, choose to Accept each valid occurrence of the Return Field that has been found. Click the Accept button to move them to Accepted Discoveries, or click Accept All to move all of the fields in the Discoveries box.
7. Click the Commit Button.

You can perform steps 4-7 as many times as you need to in order to find all occurrences of the Return Field.

Appendix D – Working with Custom SQL Objects

There may be cases where you want to do a lookup that is more complex than what SmartFill will allow you to define. In these cases, you will want to change the Search Type to Custom SQL for that Object.

Creating a Custom SQL Object requires you to have a stored procedure called spSmartFill.sql in each company database where you want to use this Custom SQL Object. Fortunately, we give you a template procedure to use as a starting point.

The main function of this procedure is to take the search string entered by the User and fill the SF001 table with the appropriate results set of this search. In addition, the SmartFill Object ID is passed in so that you know which search to perform. This is so that you can use the same stored procedure for several different Custom SQL Objects.

The three steps to create a SmartFill Custom SQL Object:

1. Create the SmartFill Object definition (described below).
2. Update spSmartFill.sql template file (described below).
3. Create the spSmartFill stored procedure by running the updated template file on each Company database in SQL Server Management Studio (SSMS).

Creating the SmartFill Object definition.

1. Open the SmartFill Objects window (Tools > Setup > SmartFill > Objects) and press the New Object button (**+**) to create a new Object.
2. In the Object Name field, enter a name that has not already been used.
3. For Search Type, select Custom SQL.
4. Select the Product that contains the field that you want to look up.
5. Select the Lookup Form Name. This is the form that is used when the standard lookup is invoked for this object. (i.e., the form to select for Customers is Customer_Lookup).
6. Select the Table Name of the master table that is used to define the field you are looking up. Using Customer Number as an example, you would select RM_Customer_MSTR here.
7. Select the Return Field. This is the field that you are looking up.
8. Select the Return Datatype. This is the data type of the Return Field.
9. The Table and Field Name columns will be disabled for Custom SQL because they are not necessary to specify here.
10. Enter the Display Names that you want to see as the column headings on the Make a Selection window (SmartFill's lookup window).
11. Mark the Search and/or Display checkboxes as desired. For Custom SQL, these are for informational purposes only,
12. Adjust the column widths in the Preview area as you would like them to appear in the Make a Selection window.
13. Assign access to the appropriate Users and Companies by clicking the Access button.
14. Click the Save button to save the Custom SQL Object.

Updating the spSmartFill.sql template file.

1. Open the spSmartFill.sql template, which was included with your SmartFill download files, in SQL Server Management Studio (SSMS). This is the template that you will use to create the stored procedure on your SQL server.

2. In Dynamics GP, go to Tools > Setup > Company > Account Format. Take note of the number in the **Maximum Segments** field (in this case, it is 5):

3. Do not make any changes to the parameters (**@SmartFillObjectID**, **@UserID**, **@CompanyID** and all nine (9) **@SearchValue** fields) at the top of the stored procedure definition. These must remain exactly as they are in the template.

4. Notice the line containing '**IF @SmartFillObjectName = 'Customers' BEGIN**'. The value in single quotes (in this case **Customers**) needs to match the name of the SmartFill Object you created above.

5. In the first part of the INSERT statement, the only change you need to make is to the **SF_Return_Field_Account_1** through **_10** lines. The number of these lines must match the Maximum Segments that you noted in step 2. In the example above, you would simply need to remove the lines for **SF_Return_Field_Account_6** through **SF_Return_Field_Account_10**.

6. Do not make any changes to the other **SF_Return_Field_** lines or to the ten (10) **SF_Field_Value_** lines. These must remain exactly as they are in the template.

7. In the SELECT clause of the INSERT statement, you need to make a similar change to the number of Account Segment lines that appear here as you did in step 5. In the example above, you would remove the lines with the comment **-- Account Segment 6** through **-- Account Segment 10**.

8. The third line below the SELECT line will contain the SQL column name for the Return Field that you defined on the SmartFill Object. This will be the case whenever the Return Datatype is String. If it is other than String, then you will use the Account, Integer or Currency fields to return your Return Field's value.

9. The lines commented with **-- Display Field 1** through **10** will be used to fill the columns in the SmartFill's Make a Selection window. Enter the SQL column names or calculations that correspond to the Display Names that you entered on the SmartFill Object. Note, however, that you need to have ten (10) of these Display Field lines, even if you are not using all ten columns.

10. The FROM clause will contain all of the tables that you need for the SQL columns that you used in the above steps. There may be just one table, or you have many tables that are connected with JOIN clauses.

Important Things to Know.

- The spSmartFill.sql file itself is **not actually used by SmartFill at all**. It is simply a template, or "starter" file that we provide to give you an idea of what the spSmartFill stored procedure needs to look like. It is intended that you open this file in SSMS, make the necessary changes, and then run this file on each Company database. This creates the **spSmartFill stored procedure** on your SQL databases. The stored procedure is what SmartFill actually uses. Once you have done that, you can save your changes back to the template file if you want to, but SmartFill no longer uses this file for anything.

- You can have only one spSmartFill stored procedure in each Company database. However, you can make this one stored procedure work for multiple objects by adding an **ELSE** to the **IF @SmartFillObjectName =** portion of the SQL code. See below for an example.

- When doing a SmartFill Lookup, the SF001 table contains the values that show in the SmartFill "Make a Selection" window.

- If you add a field to an Object then you must also add it to the spSmartFill stored procedure.

- If you want to change the spSmartFill stored procedure in the future or add another Custom SQL object, save the changes you made to the template and update by adding the new sql code (see example towards end of this document). Then run that file against each Company database again. Be sure to replace the old spSmartFill with the newer version.

Examples:
- spSmartFill script for the "ITEMS" Object
- Combining two custom SQL Objects into one spSmartFill stored procedure

spSmartFill script for the "ITEMS" Object

```
CREATE PROC spSmartFill
        @SmartFillObjectID INT,
        @UserID CHAR(15),
        @CompanyID INT,
        @SearchValue CHAR(50),
        @SearchValue2 CHAR(50),
        @SearchValue3 CHAR(50),
        @SearchValue4 CHAR(50),
        @SearchValue5 CHAR(50),
        @SearchValue6 CHAR(50),
        @SearchValue7 CHAR(50),
        @SearchValue8 CHAR(50),
        @SearchValue9 CHAR(50)
AS
DECLARE @SmartFillObjectName CHAR(50)
SET @SmartFillObjectName = (SELECT SF_Object_Name FROM DYNAMICS.dbo.SF002 WHERE
SF_Object_ID = @SmartFillObjectID)

IF @SmartFillObjectName = 'Items' BEGIN
        INSERT INTO DYNAMICS.dbo.SF001
                (USERID,
                CMPANYID,
                SF_Return_Field_String,
                SF_Return_Field_Account_1,
                SF_Return_Field_Account_2,
                SF_Return_Field_Account_3,
                SF_Return_Field_Account_4,
                SF_Return_Field_Account_5,
                SF_Return_Field_Account_6,    -- need to adjust to match Maximum Segments number
                SF_Return_Field_Account_7,
                SF_Return_Field_Account_8,
                SF_Return_Field_Account_9,
                SF_Return_Field_Account_10,
                SF_Return_Field_Integer,
                SF_Return_Field_Currency,
                SF_Field_Value_1,
                SF_Field_Value_2,
                SF_Field_Value_3,
                SF_Field_Value_4,
                SF_Field_Value_5,
                SF_Field_Value_6,
                SF_Field_Value_7,
                SF_Field_Value_8,
                SF_Field_Value_9,
                SF_Field_Value_10)
```

```
SELECT
        @UserID,
        @CompanyID,
        IV00101.ITEMNMBR,--Return Field String
        '', --Account Segment 1
        '', --Account Segment 2
        '', --Account Segment 3
        '', --Account Segment 4
        '', --Account Segment 5
        '', --Account Segment 6   -- need to adjust to match Maximum Segments number
        '', --Account Segment 7
        '', --Account Segment 8
        '', --Account Segment 9
        '', --Account Segment 10
        0,  --Integer Placeholder
        0,  --Currency Placeholder
        IV00101. ITEMNMBR,  --Display Field 1
        IV00101. ITEMDESC,  --Display Field 2
        IV00101. ITMCLSCD,  --Display Field 3
        FirstData.AltName, --Display Field 4
        '', --Display Field 5
        '', --Display Field 6
        '', --Display Field 7
        '', --Display Field 8
        '', --Display Field 9
        ''  --Display Field 10
FROM IV00101
JOIN FirstData ON IV00101. ITEMNMBR = FirstData. ITEMNMBR
        WHERE IV00101. ITEMDESC LIKE '%' + LTRIM(RTRIM(@SearchValue)) + '%'  -- Contains
          OR FirstData.AltName LIKE '%' + LTRIM(RTRIM(@SearchValue)) + '%'       -- Contains
RETURN @@ROWCOUNT
END
```

Combining two custom SQL objects into one spSmartFill stored procedure

(Combining Vendors and Customers)

```
CREATE PROC spSmartFill
    @SmartFillObjectID INT,
    @UserID CHAR(15),
    @CompanyID INT,
    @SearchValue CHAR(50),
    @SearchValue2 CHAR(50),
    @SearchValue3 CHAR(50),
    @SearchValue4 CHAR(50),
    @SearchValue5 CHAR(50),
    @SearchValue6 CHAR(50),
    @SearchValue7 CHAR(50),
    @SearchValue8 CHAR(50),
    @SearchValue9 CHAR(50)
AS
DECLARE @SmartFillObjectName CHAR(50)
SET @SmartFillObjectName = (SELECT SF_Object_Name FROM DYNAMICS.dbo.SF002 WHERE
SF_Object_ID = @SmartFillObjectID)
/*
        Vendors Object
*/
IF @SmartFillObjectName = 'Vendors' BEGIN
    INSERT INTO DYNAMICS.dbo.SF001
        (USERID,
        CMPANYID,
        SF_Return_Field_String,
        SF_Return_Field_Account_1,
        SF_Return_Field_Account_2,
        SF_Return_Field_Account_3,
        SF_Return_Field_Account_4,
        SF_Return_Field_Account_5,
        SF_Return_Field_Integer,
        SF_Return_Field_Currency,
        SF_Field_Value_1,
        SF_Field_Value_2,
        SF_Field_Value_3,
        SF_Field_Value_4,
        SF_Field_Value_5,
        SF_Field_Value_6,
        SF_Field_Value_7,
        SF_Field_Value_8,
        SF_Field_Value_9,
        SF_Field_Value_10)
```

```sql
SELECT distinct
    @UserID,
    @CompanyID,
    PM00200.VENDORID,
    '', --Account Segment 1
    '', --Account Segment 2
    '', --Account Segment 3
    '', --Account Segment 4
    '', --Account Segment 5
    0, --Integer Placeholder
    0, --Currency Placeholder
    PM00200.VENDORID, --Display Field 1
    PM00200.VENDNAME, --Display Field 2
    B3900230.VNDCLSID, --Display Field 3
    PM00200.CITY, --Display Field 4
    '', --Display Field 5
    '', --Display Field 6
    '', --Display Field 7
    '', --Display Field 8
    '', --Display Field 9
    '' --Display Field 10


FROM   B3900200 INNER JOIN
            B3900230 ON B3900200.BSSI_Facility_ID = B3900230.BSSI_Facility_ID INNER JOIN
        PM00200 ON B3900230.VNDCLSID = PM00200.VNDCLSID


    WHERE  @UserID=B3900200.USERID and pm00200.VENDNAME LIKE '%' +
LTRIM(RTRIM(@SearchValue)) + '%'
            or pm00200.VENDORID LIKE '%' + LTRIM(RTRIM(@SearchValue)) + '%' -- Contains
    --WHERE CUSTNAME LIKE LTRIM(RTRIM(@SearchValue)) + '%'        -- Begins With
   RETURN @@ROWCOUNT

/*
        Customers Object
*/
ELSE IF @SmartFillObjectName = 'Customers' BEGIN
   INSERT INTO DYNAMICS.dbo.SF001
        (USERID,
        CMPANYID,
        SF_Return_Field_String,
        SF_Return_Field_Account_1,
        SF_Return_Field_Account_2,
        SF_Return_Field_Account_3,
        SF_Return_Field_Account_4,
        SF_Return_Field_Account_5,
```

```sql
        SF_Return_Field_Integer,
        SF_Return_Field_Currency,
        SF_Field_Value_1,
        SF_Field_Value_2,
        SF_Field_Value_3,
        SF_Field_Value_4,
        SF_Field_Value_5,
        SF_Field_Value_6,
        SF_Field_Value_7,
        SF_Field_Value_8,
        SF_Field_Value_9,
        SF_Field_Value_10)
    SELECT distinct
        @UserID,
        @CompanyID,
        RM00101.CUSTNMBR,
        '', --Account Segment 1
        '', --Account Segment 2
        '', --Account Segment 3
        '', --Account Segment 4
        '', --Account Segment 5
        0,  --Integer Placeholder
        0,  --Currency Placeholder
        RM00101.CUSTNMBR,  --Display Field 1
        RM00101.CUSTNAME,  --Display Field 2
        B3900280.CLASSID,  --Display Field 3
        RM00101.CITY, --Display Field 4
        '', --Display Field 5
        '', --Display Field 6
        '', --Display Field 7
        '', --Display Field 8
        '', --Display Field 9
        ''  --Display Field 10


FROM   B3900200 INNER JOIN
            B3900280 ON B3900200.BSSI_Facility_ID = B3900280.BSSI_Facility_ID INNER JOIN
        RM00101 ON B3900280.CLASSID = RM00101.CUSTCLAS

    WHERE  @UserID=B3900200.USERID and RM00101.CUSTNAME LIKE '%' +
LTRIM(RTRIM(@SearchValue)) + '%'
            or RM00101.CUSTNMBR LIKE '%' + LTRIM(RTRIM(@SearchValue)) + '%' -- Contains search
        --WHERE CUSTNAME LIKE LTRIM(RTRIM(@SearchValue)) + '%'        -- Begins With search
    RETURN @@ROWCOUNT

END
```