

# GP Power Tools

What are the benefits

(AKA: How it solves your pain points)

# Purpose of this presentation

- The purpose of this presentation is to provide information about GP Power Tools that answers some common questions.
- It is also to provide real-life examples of “pain points” faced by the Microsoft Dynamics GP community and show how GP Power Tools solves them.
- This is a living document that will be updated regularly with new examples and features.
- Click on hyperlinks to move around the slides or open links.

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# Introduction

Background information for GP Power Tools

# Introduction

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# Why GP Power Tools was developed



- GP Power Tools (and previously the Support Debugging Tool) were developed to help solve issues with Microsoft Dynamics GP.
- It also has features designed to make using and administering Dynamics GP simpler and easier.
- When a “pain point” is discovered, a solution is created and added as a feature to the product.
- Almost all of the features in the product have been driven by product suggestions from the Community.

# Works with all installed dictionaries



- GP Power Tools is fully multi-dictionary enabled.
- Able to provide full resource information for tables, fields, windows, reports, scripts, etc.
- Security features work across all installed dictionaries.
- Easier to prototype and write cross dictionary code with GP Power Tools for Dexterity, SQL, C# and VB.Net.
- Helper functions enhance cross dictionary scripting.

# What modules are in GP Power Tools



- System Features (free with registration of any module)
  - Manual Logging, Screenshots, Email, Dex.ini Settings
- Administrator Tools
  - Resources, Security, Company Colors, Window Positions, Usability Enhancements, User License Management
- Developer Tools
  - Triggers, Scripting (Dexterity, SQL C# & VB.Net), Parameters Lists
- Database Tools
  - Data Export/Import, Database Validation

[Blog Article](#)

# System Features



- GP Power Tools Logging Control
- Capture Screenshots
- Send Email
- Dex.ini Settings
- Find a Window
- Administrator Password Setup
- Logging Settings
- Email Settings
- Configuration Export/Import

[Blog Article](#)

# Administrator Tools Features

- Resource Information
- Security Profiler
- Security Information
- Security Log
- Security Analyzer
- Enhanced Security
- Security Denied
- Security Hidden
- Administrator Settings
- Dex.ini Configuration
- Dictionary Control
- Company Login Filter
- Window Position Memory
- User Activity Log
- Login Limits

[Blog Article](#)



# Developer Tools Features

- Trigger Status
- Runtime Executer
- SQL Executer
- .Net Executer
- Project Setup
- Trigger Setup
- Runtime Execute Setup
- SQL Execute Setup
- .Net Execute Setup
- Parameter Lists
- Dynamic Trigger Logging

[Blog Article](#)

# Database Tools Features



- XML Export
- XML Import
- Database Validation

[Blog Article](#)

# Web Client Compatibility

- GP Power Tools is Web Client compatible. However some features do not make sense on the web client or are not supported by Microsoft on the web client. Below are some features not supported:
  - Capturing Screenshots
  - Macro Logging
  - Window Position Memory & preventing offscreen windows
  - Company Color Themes & Changing window titles

# System Features

Provided at no cost when any other module is registered

# System Features



- [Capturing & Emailing Logs](#)
- [Capturing & Emailing Screenshots](#)
- [Using High Resolution Monitors](#)
- [Sending Emails from inside GP](#)
- [Finding windows in Dynamics GP](#)

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# Capturing & Emailing Logs

- Use a single click to turn on logging and a single click to turn off logging.
- Captures up to five logs: DEXSQL Log, SQL Profile Trace, Dexterity Script Log, Dexterity Script Profile, Macro.
- Can email logs when finished.
- No need to change Dex.ini Settings or re-launch GP.
- Does not affect other users on Terminal/Citrix Server.

# Capturing & Emailing Screenshots

- Use a Single click to capture screenshots of all open windows in GP, even when windows are overlaid.
- Save screenshots or email them.
- Email includes System Summary report with everything about the workstation, server, application and products.
- Email can include Dynamics.set and Dex.ini files.

# Using High Resolution Monitors

- GP Power Tools can adjust registry settings to fix Bitmap font sizing, when font size is incorrectly set to 120%.
- GP Power Tools can adjust registry and system settings to enable Bitmap Scaling which makes GP scale properly on High resolution monitors when the DPI Setting is greater than 100%.
- Both of these settings can be set manually, but GP Power Tools simplifies the process.



# Sending Emails from inside GP

- GP Power Tools has its own email engine to send emails from inside Microsoft Dynamics GP.
- Can be used to log application issues with support teams or administrators.
- Works with Outlook, any other MAPI Client, direct to a SMTP Server or with Exchange Web Services.
- Can be used on a terminal server when no mail client is installed, or from web client session.

# Finding windows in Dynamics GP

- The web client introduces a find window to help you navigate.
- GP Power Tools exposes a similar window in the desktop application.
- Just press Ctrl-F and type in what you are looking for.
- All windows on the menu navigation that contain your search term are displayed along with the navigation path.

# Administrator Tools

Everything that makes GP easier to use and administer

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- [Satisfy Auditor's Security requests](#)
- [Remove access without duplicating](#)
- [Capturing Security Data](#)
- [Creating Security Tasks and Roles](#)
- [Analyzing Security Data](#)
- [Avoid Data Entry Errors](#)

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# Identifying Dictionary Resources

- What is the table field linked to this window field?
- What is this obscure SQL column or table name?
- What is the data type and keyable length of a field?
- What other tables store this field?
- What does this resource ID value refer to?
- What are the parameters for this function or procedure?
- All of these questions and more are easily answered using GP Power Tools Resource Information window.



# Security Reporting Using SQL

- GP Power Tools automatically updates the SY09400 table with all the resources not added by core Dynamics GP.
- Updates table when new dictionaries are installed.
- Checks if updates needed when Security Information or Security Analyzer windows are opened.
- Also creates a SUPERUSER Security Task and Security Role for use instead of POWERUSER.

# Make working with Security easy

- Identifying the cause of privilege errors is simple with GP Power Tools adding more information to the dialog.
- Security Profiler captures all security events and can open automatically to capture errors as they occur.
- Security Information shows current status and what changes can be made to grant access.
- Security Information shows who will be affected by changes to Security Tasks or Roles.

# Satisfy Auditor's Security requests



- Easily see the Operations that users have access to, and export to Excel using tab or comma delimited.
- Show the Operations that make up a Security Task or Security Role.
- Show what Operations users have actually used.
- Compare Operations actually used against access granted.

# Remove access without duplicating



- Normally to remove access to one Operation without affecting any other users required duplication of all Security Tasks and Security Roles which provided access.
- Deny Based Security adds an additional layer to the security model where Operations can be denied on a User and Company basis.
- Deny Based Security can also hide menu options that normally cannot be removed.
- Deny Based Security cannot be bypassed by removing GP Power Tools from the Dynamics.set launch file.

# Capturing Security Data

- GP Power Tools can log security events to capture statistical data about what resources users actually use.
- The first and last time a resource is accessed is recorded along with how many times the access to the resource was granted or denied.
- The data is captured on a system wide, company level, user level and company & user level.
- The data can be easily exported for review in Excel.

# Creating Security Tasks and Roles



- GP Power Tools makes it simple to create new or update existing Security Tasks and Security Roles.
- You can use the Security Profiler to perform a task and capture what resources are used. Then create/update security settings based on the data captured.
- You can also use the Security Log which has the data about the resources used by a user. You can select the resources and then create/update security settings based on the selected data.

# Analyzing Security Data

- GP Power Tools' Security Analyzer tool has 40 queries which look for known issues with the security settings.
- You can identify settings that are not used, companies that do not have security enabled; who the POWERUSERS are; and much more.
- Using data captured by the Security Log feature, you can also see a comparison of what a user has access to versus what they are actually using.

# Avoid Data Entry Errors

- GP Power Tools allows you to apply a different color scheme to each company. Users will then see instantly which company they're logged into.
- This helps avoid transactions being entered into the wrong company.
- Adding Company ID and User ID to the title bar makes switching between multiple instances of GP easy.



# Using Long Company Names

- GP Power Tools can expand the Company Name selection drop down list to take the full width of the window so the full text of a long company name can be seen.
- GP Power Tools remembers the last company used and defaults this back when logging in or switching companies.

# Avoid SQL Password Expiring

- Using SQL Server to implement password policy with password expiry provides increased security.
- However, it is possible for a password to expire while a user is currently logged in. This causes the connection to be terminated and the data to be left in an unknown state and can potentially damage data.
- GP Power Tools can provide warnings of impending password expiry a specified number of days ahead and direct the users to change their passwords.

# Losing Windows off screen

- Some windows in Microsoft Dynamics GP remember their position. Positions are measured relative to the main application window (below toolbar and to the right of shortcut bar).
- Windows can open off screen and only be “recovered” with a complex keyboard and mouse combination. This is very common on dual monitor or terminal servers.
- GP Power Tools can prevent windows opening off screen and always restore windows to the nearest monitor.

# Remembering Window Positions

- Users often open windows and then move and size them to their preferred settings.
- GP Power Tools can remember the size, state and position of any window in any dictionary in the application.
- Defaults to common transaction and master windows.
- Works best in combination with the option to prevent windows opening off screen.
- Use Startup shortcut group to set up windows automatically.

# Rolling out Dex.ini Settings

- Changing system level Dex.ini Settings can be a lot of work as it would require you visit every workstation.
- Even on a terminal server, you can set up the system for individual system level Dex.ini files for each user.
- GP Power Tools can automatically add, update or remove settings from the system level or user level Dex.ini file.
- Can be used to clean up winspool= entries from Terminal Server/Citrix server Dex.ini files to improve performance.

# Troubleshooting Customizations

- When troubleshooting issues, you need to isolate the cause by disabling customizations and add-on products.
- GP Power Tools Dictionary control allows triggers and alternate windows to be disabled without restarting.
- Products can be disabled for current session only or until enabled again (option to select users and/or companies).
- Visual Basic for Applications (VBA) and Visual Studio add-ins can be also disabled after restarting.

# Remembering System Password

- When logged in as administrator it can be frustrating to continuously be asked for the System Password.
- GP Power Tools can remember the System Password and GP Power Tools Administrator Password during the current session so it only needs to be entered once.
- This feature is available for all GP Power Tools versions.
- Dynamics GP 2018 offers similar feature, which GP Power Tools can disable if desired.

# Control access by configuration

- Control access to companies based on the application configurations.
- Only allow access to specified companies when using a specific application folders or launch files.
- Ensures customizations or addon products are only used with the correct companies.
- Designed for multi-national companies or companies with different sets of custom code.

# User License Management



- Track user logging in and logging out activity.
- Track maximum sessions logged in on a system, per user and per company basis.
- Automatic Logout with many options including warning dialog and automatic saving.
- Login Limits to control how many sessions a user can log into or how many users can log into a company.

# Developer Tools

Scripting and trigger features for debugging and customization

# Developer Tools



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- [Creating Customizations](#)
- [Self Service Support Scripts](#)
- [Custom RW Functions](#)
- [Custom SBA Service Procedures](#)
- [Custom Scheduled Events](#)
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# Troubleshooting “No Repro” issues

- This is what the original Support Debugging Tool was created for.
- Identifying the cause of an issue that cannot be reproduced on demand can be extremely difficult.
- Using Triggers and Automatic Logging Mode, GP Power Tools can watch for the issue to occur and capture logs.
- Other actions available include sending emails, displaying dialogs, capturing screenshots or saving table contents.

# Creating Customizations

- Creating customizations can be complex and expensive.
- Using GP Power Tools Triggers and Scripts make it simple.
- Can use a combination of Dexterity, SQL, C# and VB.Net.
- No deployment step, available automatically once saved.
- No upgrade step, just comes through with table data.
- Can read and write Modifier added local fields.
- Works on the web client, unlike VBA.

# Self Service Support Scripts

- Many sites have scripts they run on a regular basis for solving support issues or just updating data for business processes.
- GP Power Tools scripts with parameter lists to ask questions can be used to allow users to perform these actions themselves without exposing them to the scripting tools.
- Scripts can be available in read-only executer windows or added to existing windows as window or field menus.

# Custom RW Functions

- Getting data on GP Reports and Word Templates can be difficult especially if you cannot create a relationship.
- You might not be able to create a relationship if you don't have all the columns needed or if there is already a relationship for the same table already in use.
- GP Power Tools allows you to create custom RW functions which can get any data or perform a task.
- Works on web client when VBA does not.

# Custom SBA Service Procedures

- Service Based Architecture (SBA) REST based Web Service Calls provide an excellent method of sending data to or from Microsoft Dynamics GP.
- However, Microsoft has not exposed every data object nor all functionality in their built in service procedures.
- Using GP Power Tools you can create your own Service Procedures to perform any integration, task or process.
- Deployed when saved, no need to restart services.

# Custom Scheduled Events

- Create Scheduled Events which perform any desired actions within Dynamics GP.
- Events can be scheduled to run Daily, Weekly or Monthly.
- Events can be timed to repeat every X minutes.
- Events can be scheduled for login or logout.
- Events can be enabled for specific users and/or companies or all users.

# Prototyping Development

- The normal process of writing cross dictionary Dexterity or .Net code can be slow as it requires the code to be compiled, deployed, application restarted each time.
- Using GP Power Tools, Dexterity, SQL, C# & VB.Net code can be developed and tested without needing Dexterity, SQL Server Management Studio or Visual Studio loaded.
- Dexterity and SQL scripts can be converted to pass through scripts (with optional parameters), which can be cut and pasted into your development dictionary.

# Enhanced Debugger Experience

- Enhanced features when using the Dexterity Script Debugger in runtime mode with GP Power Tools installed.
- GP Power Tools adds a Dictionary Context selection window to the Script Debugger to switch between dictionaries without having to exit or change Dex.ini settings.
- GP Power Tools will also link Dictionary Context to the Resource Information window so that as you change windows, the context is changed to match.

# Database Tools

Checking integrity of User and Company data and copying specific data for transfer or backup

# Database Tools



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- [Forcing users to change password](#)
- [Ensuring Smooth upgrades](#)
- [Copying settings between systems](#)

# Create Logins after moving server



- When moving Dynamics GP to a new server or creating a test server, all the user's SQL logins and database users need to be recreated.
- You might need to clean up users and companies not transferred.
- Database Validation will ensure that the Dynamics GP Users, Companies and Company Access match the SQL Logins, Database and Database Users.
- Passwords can be set manually or created automatically and emailed to users.

# Forcing users to change password



- If you want to force a large number of users to reset their passwords, Microsoft Dynamics GP does not offer a easy way to perform this in bulk.
- Database Validation can be used to reset logins for any user currently not logged in. Then you can recreate the login using a manual or automatically generated password.
- You can enable Password Policy to force the password to be changed on next login.

# Ensuring Smooth upgrades

- There are many issues that can cause problems when upgrading, including:
  - Tables not in the correct starting format.
  - References to database or dictionaries that don't exist in the Dynamics Utilities tables.
  - Account Framework mismatches.
- GP Power Tools Database Validation looks for and fixes all these problems if they exist.

# Copying settings between systems



- Transferring data between systems can be difficult, requiring the data to be mapped at the SQL level or set up in the Import Utility.
- Using GP Power Tools XML Export, you can specify exactly which tables to export with an optional SQL where clause. Data is exported as a single XML file.
- GP Power Tools XML Import can import the data easily.
- This can be used to backup and restore testing data, or send data to a support agent without needing huge SQL Database backups.

# Bottom Line

How do you get GP Power Tools

# Bottom Line



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- [How can I get GP Power Tools?](#)
- [What does GP Power Tools cost?](#)

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# What versions of GP are supported?



- GP Power Tools for Microsoft Dynamics GP is supported for the following versions:
  - Microsoft Dynamics GP 2010
  - Microsoft Dynamics GP 2013 (including R2)
  - Microsoft Dynamics GP 2015 (including R2)
  - Microsoft Dynamics GP 2016 (including R2)
  - Microsoft Dynamics GP 2018 (including R2)



# How can I get GP Power Tools?

- Partners can get NFR (Not For Resale) keys for their in house and demo systems.
- Customers can get a free 30 day trial for their systems.
- Portal: <http://WinthropDC.com/GPPT>
- Webpage:

[https://www.winthropdc.com/products\\_GPPT.htm](https://www.winthropdc.com/products_GPPT.htm)

# What does GP Power Tools cost?

- GP Power Tools is sold as an annual subscription.
- Required System Features module costs US\$100 per year.
- Three available modules costs US\$400 each per year:
  - Administrator Tools
  - Developer Tools
  - Database Tools



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