Syniti Solutions psaSAPConfiguration

Installation, Configuration & User Guide

Contents

Overview

psaSAPConfiguration has two key features to help project work with SAP Data Migration. The first part is using SPRO to find "optional" fields - turned "required" - based upon SAP Configuration. The second part is the ability to compare two SAP Systems looking for different configuration values. The process can also be used to compare SAP ERP to MDG where the configuration should be identical.   This application saves critical time during load cycles and initial configuration.

Key Features:
1. Ability to extract across SPRO configurations from multiple SAP systems.
2. Activate or Deactivate the Auto Generation of SPRO rules and reports
3. Logging all data errors for fields found "required" based upon user configuration
4. Compare processes looking for configuration differences
5. Compare has list builder for tables and columns
6. Compare processes ability to exclude columns like dates and user id that are often different
7. Compare uses the output from the collect table downloads.
8. Compare processes can be used for Master Data tables looking at MDG and SAP ERP systems.

Install psaSAPConfiguration

The application can be installed on Syniti Solutions DSP versions 7.0.1 and above

Download the Application & License

The psaSAPConfiguration application and/or license are obtained by opening a support ticket at support.syniti.com.

Perform the following steps to retrieve the necessary information for a license request:

1. On the DSP application server, locate the Hardware Identifier program (called **"HardwareIdentifier.exe"**) included in a zip file along with the DSP installation software and documentation previously downloaded from Syniti.

2. Open the program.

3. Click **Generate**.

4. Copy the automatically generated ID and collect the following additional information. All information below pertains to the application server running DSP; no information is needed regarding the database server:

   a. Hardware ID (as mentioned above)

   b. Windows computer name

   c. Number of processor cores (as shown in the Task Manager CPU tab)

      d.   Usage of the DSP instance, as in, DEV, TEST (or QA) or PROD

   5.   Syniti Licensing will deliver the license file via the support ticket.

Install the License

Perform the following steps to install the license:

1. Log in to the DSP site as an Administrator.
2. Select **Admin > Configuration > Product Licenses** in the Navigation pane.
3. Click the Upload a file icon in the **FILE NAME** column next to the Upload a New Product License link.
4. Locate the license file that was provided by Syniti Licensing.
5. Click **Open**.
6. Verify the license is uploaded.

      a.   **NOTE**: If the Navigation pane does not display all the licensed components as expected, use the browser refresh button or the F5 key to refresh the screen. At this point the full vertical menu will appear.

Install the Application

Perform the following steps to install the application:

1) Right click on **psaSAPConfigurations.zip** and go to **Properties**. Ensure to unblock the file if it is blocked.
2) Unzip the file
3) Navigate to the DSP Installation folder (e.g. D:\BOA\DSP or C:\Program Files (x86)\BOA\DSP)
4) Back up the DSP Install\BOA\DSP folder to a compressed zip file
5) Back up all Syniti-supplied SQL Server databases or verify that a complete recent backup already exists

      a)   Supplied databases: AutoGen, cMap, cMap_Data, cMass, cMass_Data, Console, CranPort, CranSoft, DataConstructionServer, DataDialysis, DataGarage, DBMoto_Client, DGE, DGE_Data, dgReports, dgSAP, dspAddOn, DSPCommon, dspMonitor_AccPak, dspMonitorConfig, DSW, IGC, Integrate, IntegrateStaging, InterfaceServer, MC, & RADToolkit

6) Stop IIS

   This process disconnects all active DSP users, so it is highly recommended to perform the install when no users are on the system. This process stops IIS on the web server.

      a)   Open Windows *Start* Menu.
      b)   Open the **Command Prompt** (run as an administrator).
      c)   Type: **IISReset –stop**.

d) Press the **Enter** key.

e) Leave the Command Prompt window open for later use.

7) Stop all services that start with "Cransoft Service …"

This process stops all DSP background jobs, so it is highly recommended to perform the install when no scheduled operations are running on the system.

a) Open Windows *Start* Menu.

b) Select **Administrative Tools**.

c) Run **Services**.

d) Right-click the DSP service.

e) Select **Stop**.

f) Repeat the previous two steps for any additional DSP services.

8) Copy the **Web** folder from the zip file to your existing DSP install\Web folder. If prompted, replace the files in the destination.

9) Copy the **Databases** folder from the zip file to your existing DSP install\Databases folder. If prompted, replace the files in the destination.

10) Navigate to DSP install\Databases and execute file **psaSAPConfiguration_Install.bat** (run as an administrator)

11) Start all services that start with "Cransoft Service …"

a) Open Windows *Start* Menu.

b) Select **Administrative Tools**.

c) Run **Services**.

d) Locate the DSP service(s).

e) Right-click the DSP service.

f) Select **Start**.

g) Repeat the previous two steps for any additional DSP services.

12) Start IIS

a) Open Windows *Start* Menu.

b) Open the **Command Prompt** (run as an administrator).

c) Type: **IISReset –start**.

d) Press the **Enter** key.

Checklist - SPRO

1. Download the required configuration table in collect
2. Click Build Configuration in psaSAPConfiguration to build out the local settings
3. Click Activate AutoGen process so the process will be created when Targets are generated.
4. Click Target Create in Auto Gen
5. Click Target Create Reports in Auto Gen
6. Verify the SPRO report and SPRO stored procedure were generated correctly
7. Execute the Target in Transform and a report of errors will appear at the end of the process.
8. psaSAPConfiguration will store the errors found via the Transform target stored procedure.
9. Developer should review the results with the users and get better requirements to update these values.

   SAP tables required for SPRO process. (**T001, T077D, T077K, T077X, T077Y, T078D, T078K, T079K, T130A, T130F, T130W, T133F, T134, T137, TMODU, TSTC, TSTCT**)

Checklist - SAP Compare

1. Download Target A tables into a local SQL SERVER database
2. Download Target B tables into a local SQL SERVER database
3. Build Lookup Group Table list using wild card entry, Collect Group or manual entry
4. Build the exclude table column process to remove columns to be excluded
5. Create an entry in the SAP Compare web page and select Target A and B and LookupTableGroup
6. Click the load tables toolbar so the compare has a table list to process.
7. Click submit compare to start the process running in the background.
8. Click on tables to review table results from the compare.
9. Go back to Lookup Table Column exclude if the results are finding differences in fields that do not matter.

Checklist - SP SPRO Databases

SPRO Database can handle multiple configuration for different SAP environments.
Click add database and then Build Configuration to load configuration and SPRO SAP Fields that are marked as required.

These tables must be downloaded via Collect before performing Build Configuration task. The Remove Database will remove the configuration tables and the SAP SPRO fields but it will not remove any changes to the Transform Targets.

Activate Auto Generate is a process to add SPRO Target generation during the Auto Gen build target execution. De-Activate Auto Gen will remove future Target being generated. It will not remove Targets already generated.
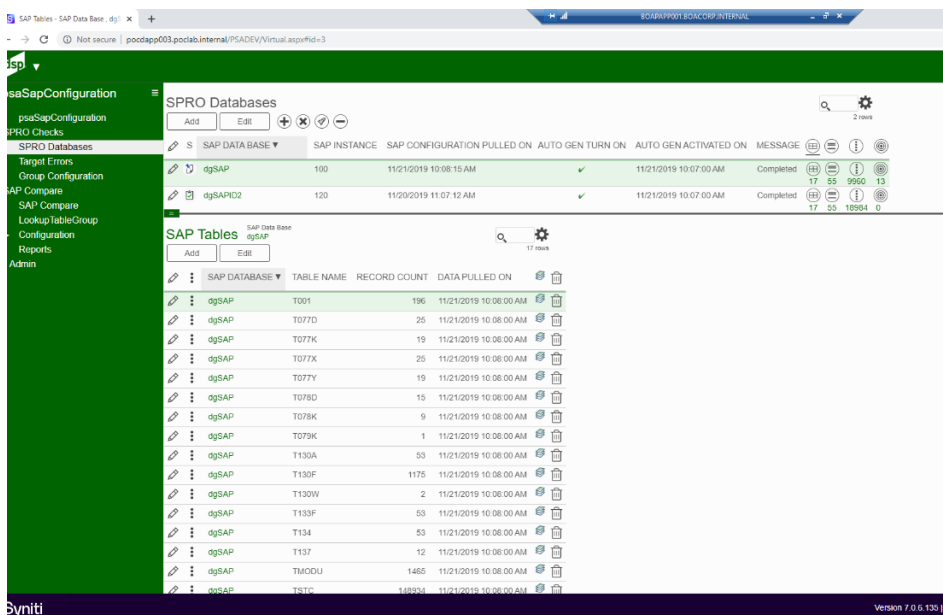
Image Definitions:

Image	Description of the process
	Build SAP Configuration for selected database for SPRO
	Removes all SAP Configuration for selected database.
	Activate the Auto Gen process for building new Targets with SPRO rules and reports.
	Deactivate the Auto Gen process so no new Target will have SPRO rules or reports.
	Link to show SAP tables with record counts used to build the SPRO configuration
	Link to show all the category tables that are active in the application.
	Link to show all SAP SPRO fields for the current database configuration.
	Link to show all Targets with SPRO reports and rules generated

Targets – Error Log

Targets generated with SPRO rules and reports will display results on this page.
All errors will show the count in the first image and a link to Transform will be the second image. A user can regenerate the reports or remove reports from this page.
There is a time stamp the last time each set of errors were generated. The errors will remain in the database until a user removes them or the target runs without errors.

Image Definitions:

Image	Description of the process
	Rebuild SPRO Reports and Rules for the selected Target
	Removes SPRO Reports and Rules from the selected Target.
	Deletes selected error rows from the log.
	Deletes all records from the log.

Checklist - SP Category – Group Fields

Category are created to help build a list of tables for the SPRO process. The Customer, Material and Vendor categories come pre-defined to extract the optional fields marked required based upon SAP Configuration. Tables like ADRC may be in more than category since addresses apply to both customers and venders. The Join Add On is an added feature to be built in the views.

Note: Categories have special logic behind them to extract the configuration.
If a new category is created, the extract logic must also be developed.

Configuration Table

SPRO configuration tables are used to find all the required fields. These values are loaded for each database selected and generated when Build Configuration is clicked. Tables can be added to the list but extraction logic will need to be developed.

Group Field Identifier

Category tables, Groups and Parent Table are defined on this page. There can been a special Join for tables dealing with customers and vendors.

S	CATEGORY ▾	TABLE NAME	GROUP IDENTIFIER	PARENT TABLE	JOIN ADD ON
	Customers	tt*KNVP			
	Customers	tt*RF02D			
	Customers	ttADR6	KTOKD	ttKNA1	
	Customers	ttADRC	KTOKD	ttKNA1	AND child.zLegacyKUNNR = dbo.ttKNA1.zLegacyKUNNR
	Customers	ttADRCT	KTOKD	ttKNA1	
	Customers	ttADRP	KTOKD	ttKNA1	
	Customers	ttBSEG	KTOKD	ttKNA1	
	Customers	ttBSEZ	KTOKD	ttKNA1	
	Customers	ttKNA1	KTOKD		
	Customers	ttKNAT	KTOKD	ttKNA1	
	Customers	ttKNB1	KTOKD	ttKNA1	
	Customers	ttKNB5	KTOKD	ttKNA1	
	Customers	ttKNBK	KTOKD	ttKNA1	
	Customers	ttKNBW	KTOKD	ttKNA1	
	Customers	ttKNEX	KTOKD	ttKNA1	
	Customers	ttKNVA	KTOKD	ttKNA1	
	Customers	ttKNVD	KTOKD	ttKNA1	
	Customers	ttKNVH	KTOKD	ttKNA1	

SAP Compare

SAP Compare is designed to compare two SAP systems either for Master Data or Configuration Data. Collect must download the data into a local SQL SERVER Database. Add a compare, select Target A and Target B with the correct client values. Load the tables to be compared from the LookTableGroup. Submit the compare to run in the background.
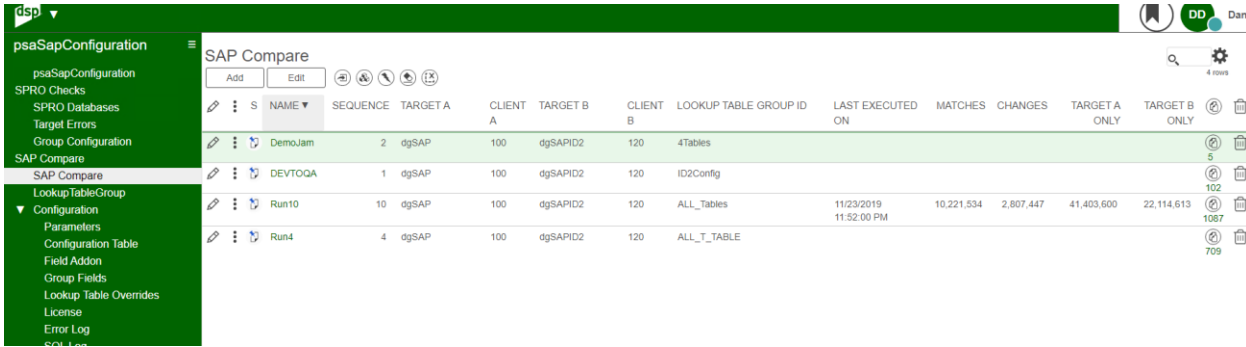
Image Definitions:

Image	Description of the process
	Load tables for comparison that will be executed.
	Submit compare to the background queue to find all difference in the tables
	Refresh the collect tables that are in Target A and Target B so a new compare can be executed after the downloads.
	Delete table results for the selected compare process.
	Delete all tables results for all compares on the page.
	Link to show all table comparison results.

Compare Table

Compare Table shows the record counts in the Target A, Target B, Matching records, Change records, Target A only records and Target B only records. Click the link to see the values in those categories. The Fields image will show all the fields used in the compare. It will show how many changes were found in that field. Fields can be marked as exclude in the Lookup Table Group pages. Tables can be submitted one at time via this page or submitted as an entire group from the Compare page.

S	TABLE ▾	LAST EXECUTED ON	TARGET A TABLE COUNT	TARGET B TABLE COUNT	MATCHES	CHANGES	TARGET A ONLY	TARGET B ONLY		
	MARA	11/25/2019 5:57:00 PM	25,019	21,561	0	14,851	10,168	6,710		224
	T000	11/25/2019 5:57:00 PM	1	1	0	0	1	1		17
	T001W	11/25/2019 5:57:00 PM	3	267	0	2	1	265		61
	T005	11/25/2019 5:57:00 PM	256	237	0	235	21	2		64
	T006	11/25/2019 5:57:00 PM	285	395	187	51	47	157		22
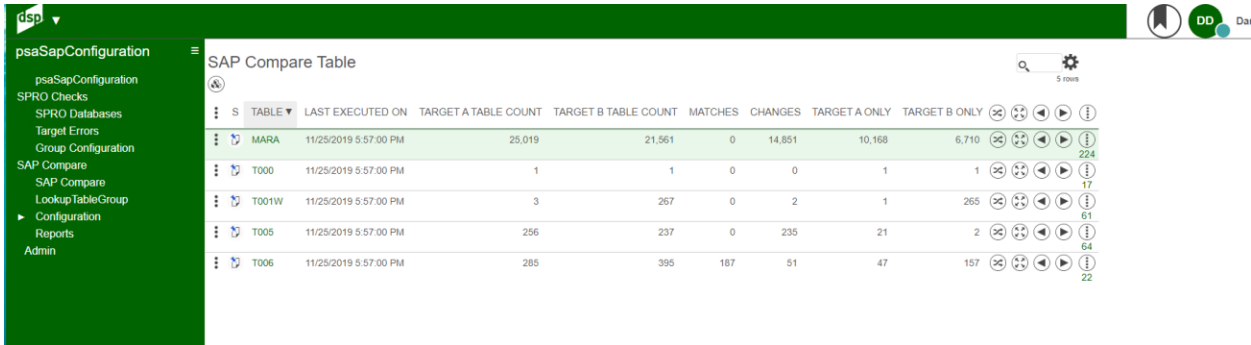
Image Definitions:

Image	Description of the process
	Submit table for comparison.
	View matching data records in both Target A and Target B
	View change data records showing values in Target A and Target B
	Show Target A only records
	Show Target B only records
	Link to Compare Table Fields for the current table.

Compare Table Fields

Compare table fields shows the active columns used in the compare process. It will display the total number of changes found per field. Date and User id fields are often excluded from the compare process so the important data fields can be compared. Lookup Table Group Tables will store the excluded columns for each table. The load tables on the compare will add or remove the fields from the configuration.

Lookup Table Group

Lookup Table groups are created on this page. Tables can be manually entered or loaded from a local SQL SERVER Database. The Vertical View will have table filter so many tables can be loaded with a quick selection.
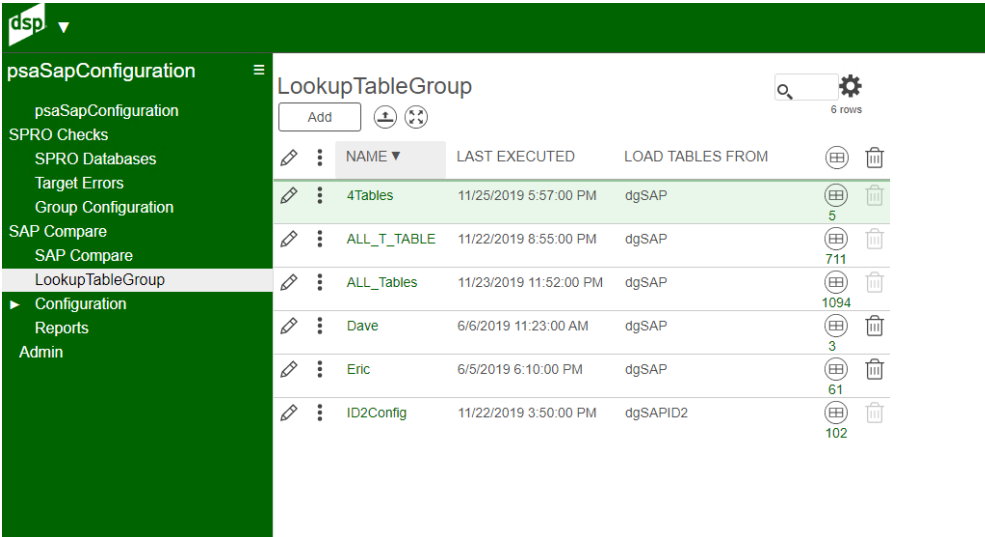
Load From Group is a matching group name from Collect and the process will load all the tables in that group. Load Table where like clause can be a wild card to find all tables that start with a character combination.
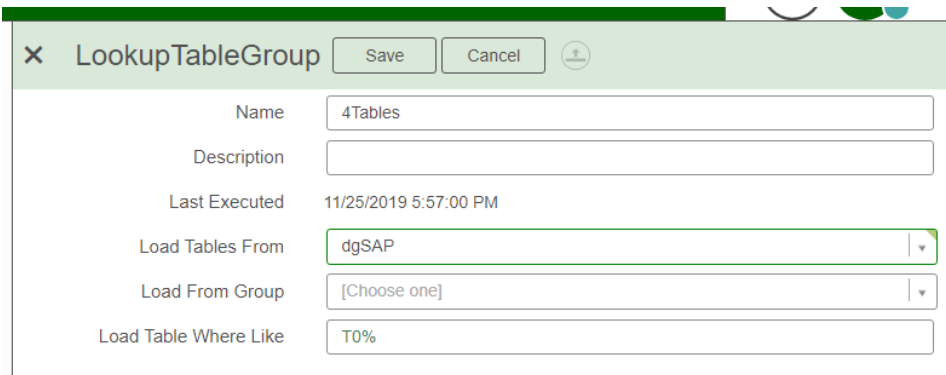
Image Definitions:

Image	Description of the process
	Upload Table list from the database or Collect Group with columns from the database.
	Exclude all Table and column found matching values in lookup table override
	View tables defined for the current group.

Lookup Table Group Table

Tables in the Lookup Table Group are listed here. Click on the field counts to see the fields for each table. Users can add tables manually and click the load fields on toolbar to get the fields populated.

Image Definitions:

Image	Description of the process
	Load fields for selected table reading the SQL SERVER database table definition.
	Link to Table Fields for the current table.

Checklist - SP Lookup Table Group Table Field

Lookup Table Group will contain field information. This field can be deleted from this page. The click Load Tables on the compare page to refresh the list of columns. Fields marked as excluded will not show table column page in the comparison. Key columns must be marked in each table to perform the compare correctly.

Fields with datatype other than character will be casted to character values.
Lookup Table Overrides will mark fields excluded on this page if the table and column name exist in that table.

Lookup Table Overrides

SAP Compare will compare two tables in two different databases. There are times where User Name and Data entry should be skipped for comparison reasons. This page will allow users to configure all excluded columns. Tables may not have a key defined on the tables so this process will allow key field overrides as well. Timestamps and Sequence number are often skipped as well.

The Lookup Table Group page has the toolbar to apply the global exclude columns to that group.

Parameters

Parameter page shows the whether AutoGen has been turned on and at what time.
AutoGen must be turned on for new target SPRO rules & reports to be generated.
The Compare table to background size is used by the SAP Compare when large tables are push
into a single thread mode so small tables can be compared immediately.

Error Log

psaSAPConfiguration stores all data errors for targets activated for the SPRO process.
The data will appear in target reports in Transform. The records can be deleted by selected row
or delete all to reset the error cache.

Image Definitions:

Image	Description of the process
	Delete selected row in Error Log records stored in the table.
	Delete all Error Log records stored in the table.

SQL Generate Log

SQL generate during processing can be viewed for debugging processes on this page.
The delete all tollbar will empty the table.

Image Definitions:

Image	Description of the process
	Delete all SQL Log records stored in the table.

Support and License

Page is not updatable via the Web Application. psaSAPConfiguration is a license app via
Consultant Services as an Add-On Application to DSP. Support is done via the SMT. License
page displays who licensed the application and when the application license expires.

Addendum

Adding steps and clarifications that may not be included above.

1.   Add the relevant dgSAPxxxx database to the SPRO database screen.
2.   Add the default 17 SAP configuration tables to the SAP Tables screen under the relevant db created in 1 above.
3.   Add those same 17 tables from 2 above to Collect for the relevant db in 1 above.
4.   Click button to access Category Tables (SPRO Group Field Identifier).
5.   Add Category, Table Name, Group Identifier, parent table to screen for each target table in db
6.   Click to Activate AutoGen
7.   Click to Build Configuration
8.   Locate Target in Transform and select Target Rules. A new rule has been created that will run when the target is processes.
9.   The above rule will store errors in the psaSAPConfiguration Target Errors - Error log.

Version History

Version	Date	Written By	Written On	Approved By	Approved On
1.0	11/25/2019	Dan Downey	11/25/2019		
1.1	4/17/2020	Paul Garner	4/17/2020		