

SMART 365

Manual of Operation for Platforms

CRM 2011/2013/2015/2016/365 (ONPREMISE-ONLINE)



Version 7.0

<https://smartxrm.microsoftcrmportals.com/en-US/SmartEIABus/>

Smart Process 2018-08-20

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Reviews and Approvals

Review Smart Process

Date	Author	Version	Role
2018-08-20	Mauricio Molina	V1 R1	Comercial
2018-08-20	Juan Carlos Parra	V2 R2	Arquitecto

Aprobaciones Internas

Date	Name	Version	Role

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1 INTRODUCTION

Smart Process company focused on Microsoft Dynamics CRM, introduces an integration product based on the Dynamics platform to cover all the needs of an organization in the use of the solution by providing the required profiles:

It is expected that organizations can count on the support of our organization to grow the use of the solution in the organizations processes in an effective way.

1.1 How Smart Integration works

See PPT

1.2 Smart Integration Support

See PPT

2 INSTALLATION AND IMPLEMENTATION

2.1 Requirements

For Smart Integration Installation and Configuration, the following components are required:

- CRM Dynamics Versions 2011, 2013, 2015, 2016 or 365 (Online or Onpremise):
 - A) CRM Dynamics System Administrator User is required
 - B) Connectivity to the Integration Engine
- Server for Integration Engine:
 - A) Minimum 8 GB RAM, recommended 16GB
 - B) 50 GB Hard Disk
 - C) Intel processor 2.6 Ghz
 - D) Operating System: Windows Server 2008 R2, Windows Server 2012 std, Windows Server 2012 R2
 - E) Framework 3.5 and 4.5
 - F) IIS 7.0 or higher
 - G) Internet

2.2 Integration Engine Implementation

- **Smart Integration**, comes with a .zip file (Smart365 V7.0.zip), unzip the file in your local directory where the integration engine will be installed, there you will find a folder with the same name (Img-1).

Smart 365 Installer V6.1	26/10/2017 11:57 a...	Carpeta de archivos
Smart 365 Installer V6.2	24/11/2017 1:49 p.	Carpeta de archivos
<input checked="" type="checkbox"/> Smart365 V7.0	19/06/2018 6:03 p.	Carpeta de archivos
SmartProcess_samplepkg6	20/06/2018 3:07 p.	Carpeta de archivos
Sol Smart 365	28/05/2018 1:35 p.	Carpeta de archivos
Utilidades CRM	29/04/2018 2:31 n.	Carpeta de archivos

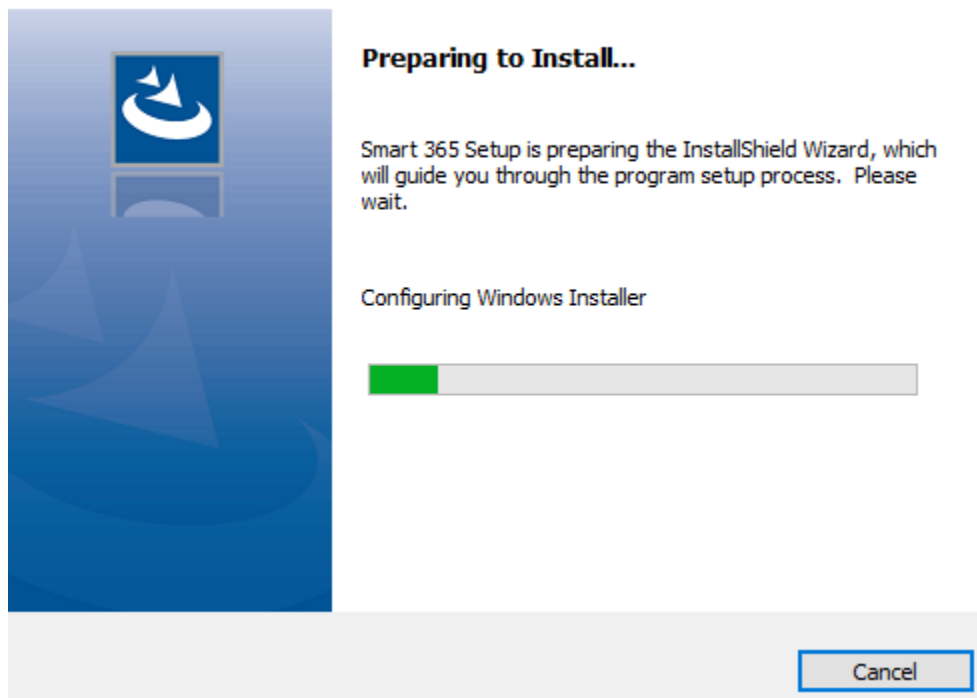
Img-1

- Open the contents of the folder and run the setup (Img-2) file, an installation window (Img-3) will be displayed, wait for it to complete and then press Next (Img-4)

GlobalAssemblyCache	3/05/2018 11:44 a. ...	Carpeta de archivos	
IISRootFolder	3/05/2018 11:44 a. ...	Carpeta de archivos	
program files	3/05/2018 11:44 a. ...	Carpeta de archivos	
0x0409	1/10/2014 10:41 a. ...	Opciones de confi...	22 KB
setup	3/05/2018 11:41 a. ...	Aplicación	1.263 KB
Setup	3/05/2018 11:41 a. ...	Opciones de confi...	6 KB
Smart 365	3/05/2018 11:41 a. ...	Paquete de Windo...	1.706 KB
Smart365 7.0	8/06/2018 12:16 p....	Archivo WinRAR Z...	5.135 KB

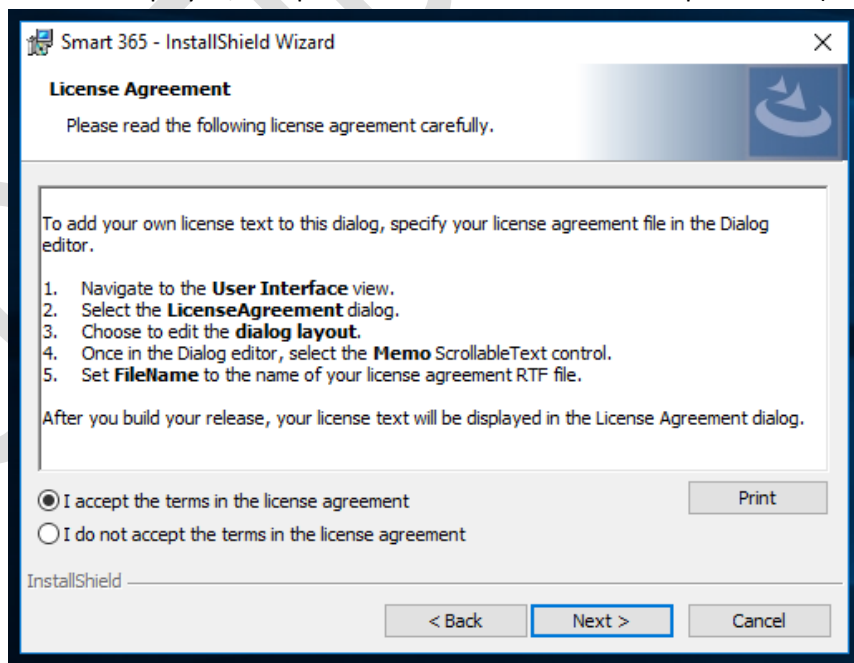
Img-2

Smart 365 - InstallShield Wizard



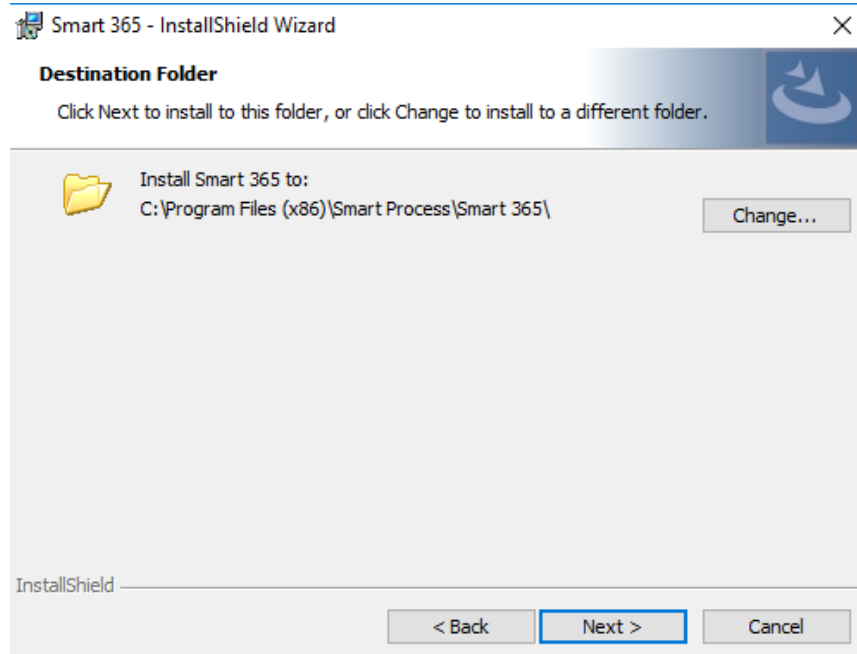
Img-3

- The Contract will be displayed, accept the terms and conditions and press Next (Img-4).



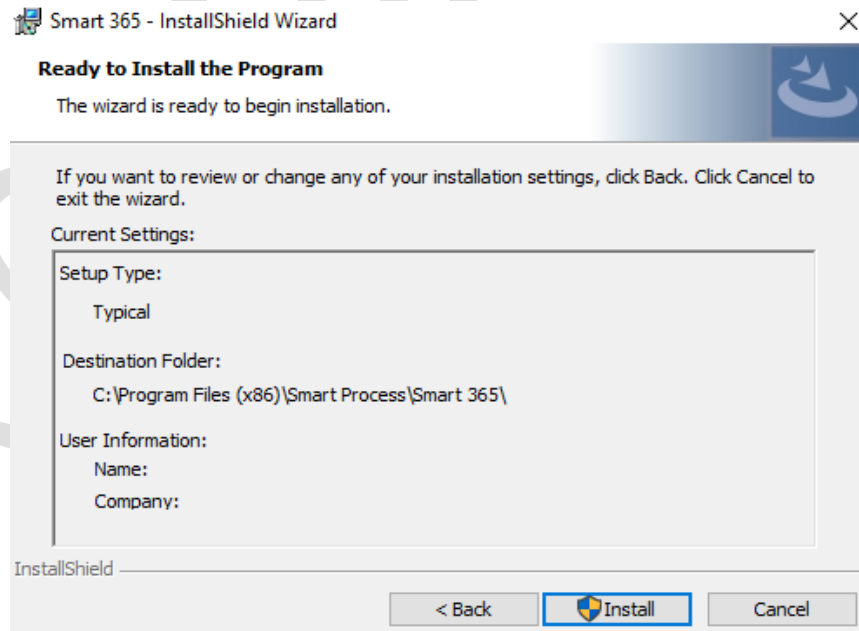
Img-4

- Click Next to install to this folder (Img-5)

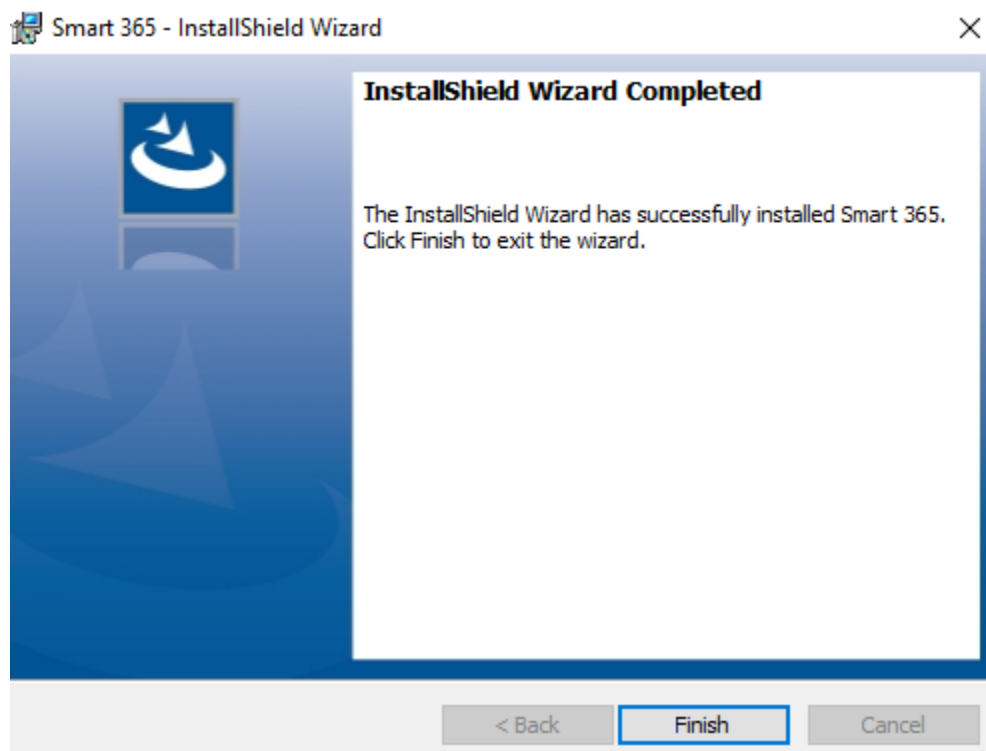


Img-5

- Next, you will find the installation data (Img-6) press Install, you will be notified if the user can make changes to the equipment press Yes and wait for the product to be installed, You will find a screen (Img-7), where you are notified of the installation of the product, click Finish.

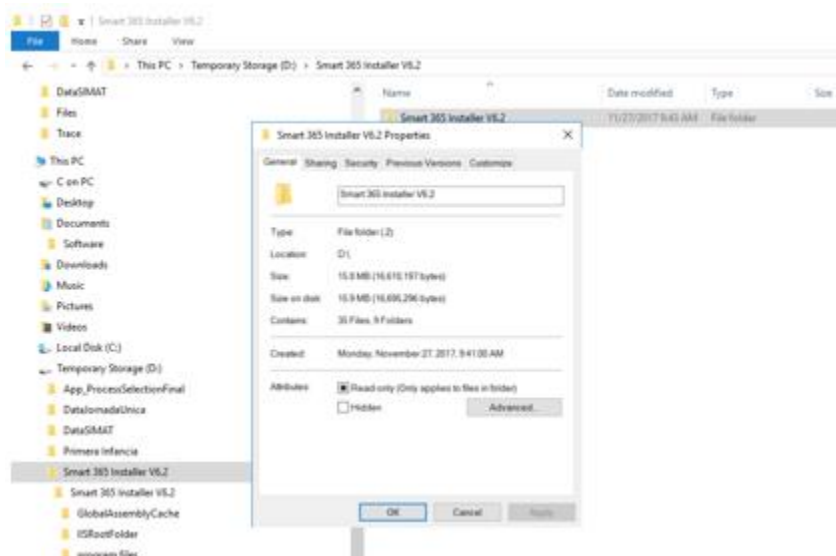


Img-6

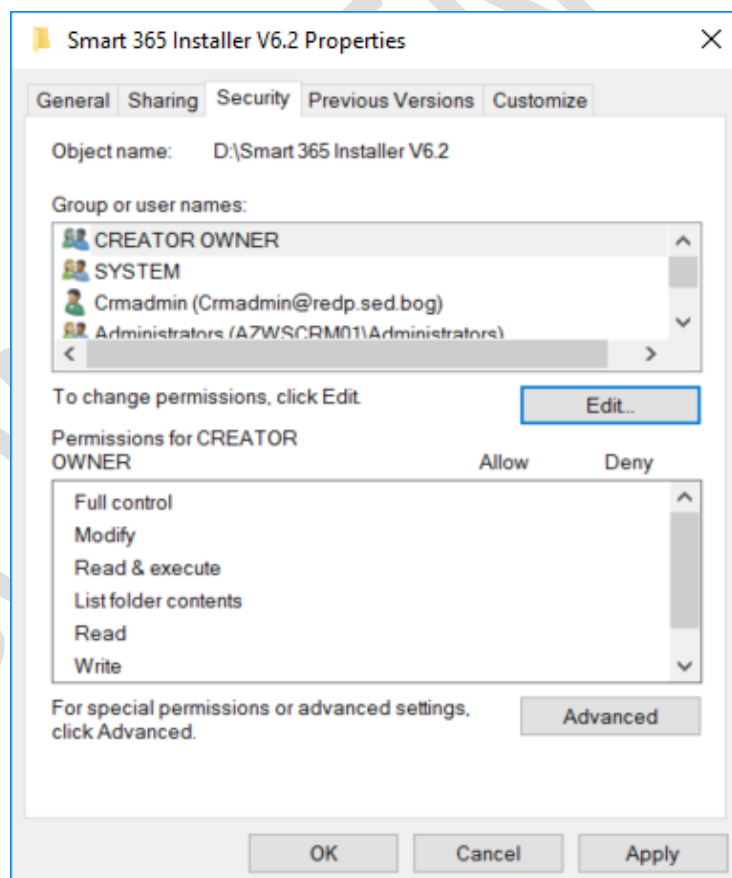


Img-7

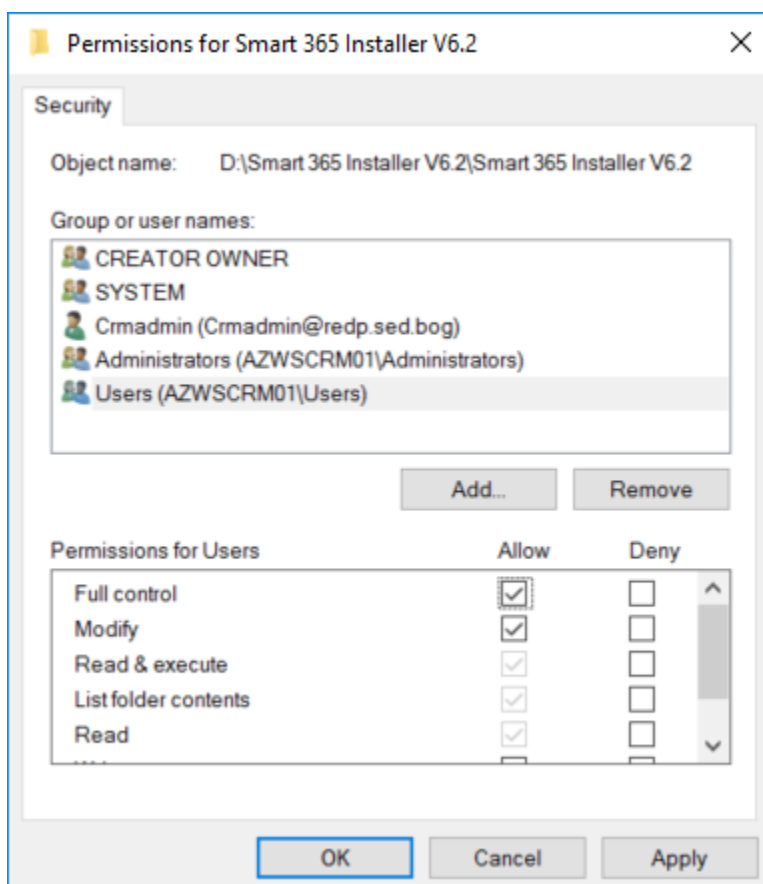
- After the installation is complete, we proceed to give permissions to the folder where the product was installed, for this we go to: \ Program Files (X86) \ SmartProcess (Img-10), there we right click on the Smart folder and Select Properties will open a window (Img-11), and press Edit, another window will open where we select Users in the first tab and give Total Control in the second tab (Img-12).



Img-10

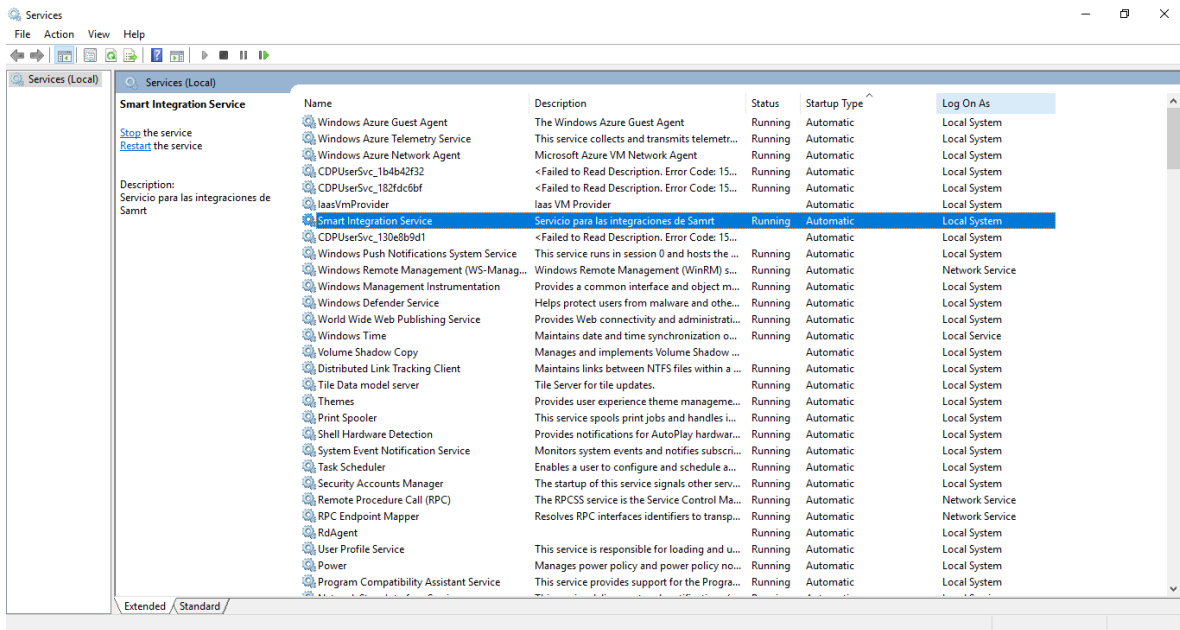


Img-11

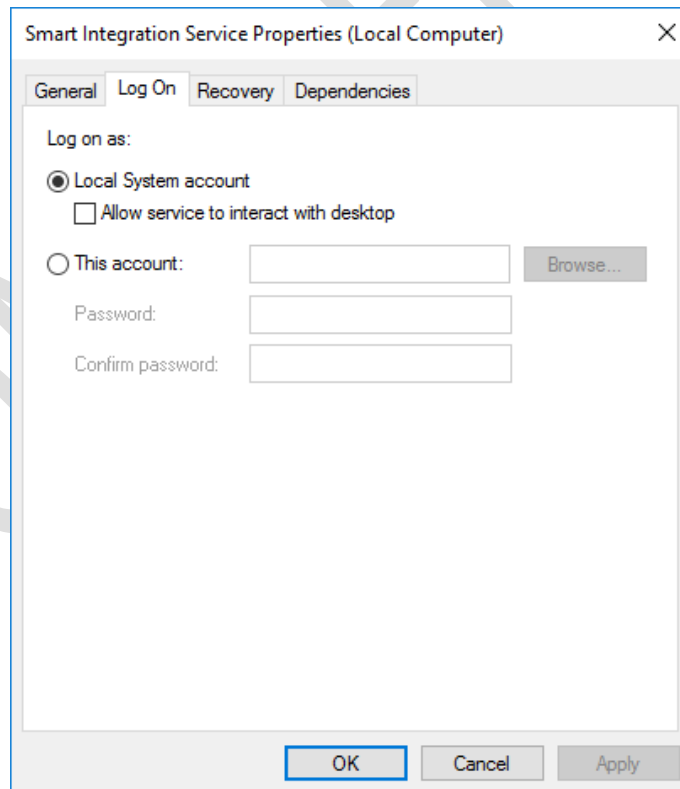


Img-12

- In this moment the Integration engine has been installed correctly, to visualize the correct operation of the engine, we will check the service installed in the machine, for this we execute Windows services and we review the Integration Service SP (Img-13) That its state is initiated and type of Automatic start, we can change the user that executes the service, since this user will execute the integrations and therefore for certain connections (BD SQL, BD Oracle, etc) with Windows authentication the user of the Service will be the one that authenticates, therefore to change it double click on the service and change it in the screen Next (Img-14).



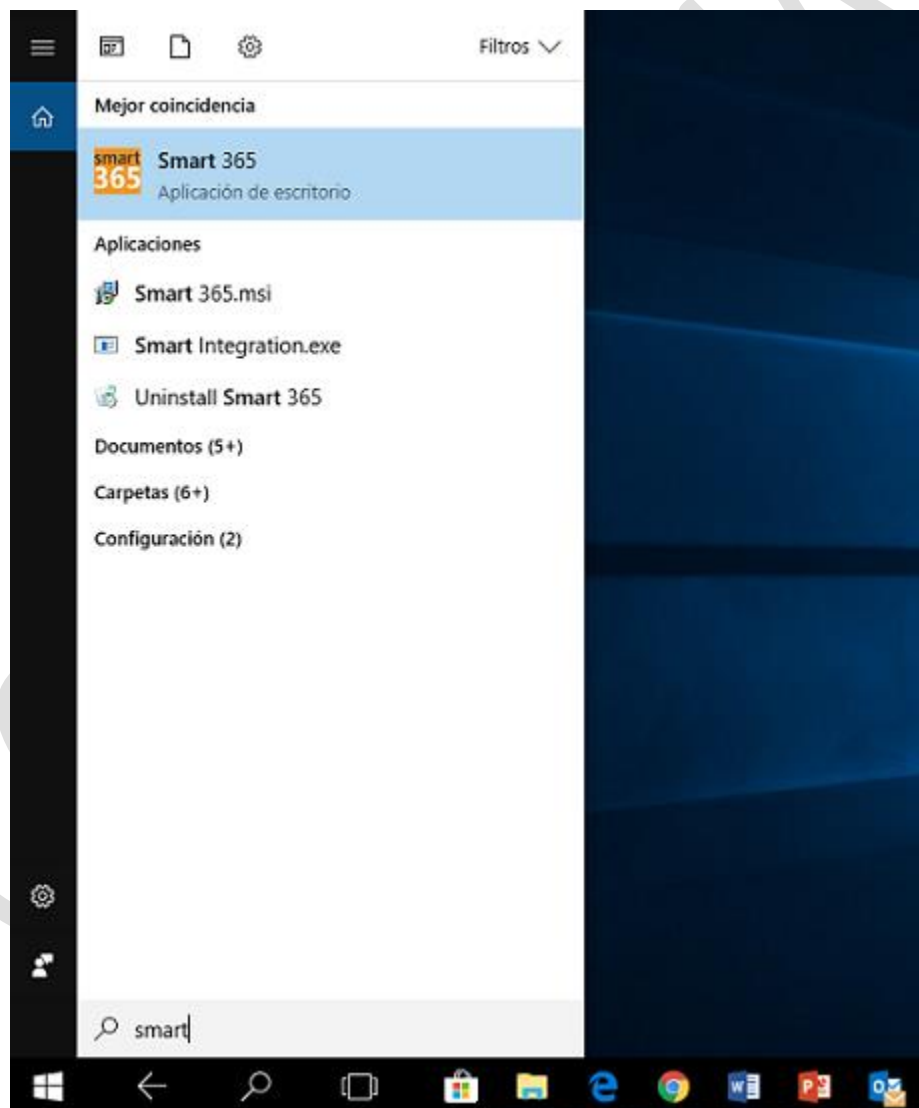
Img-13



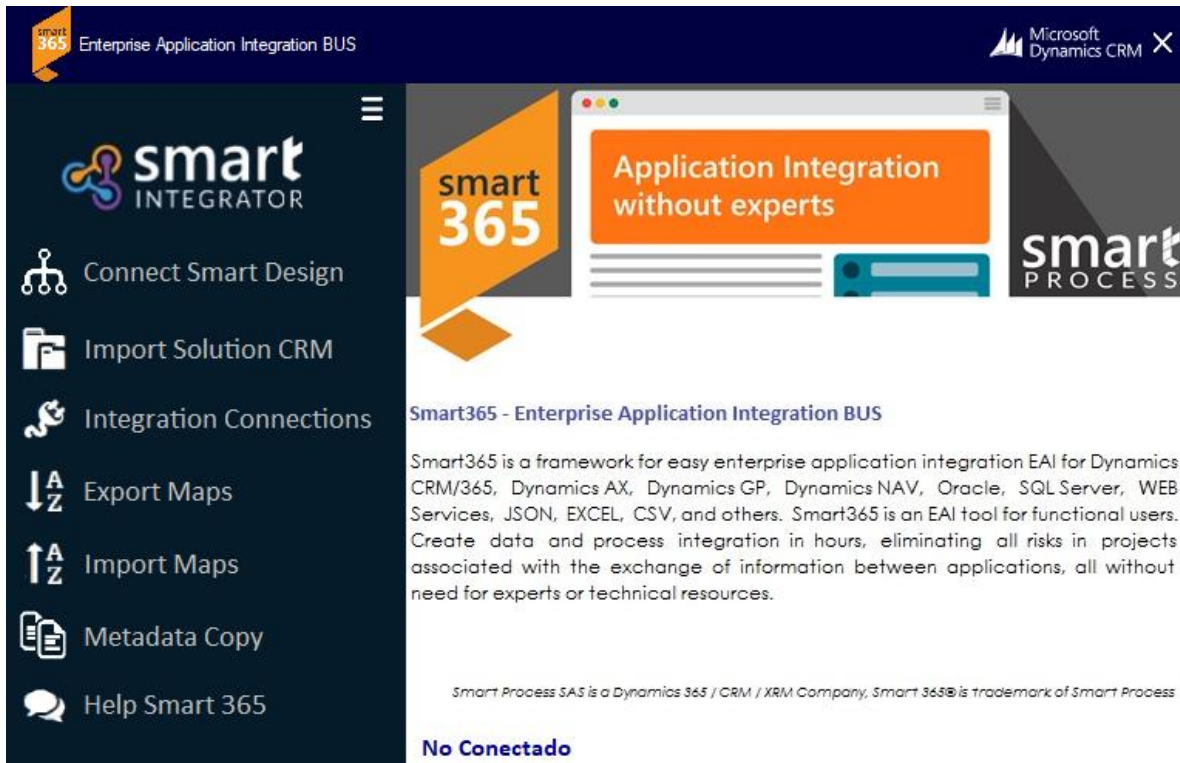
Img-14

2.3 Engine App Settings

- After the installation of the engine, the next step is to configure the engine to connect to the platform of CRM Dynamics where you configure, manage and monitor integrations; so we look for in Windows with the word SMART and there to show us in your search aplicación(Img-15), we proceed to run Smart Integration.exe and there the app opens(Img-16).



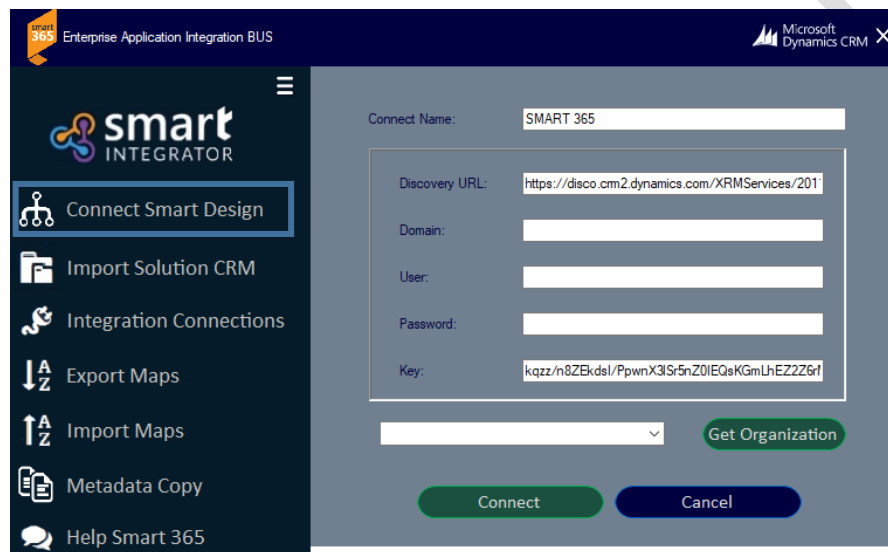
Img-15



Img-16

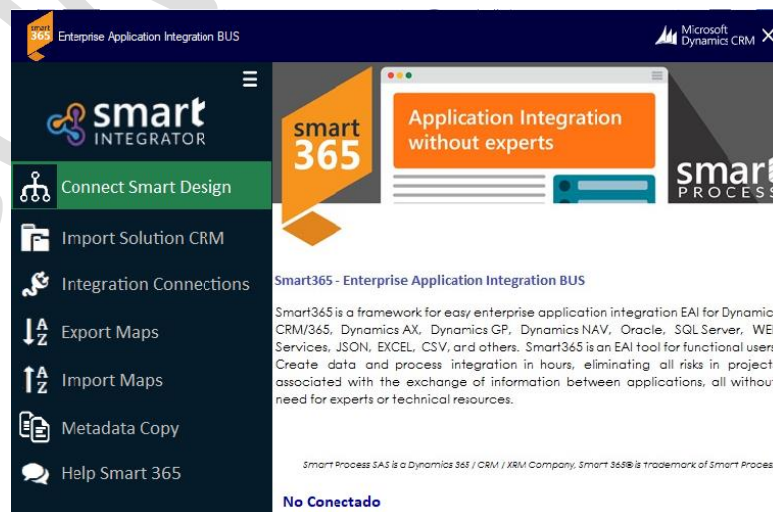
- The first thing is to configure the CRM, to do this press the **Connect** button and the connection configuration screen (Img-17) is displayed, in this screen the following data is processed:
 - **Connection Name:** A name that refers to the organization to be connected is placed.
 - **Url Implementation:** The Discovery URL is placed, this data is found in CRM dynamics in CONFIGURATION \ PERSONALIZATIONS \ DEVELOPER RESOURCES.
 - **Domain:** If the CRM Implementation is Online that field is not diligent, otherwise if Local (On-Premise) is placed the domain where the CRM implementation is hosted.
 - **User:** System administrator user and Dynamics CRM Implementer.

- **Password:** User Password to enter CRM Dynamics.
- **Key:** Licensing Key provided by SMART PROCESS (See Licensing in <https://smartxrm.microsoftcrmportals.com/en-US/SmartEIABus/>).
- When completing the above information we press **Get Org**, there brings us the organizations available given the premise that the CRM is Multiorganizational, so we choose which we will implement the integrator and we will **accept**.



Img-17

- Finally, the start screen with all active options (Img-18a) will be displayed, each button and operation of this application will be explained in more detail later.



Img-18a

- **File .config**

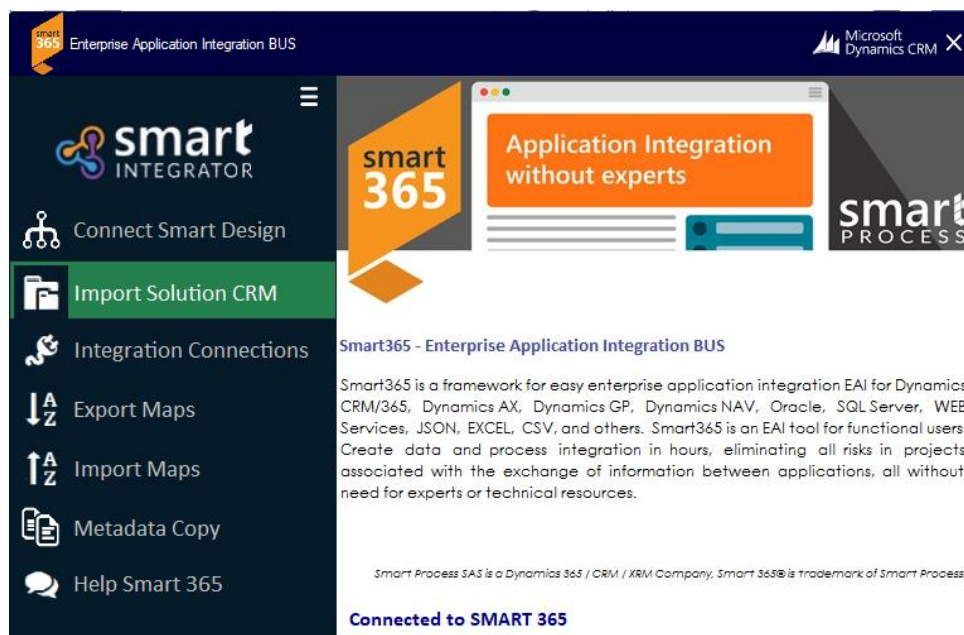
After configured connection all parameters are stored in the .config file, to access that file follow the following path: **C:\Program Files (x 86) \Smart Process\Smart 365\Files**, there you will find the **Smart Integration.exe.config** file, open a program's text (Notepad, Word, etc.), there you will find the following information:

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <appSettings>
    <add key="OrganizationName" value="DBConnection String 1" />
    <add key="ClientSettingsProvider.ServiceUri" value="" />
  </appSettings>
  <connectionStrings>
    <add name="Name" connectionString="SMART" />
    <add name="UrlDiscovery"
connectionString="https://disco.crm2.dynamics.com/XRMServices/2011/Discovery.svc" />
    <add name="OrganizationName" connectionString="ORG" />
    <add name="Domain" connectionString="XXXX" />
    <add name="User" connectionString="Admin@smartprocess.onmicrosoft.com" />
    <add name="Pass" connectionString="XXXXXX" />
    <add name="Solucion" connectionString="" />
    <add name="MapaTodos" connectionString="" />
    <add name="Mapa" connectionString="" />
    <add name="ProcesoAlt" connectionString="" />
    <add name="Key" connectionString="XXXXXXXXXXXXXXXXXX" />
    <add name="TimeRelaunch" connectionString="15" />
    <add name="AllowParallel" connectionString="Y" />
  </connectionStrings>
</configuration>
```

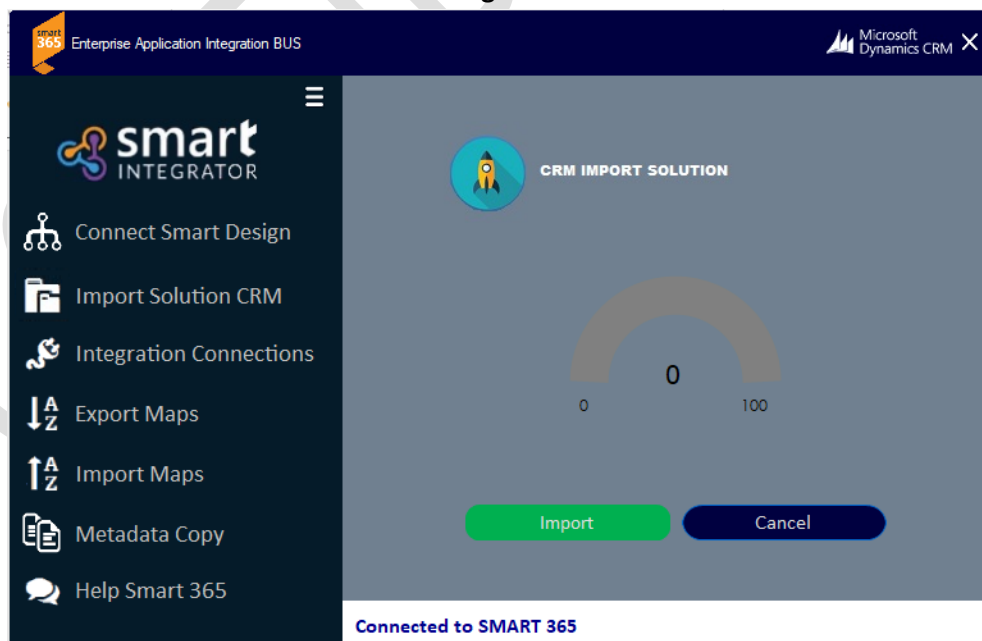
2.4 Importing the Solution to CRM

- After Connected, the next step is to deploy the solution in the CRM, in the Smart Integration App (Img-18b), click on the Import Solution button(Img-18c), validate if the CRM implementation already has An installed solution, otherwise a window with the question is displayed if you want to create the solution in the connected organization, if it already exists it is for the update of the same.

NOTE: Each time you run the Engine App you need to reconnect to the CRM by clicking on **Connect** and have the license key on hand, enter it, run **Get Org** select the Organization and press **OK**

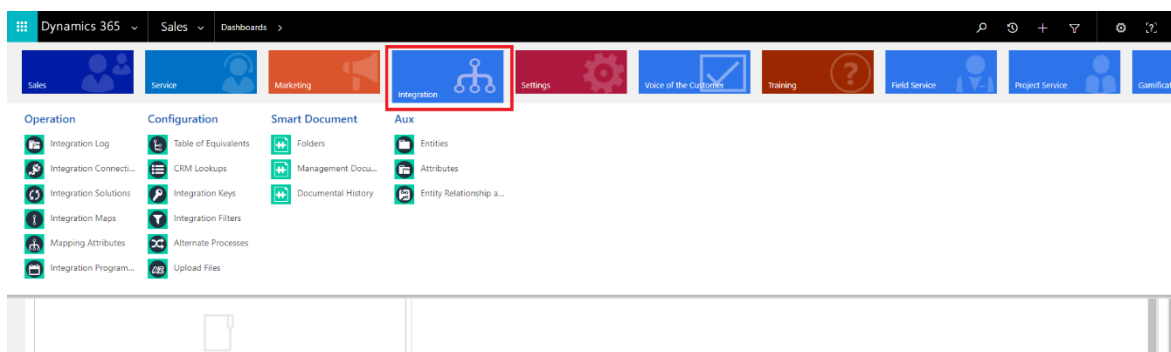


Img-18b



Img-18c

- To View the Correct CRM Dynamics installation Enter Dynamics and you will find the **Integration** module as shown by the (Img-19a)

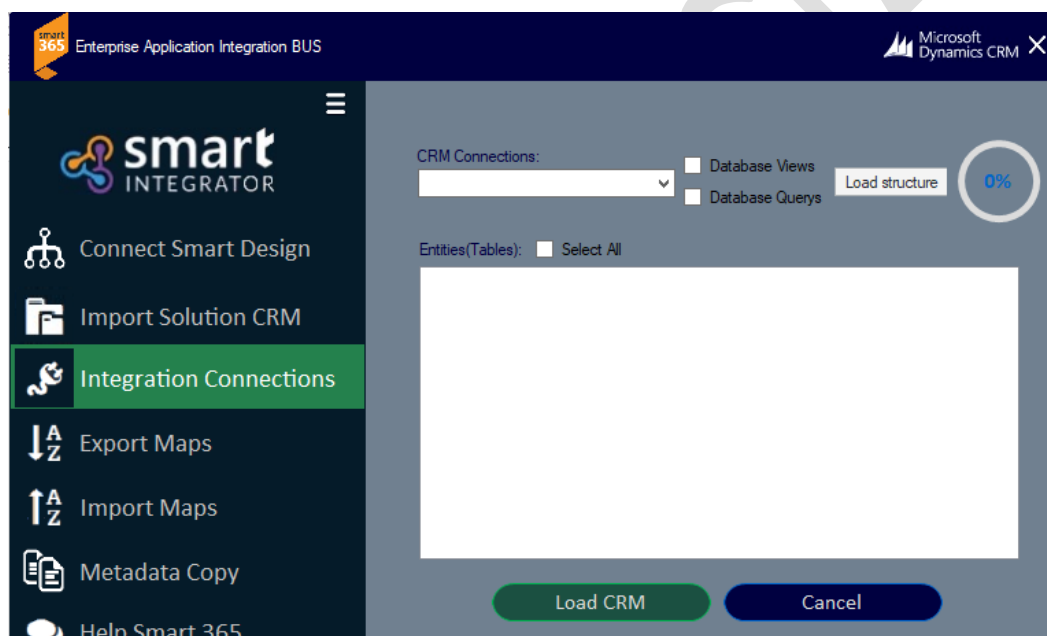


Img-19a

2.5 Integration Connections

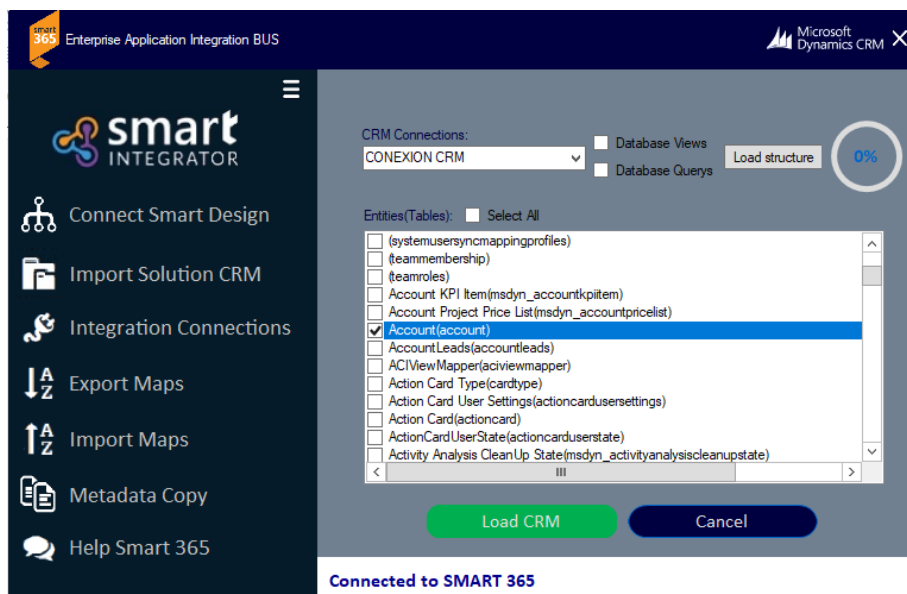
When a connection log is created in the Smart 365 designer(Img-22) Section 3.1 this document, the next step is to create the entity structures and attributes to be integrated into the smart app(Img-19b).

Within the **CRM Connections** field, you will find the list of connections created in the Smart 365 designer, where the connection to which we will create the structure of tables and attributes is created, to then create the solutions, the maps and the mapping of attributes; If the Connection Type is Database, options **Database Views** are for creating the structure of the views and Option **Database Querys** for the structure of the queries that are created in the Smart designer.

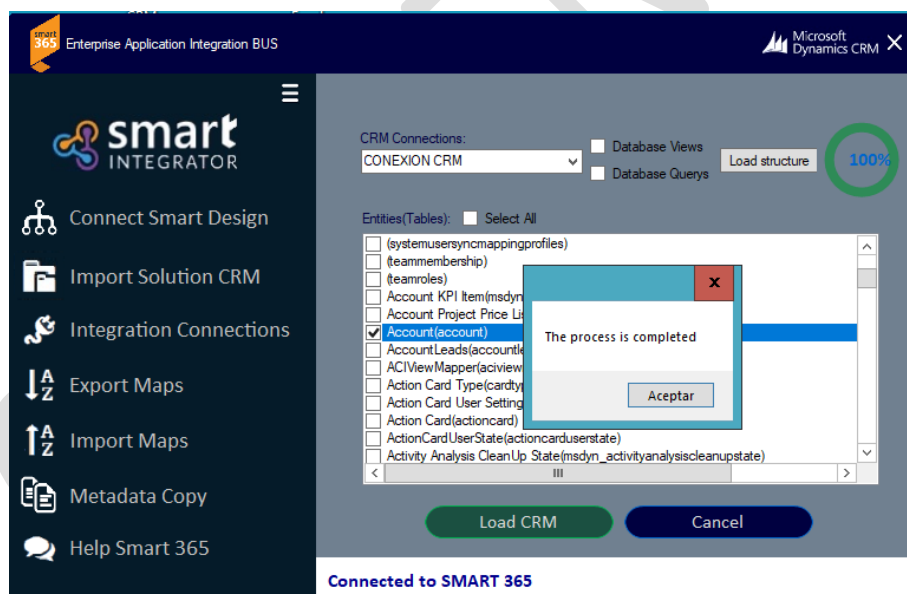


Img-19b

The first step is to choose a CRM connection in the list and select options Database Views or Database Querys if the connection is of the Database type, then press the **load structure** button and the entities or tables contained in the connection are shown in the list below. , then select the Entity to create the structure and press **load CRM** (Img-19c), wait for the process to finish(Img-19d)

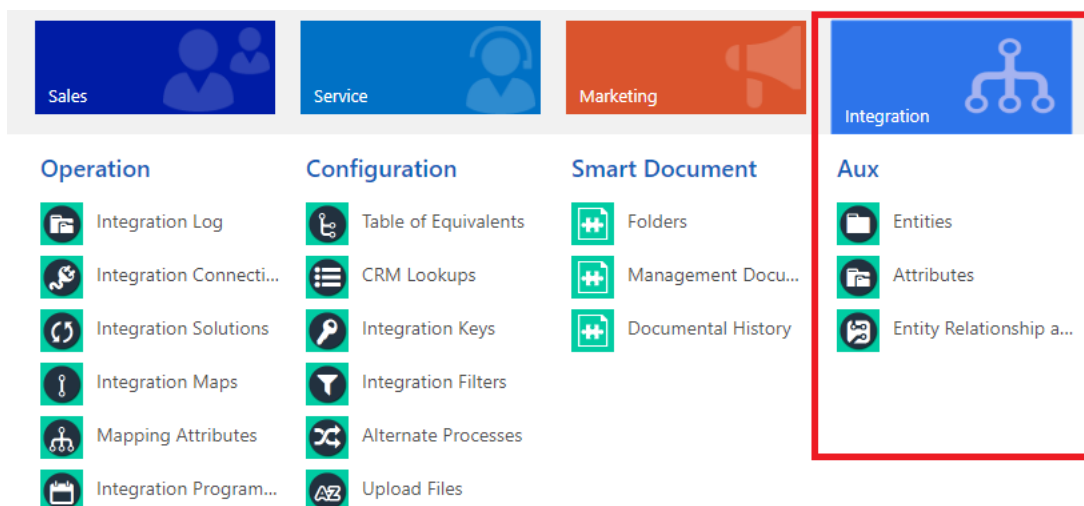


Img-19c



Img-19d

After the Load Process, go to the Smart Designer and there in the integration module in the auxiliary group go to Entities(Img-19e), there you will find the structures (Entity and attributes) created in the previous steps(Img-19f).



Img-19e

Dynamics 365 ▾ Integration ▾ Entities ▸

NEW DELETE EMAIL A LINK RUN REPORT EXCEL TEMPLATES EXPORT TO EXCEL IMPORT DATA CHART PANE VIEW ...

Entities active ▾

<input type="checkbox"/>	Name ↑	Logical Name	Object Code	Integration C...	Total Attribut...	Metadata Id	Cod Import	Creation date
	Account	account	1	CONEXION C...	Total Attributes	70816501-ed...	1	6/20/2018 1:52 AM
	Bookable Resource	bookablereso...	1,150	CONEXION C...		e9669024-79...	4	6/20/2018 1:59 AM
	Business Unit	businessunit	10	CONEXION C...		f01e8baa-c7f...	3	6/20/2018 1:58 AM
	Facility/Equipment	equipment	4,000	CONEXION C...		a7a0b367-21...	7	6/20/2018 2:03 AM
	Lead	lead	4	CONEXION C...		dc6574cb-92...	2	6/20/2018 1:55 AM
	Price List	pricelevel	1,022	CONEXION C...		e995200c-5fe...	6	6/20/2018 2:02 AM
	Tax Code	msdyn_taxcode	10,196	CONEXION C...		7e116f12-f10...	8	6/20/2018 2:04 AM
	Team	team	9	CONEXION C...		eff432f7-250...	5	6/20/2018 2:00 AM

Img-19f

3 INTEGRATION CONFIGURATION

This section of the document refers to the configuration of the tool for integrations, there are 3 groups of entities (Img-20):

a) OPERATION

Main entity group with which the integration administrator user configures, manages and monitors the entities that are in the group are:

- **Integration Log:** Entity that contains the logs that monitor the integration and the indicators of the integrated logs, created, updated deleted etc. Additional error log.
- **Integration Connections:** Entity containing Integration connection records are either source or destination.
- **Integration Solutions:** Entity that contains the records that pack the integration maps.
- **Integration Maps:** Entity that contains the records that configure the source and destination connection, and the corresponding tables or entities to integrate, additional are the general rules of integration and package attribute mapping.
- **Attribute Mapping:** Entity that contains the field-to-field mapping records of the tables specified in the integration map, additional contains the validation rules, business rules and equivalence tables by attribute to be integrated.
- **Integration Programming:** Entity that contains the records of the schedules that specify the moment in which the integrations are executed.

b) CONFIGURATION

Group of Entities that support the main entities, these entities are configured manually by the integration administrator, the entities that are in the group are:

- **Table of Equivalence:** Entity that contains the equivalence records in the mapping of each attribute.
- **CRM Lookups:** Records that referto fields of type lookups in CRM Integrations.

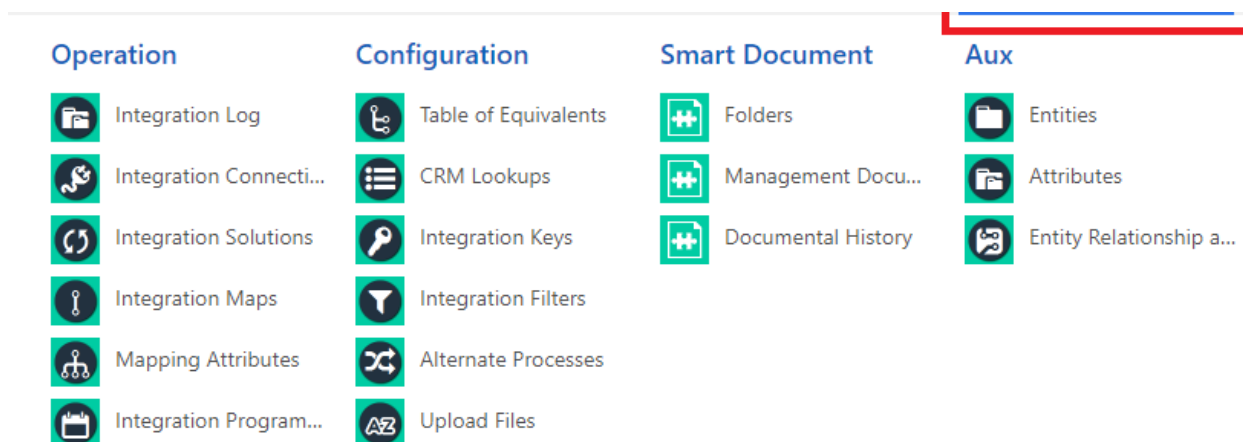
- **Integration Keys:** Entity that contains the records of the keys for certain type of operations (Update if exists, Delete if exists, Insert / update), these keys specify the unique attribute for each record eg for a contact the cedula is the unique attribute Which is not repeated.
- **Integration Filters:** Entity that contains the records of the source attributes in which the filtering rules are placed.
- **Alternate Processes:** Entity that contains the records with the rules of the processes alternate to the integration.
- **Upload Files:** Entity to integrate flat files on the CRM notes

c) AUXILIARY

Group of Auxiliary entities that are generated automatically as the integrations are configured, the entities that are in the group are:

- **Entities:** Entity that contains the records that refer to the names of the tables or Entities to be mapped.
- **Attributes:** Entity that contains the records of the attributes of the entities of the previous item.
- **Entity Relationship attributes:** An entity that contains the relations of CRM Entities.

NOTE: The Group Smart Document does no apply for this document

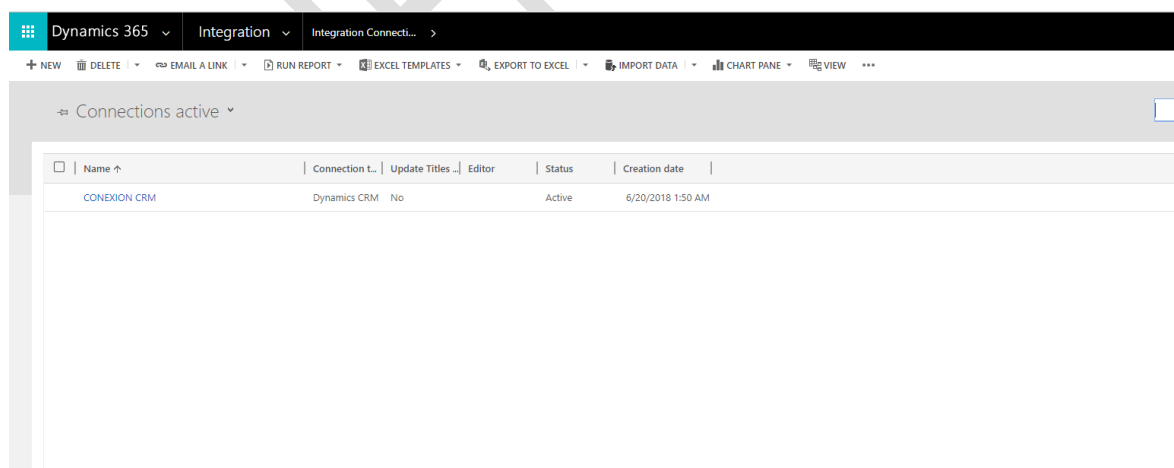


Img-20

3.1 Integration Connections

Integration Connections refer to these interfaces (Connectors) of the systems to be integrated either source or destination, below will show examples of the most common connection types (CRM Dynamics, BD SQL, BD Oracle, BD Postgress, BD MySQL, File Flat etc).

- In the **Integration** Module (Img-20) in the **Operations** section, click on **Integration Connections**. There you will see the screen (Img-21) and click on the **New** command bar.



Img-21

- Next, a record is created for the creation of a connection (Img-22), there you will find a **GENERAL** tab in which you have the following fields to fill:

GENERAL TAB:

- **Connection Name:** Name that refers to the Integration, specify some.
- **Type of Connection:** Type of connectors available for Integration, Values:
 - Flat File(Csv,Excel)
 - Dynamics CRM (2011,2013,2015,2016,365)
 - Base de Datos(SQL,ORACLE)
 - XML
 - Web Services
 - Undefined(DII)
 - Sharepoint
- **Key:** Licensing key of the connector specified in the previous field, see Licensing in <https://smartxrm.microsoftcrmportals.com/en-US/SmartEIABus/>.

The screenshot shows the 'New Integration Connection' form in Dynamics 365. The 'general' tab is active, displaying the following fields:

- Connection name:** A text field with a red asterisk indicating it is required.
- Key:** A text field containing a long alphanumeric string: x3vdj75tEpWpzyu3KlUQNbG4i9OQqRw5ArmWTb6N+Dk1oE2RLg/RvBZ1nISqj8phUNWF/60pu/kDmzTOmRij+J/ThSl.
- Connection type:** A dropdown menu with options: Flat File (Csv, Excel), Dynamics CRM, Database (SQL, Oracle), Web Services, Undefined, and Sharepoint. 'Dynamics CRM' is selected.
- Owner:** A text field.
- Global setting:** A section containing:
 - Dates and Decimals:** Fields for Culture, Decimal point, Format Dates, and Time Format.
 - Coding:** A field for Encoding Type.

Img-22

TAB GLOBAL CONFIGURATION (img-23):

- **Date in UTC format:** Field that refers to whether the source data is in UTC (SI) format or with the specified locale (NO).

- **Format Dates:** Field that refers to the date format of the Datetime fields.
- **Decimal point symbol:** Field that refers to numeric data type Decimal, Float, doublé, Currency, the format of the decimal point.
- **Coding type:** Coding type of texts, eg UTF-8, UTF-16, Unicode, etc.

Configuración Global

Fechas y Decimales

Fechas en formato UT **No** Formato Fechas --

Símbolo Punto Decim --

Codificación

Tipo de Codificación --

Img-23

3.1.1 Connection Types:

3.1.1.1 Flat File Connection (CSV, EXCEL)

INTEGRATION CONNECTION : INFORMATION

CONNECTION FLAT FILE DEMO

Name: CONNECTION FLAT FILE DEMO Creation date: 6/21/2018 5:29 PM

general

Connection name: CONNECTION FLAT FILE DEMO Connection type: Flat File (Csv, Excel)

Key: x3vdj75tEpWpquv3KIQNbG4800qgRivSAmWtb6N+Dk1oE2RLg/Rh6Z1nISogrBphLNWF/60pu/kDmzTOTmRj+/Tht Owner: Juan Carlos Parra

Archive

General

*CRM Attachment Archive: No *File type: Csv *Delimiter: |

General

*File Location: Local Directory

*File Directory: C:\Archivos

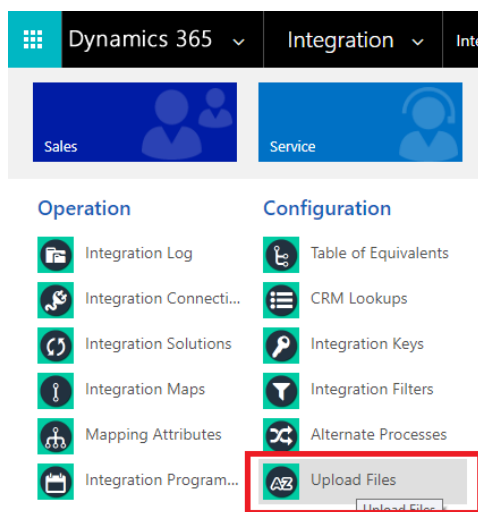
*File Name: DemoSmart365.csv

Host Name: Port:

User: Password:

Img-24a

- **CRM Attachement Archive:** This option to be in YES specifies if the file is loaded in the notes of the connection to create the structure and later in entity Upload Files(Img-24b) of the Smart Designer, otherwise the file is loaded from a local location or from an FTP.



Img-24b

- **File Type:** This is the type of flat file to integrate, the types are csv, Excel 97-2003 (xls), Excel 2007 (xlst, xml)
- **Delimiter:** If the file type is CSV, the column delimiter is specified here(ej: |)

Options if CRM Attachement is NO

- **File Location:** The location of the file, if it is a local directory or is an ftp or sftp
- **File Directory:** This is path of the file directory(ej: C:\Documents)
- **File Name:** This is name of the file with extension included(ej: file.csv)
- **Host Name:** If the location is on another server than the Smart engine, enter the name of the server or IP.
- **Port:** If the location is on another server than the Smart engine, enter the port of the server or FTP
- **User:** If the location is on another server than the Smart engine, enter the username
- **Pass:** If the location is on another server than the Smart engine, enter the password

3.1.1.2 Dynamics CRM Connection

INTEGRATION CONNECTION : INFORMATION
CONNECTION CRM DEMO

general

Connection name *	CONNECTION CRM DEMO	Connection type *	Dynamics CRM
Key *	x3vdj75tEpWpqu3KIJQNbG4i9OQqRwSArmWTb6N+Dk1oE2RLg/RlvBZ1niSojrBphLNWF/60pu/kDmzTOTmRjl+j/Th	Owner *	Juan Carlos Parra

Dynamics CRM

Embedded Integration	No	Implementation Type	On-line
Discovery URL	https://disco.crm2.dynamics.com/XRMServices/2011/Discovery.svc	Organization	orgfe7307f3
Domain	User	smartsupport@smartxrm.com
Password	P@a\$\$w0rd		

Img-25

- **Embedded Integration:** Specify 'YES' if the CRM connection is the same where the Smart 365 designer is installed.
- **Implementation Type:** Type of implementation if Online, Onpremise or IFD
- **Discovery URL:** It is the Discovery URL that is in the CRM to connect ([Settings / Customizations / Developer Resources](#))
- **Organization:** Organization Name of CRM to connect ([Settings / Customizations / Developer Resources](#))
- **Domain:** Domain Name, only Type of implementation Onpremise
- **User:** User to connect to CRM
- **Password:** Password to connect to CRM

NOTE: Embedded Integration is YES if the CRM connection is the same where the Smart 365 designer is.

3.1.1.3 Database Connection

INTEGRATION CONNECTION : INFORMATION
CONNECTION DATABASE DEMO

general

Connection name *	CONNECTION DATABASE DEMO	Connection type *	Database (SQL Oracle)
Key *	x3vdj75tEpWpqyu3KIJQNbG4i9OOqqRwSArmWTb6N+Dk1oE2RLg/RlvbZ1nSojrBphLNWF/60pu/kDmzTOTmRjl+jj/TH	Owner *	Juan Carlos Parra

Database

Database Type	SQL Server	Server Name	PC-XRM
Authentication Type	Windows	Database Instance	
Database name	Prueba	Puerto BD	4,413
Login (Domain \ User)	XRM\Administrator	Database password	P@\$\$w0rd

Img-26

- **Database Type:** The type of the database is specified: SQL Server, Oracle, Postgress, MySQL
- **Server Name:** Name of the server or IP where the Database is located
- **Authentication Type:** Specify the type of authentication if it is Windows or SQL
- **Database Instance:** Name of the instance of the Database
- **PortBD:** Port where the Database is located
- **Login(Domain\User):** Domain and User to access to database
- **Database Password:** password to access to database.

TAB QUERIES

At the bottom is the query tab, where you can add a personalized query by pressing the + of the grid(fig-27a), Then a query record is displayed, which has two fields, an entity name or query and a field to write the query(fig-27b).

- **Entity Name:** Name of the query to later be the name of the entity when it is synchronized in the Smart engine
- **Allow CRM Filter:** Option used to specify whether the query filter takes it from the integration map or is specified in the query field with a "where"
- **Query:** Select type SQL statement(ej: select * from table where var1 = "1")

NOTE:

The entities that are generated from the queries database can only be used in origin connections in the integration maps

Consultas

Detail						
Name ↑	Url	Query	Protocol	Connection	Entity	Creation date
No WS / Queries found for this Integration Connection. Select Add (+).						

Img-27a

WS / QUERIES : INFORMATION

New WS / Queries

Connection*
CONNECTION DATABASE
DEMO

Connection Type
BD SQL

General

Information	
Entity Name *	Consulta Prueba
Allow CRM Filter	No

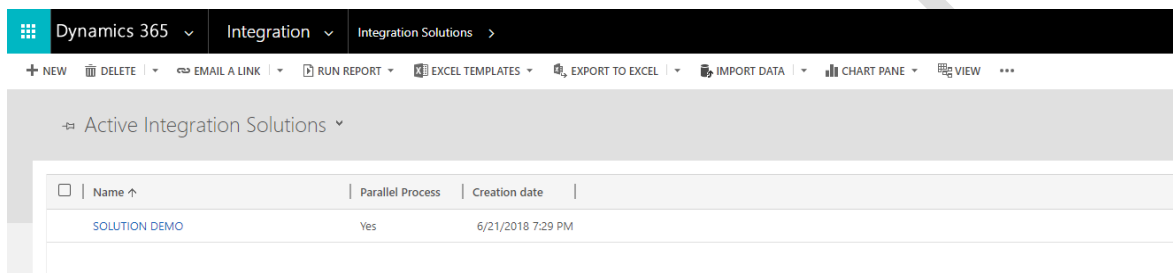
Query	
Query	Select * from Database

Img-27b

3.2 Integration Solution

Integration Solutions refer to records that contain several Integration maps, such maps can be ordered so that when executing a solution, maps are executed one by one in the order specified.

- In the **Integration** Module (Img-20) in the **Operations** section, press **Integration Solution**. There you will see the screen (Img-28) and click on the **New** command bar.



Img-28

- A new window will open on the solution to be created (Img-29), locate a **GENERAL** tab with the following Fields.
 - Name:** Text field that refers to the name of the solution, specify some.
 - Description:** Field that refers to the description of the Solution, specify some.
 - Global Integration Log:** Field that refers to whether a Global Integration Log is generated, which adds the indicators (#reg Processed, #reg Created, #reg Updated, #reg Deleted, #reg Errors, #reg Adv) from The maps that this solution contains.
 - Parallel Porcess:** If any solution is running and this option is "YES", you can run another one in parallel at the same time.

NOTE: Each time an integration map is executed, a solution is generated by map integration, activating the global log generates a total of all maps executed in the solution.

INTEGRATION SOLUTION : INFORMATION

SOLUTION DEMO

Status: Active

Reason for the status: Active

Creation date: 6/21/2018 7:29 PM

general

Name: SOLUTION DEMO

Global Integration Log: No

Create Url Log in: No

Parallel Process: Yes

Description:

Maps

Integration Maps

Name	Connection Or...	Origin Entity	Destination Co...	Entity Destinat...	Operation	Processing All...	Order of Execu...	Top	All Columns	Specify Order	Alternate Proc...	Operation Type	Tr
------	------------------	---------------	-------------------	--------------------	-----------	-------------------	-------------------	-----	-------------	---------------	-------------------	----------------	----

Img-29

- After filling in the fields, the solution is created and then the maps are added to the grid in the MAPS tab (Img-30). Click on the (+) symbol for that action.

Mapas

Mapas de Integración

Nombre	Conexión Ori...	Entidad Origen	Conexión Des...	Entidad Desti...	Operación	Procesar Todo...	Orden de Ejec...	Descripción	Fecha de creación
CUENTA REP LEGAL	CRM COMPENS...	Cuenta	CRM COMPENS...	Cuenta	Actualizar	No	0		30/11/2015 1:42 p.m.
MAPA CUENTA A CUENTA	CRM COMPENS...	Cuenta	CRM COMPENS...	Cuenta	Actualizar si exis...	No	0		25/11/2015 4:49 p.m.
MAPA DE CIJU AFILIACIONES	CRM COMPENS...	Cuenta Prospecto	CRM COMPENS...	Vinculación	Actualizar	Sí	0		21/11/2015 1:24 p.m.
MAPA TIPO DE REGISTRO LEAD	CRM COMPENS...	Cuenta Prospecto	CRM COMPENS...	Cuenta Prospecto	Actualizar	Sí	0	Colocar Tipo de ...	21/11/2015 1:26 p.m.

1 - 4 de 10

Página 1

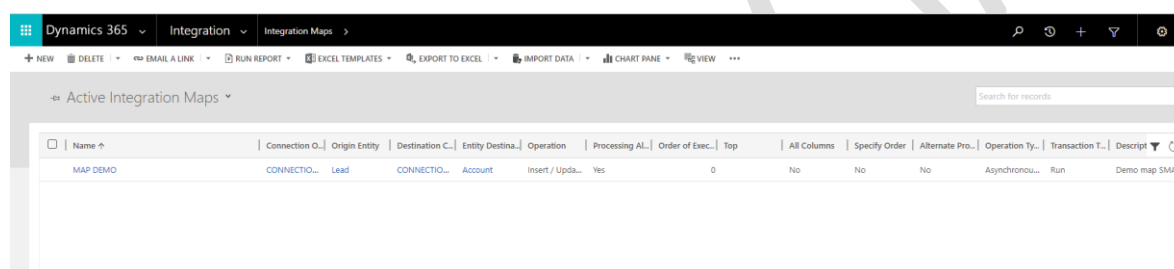
Img-30

3.3 Integration Maps

Integration Maps refers to records that relate a source table that come from a source connection, against a destination table that comes from a destination connection, in this map record the rules are configured with which they go To execute a specific integration among these are: the type of operation filter rules sorting rules, update / deletion keys, Alternate processes, Responses to the integrated register etc.

Additional the integration map contains a grid with the Attribute to Attribute mapping where field-by-field of the source table is related to the target table.

In the **Integration** Module (Img-20) in the **Operations** section, click on **Integration Map**. There you will see the screen (Img-31) and click on the **New** command bar.



Img-31

NOTE: Another way to create a map is from the solution registry, since there you will find the grid of maps that the solution will contain (Img-30).

- Next, a new Map record is displayed (Img-32), where there are several tabs with grids, the purpose of this manual is to allow the user to know how to configure each of these elements.

Img-32

- We identify the **GENERAL Tab** which we will fill out before creating our Map registry, for this we find the following fields to fill out:
 - Name: Text field, specify a name for the map.
 - Integration Solution: Search field select the solution record to which the map will belong.
 - Execution Order: Numeric field that specifies the order in which the maps are executed, if it is programmed to execute an entire solution, that order goes from 1 to 1000, additional number 0 is not taken into account at the time of the execution.

NOTE: In the programming record you can execute a specific map, so the order is not taken into account, only the order is taken into account when running an entire solution.

- We identify the **MAP Tab**, which we will fill out before creating our record, said TAB has a particularity since it is divided into two sections, the one on the left side is the source section and refers to the data And the rules of the source connection, and the right side section is the target section and refers to the operation and configuration rules of the target connection.

3.3.1 Section of Origin

- **Source Connection:** Search field that brings a connection record, previously created.
- **Origin Entity:** Search field that brings a source entity record (table), previously filtered by the Source connection, this field refers to the source table which will be queried the data.
- **Process All records:** Field of type two options (YES / NO), Enable or Disable the filters that are placed to the query of data of the Entity (table) of origin.
 - A) **YES:** check all records regardless of filters.
 - B) **NO:** It takes into account the filters that are added in the Grid Filter.
- **All Columns:** Field of two options (YES / NO), Gets or Discards all columns of the source entity (table).
 - A) **YES:** Bring all the columns contained in the Entity (table) of origin.
 - B) **NO:** It only brings the columns that are in the mapping of attributes.

- **NOTE:** When specifying fields in expressions that are not referenced in the mapping, it is necessary to bring all the columns, because an error is generated that the field is not present at the time of integration.

- **Specify Order:** Field of two options (YES / NO), Enable or Disable the order of the data of the Entity (table) of origin.
 - A) **YES:** It takes into account the order that is added to the grid of ordinations
 - B) **NO:** Brings the records in a random order given by the source connection
- **Top:** Numeric field that brings a specified number of data, if not specified brings the amount of records given by the query and stipulated filters if they are previously configured.
- **Filters:** Records that indicate what information to bring from the source.
- **Ordering:** Records indicating the order in which the origin registers are brought.
-

3.3.2 Section Detination

- **Destination Connection:** Search field that brings a connection record, created previously.
- **Destination Entity:** Search field that brings a destination entity record (table), previously filtered by the Destination connection, this field refers to the destination table which is to perform a specific operation.
- **Operation:** Field of options, refers to the type of action to be performed on the target entity (table).
 - a) **Insert:** All data coming from the data source are created without exception.
 - b) **Update(key):** the destination records referenced in the source are updated by a key that is configured in the grid of keys, this will cause the integrator to perform a search in the destination with all the records with the Attribute key and upload this data to a temporary table and from there each source record by means of the key see what your record to update.
 - c) **Remove(Key):** the destination records referenced in the source are deleted by a key that is configured in the grid of keys, this will cause the integrator to previously perform a search in the destination bringing all the records with the Attribute key and upload this data to a temporary table and from there each source record by means of the key see what its record to delete.
 - d) **Insert if it does not exist(Key):** Only the records that do not exist in the target entity (table) are created, for this it is necessary to configure the key (s) in the grid of keys that will be the attribute (S), which will make the registration unique **eg: for a contact the identification number and type of identification are the key**
 - e) **Insert / Update(Key):** All records are created or updated depending on the keys previously configured to know if the record is created or updated

- **Operation type:** Option field that refers to the type of transaction.
 - a) **Run:** Normal Execute.
 - b) **Simulation:** It simulates the operation but does not execute any action on the destination, it is worth mentioning that if it generates all the rules and a log of integrations to identify which records contain errors without carrying out the operation. It is recommended to use this type of transaction to correct possible errors of the origin registers.
- **Alternative Process:** Field of type two options (YES / NO), Enable or Disable Alternate processes to execute with the integration of this map.
 - a) YES: Enables alternate processes (Process Grid)
 - b) NO: Does not enable alternate processes (Process Grid)

3.3.2.1 Keys

Integration Keys refer to records containing the attributes of the target entity (table) that determine that a record is unique (eg identity number in a contact), so that the integration process identifies that Records are created and records are updated or deleted.

To insert a key from the map there is a grid located at the bottom of the connection and destination entity, there we can give (+) and then a screen (Img-33) will open.

KEY : INFORMATION		Name	Cod Import	Creation date
Llave Account Number		Llave Account Number	1	6/21/2018 8:01 PM

General	
Attribute *	Account Number
Entity *	Account
Logical name	accountnumber
Relation Attribute *	Name-Account Number
Map *	MAP DEMO
Field Type	14
Owner *	Juan Carlos Parra

Img-33

- There you will find the following fields to fill:

- **Attribute:** The target key attribute.
- **Relation Attribute:** The previous attribute necessarily requires a mapping with a field of the source entity (table).
- The record is created after filling in these fields and automatically fill in the fields: Entity, Map, Logical Name, Field Type.

NOTE: Multiple keys can be created for a single map, it should be noted that each key record must have a related record of mapping attribute

3.3.2.2 Alternate Processes

The Alternate Processes They refer to Registers that configure a process that can be executed in three moments of the integration by each map.

- a) Before executing all the records of the integration.
- b) For each Integrated Record.
- c) After executing all the records of the integration.

These processes are used to generate complex business logic and are based on existing processes.

- a) BD Store Procedure
- b) Query BD (Select * from Nombre_Tabla)
- c) Fetch Query (CRM Connections only)
- d) Insert, Update, Delete CRM Operations
- e) Class AX
- f) Job AX
- g) Workflow (CRM Connections only)
- h) Web Services(SOAP)
- i) Assemblies
- j) Solution and Integration Map

NOTE: Connections that refer to these alternate processes may be the same as the source or the different destination or connections.

- To create an alternate process in the integration map, there is a field Alternate Process of two Options, it must be placed in SI, to display the Alternate Process Grid, there the **(+)** is pressed and a window will open (Img-34) To complete the registration.

ALTERNATE PROCESS : INFORMATION

New Alternate Process

Integration Solution **SOLUTION DEMO** Integration Map **MAP DEMO**

General

Information

Name / Query *

Process type *

Moment of Execution *

Integration Connection *

Order *

Fetch Query (CRM)

Execution by Registry

Parameters

Name	Datatype	In / Out	Attribute	Expression	Order	Origin Attribute	Parameter Dtl	IsKey	Equivalence table	Param Out Dat	Creation date
To enable this content, create the record.											

Img-34

3.4 Attribute Mapping

The Mapping of attributes corresponds to the entity that has the records of the mapping field to field from the source to the destination for our integration, to insert these records there is a grid at the bottom of the integration map register, there we press the (+), And a window will open (Img-35).

MAP ATTRIBUTE RELATION : INFORMATION

Name: Name-Account Number | Cod Import: 1 | Integration Solution: SOLUTION DEMO | Integration Map: MAP DEMO

General

Origin Entity: Lead | Destination Entity: Account

Relationship

Origin Attribute: Name | Destination Attribute: Account Number

Validation

It is required	It's Mail Attribute	Minimum value(characters, numbers, date)	Maximum Value (Characters, Cipher, Date)
Yes	No		

Target Action

It is created	It updates	Update (White / Null)
Yes	Yes	No

Transformations

Expression	Equivalence table
No	No

Name to Show Source Attribute

Errors and Warnings

Error message	Warning message	Enviar Mail
No	No	Si

Img-35

- At a glance the record already fills some fields automatically (Solution, Map, Source entity, Target entity), these data are necessary for the filtering of the source and destination attribute.
- Required fields are filled out.
 - **Source Attribute:** Entity Field (table) of Source to be mapped.
 - **Destination attribute:** Destination Entity field (table) to be mapped.

NOTE: If the destination field is a lookup field, another Attribute field will be displayed, which will contain the attributes of the entity of the lookup field of the destination attribute, where the field is chosen Resolve the data source the lookup record.

NOTE: The attributes that are displayed in the lookup attribute of the target attribute lookup field type must be preloaded with the integration engine app.

- In the attribute mapping log there are 3 sections:
 - **Validation:** This section refers to the rules of validation of the data of the origin attribute.
 - It is Required: field of two options YES / NO, when placed in SI specifies that the data in the source field is required and has to bring information, otherwise it generates an error in the log file and therefore the record will not perform The operation specified on the map.
 - It is Mail attribute: Field of two options YES / NO, when placing it in itself assumes that the source data of the source attribute is of type mail and valid that contains an (@) and (.)
 - Minimum value: Valid the minimum limit depending on the data type; If Text is valid the minimum number of characters, if numerical is valid the minimum numerical value, if it is Date (Datetime) validates the minimum date.
 - Maximum value: Valid the maximum limit depending on the data type; If Text is valid the maximum number of characters, if numerical is valid the minimum numerical value, if it is type Datetime validates the maximum date.
 - **Errors and Warnings:** This section refers to the rules of the error log:
 - Error message: field of two options YES / NO, when placed in SI specifies that the validation rules of the previous section generates an error in the log file and therefore the record will not perform the operation specified in the map.
 - Warning message: field of two options YES / NO, when placed in SI specifies that the validation rules are the previous section generates a warning in the log file, therefore if you leave to perform the operation specified in the map but with a Warning in this field.
 - Send Mail: Send an email to the contact referenced in the integration map

- **Target Action:** At the type that allows to execute in the destination on the mapped field.
 - It is Created: Allow this field to fill in the creation option
 - It is Update: Allow this field to fill in the Update option
 - Update in White / Null: Refreshes the target value, blank or blank, containing or not containing information.
- **Transformations:** This section refers to business rules or conversions that have effect on the data source of the specified attribute.
 - Expression: Field of two Options YES / NO when placed in SI Enables a template of several lines of text to fill programming code with different functions (SEE ANNEX: EXPRESSIONS).
 - Table of Equivalences: Field of two Options YES / NO when placed in YES Enables a grid of equivalences where inserts registers by pressing in the (+), a screen will be generated (Img-36).

TABLE OF EQUIVALENCE : INFORMATION

fullname_23 - accountnumber_5

Solution*	Integration Map*	Relation Map*	In / Out Parameters
SOLUTION DEMO	MAP DEMO	Name-Account Number	-----

general

Data	
Source Value *	Value Destination *
23	5

Information	
Name	Destination Attribute
fullname_23 - accountnumber_5	accountnumber
Origin Attribute	Owner*
fullname	Juan Carlos Parra

Img-36

- Only the following fields are filled:
 - Source Value : Value that comes from the origin.
 - Destination value: Value to convert to destination

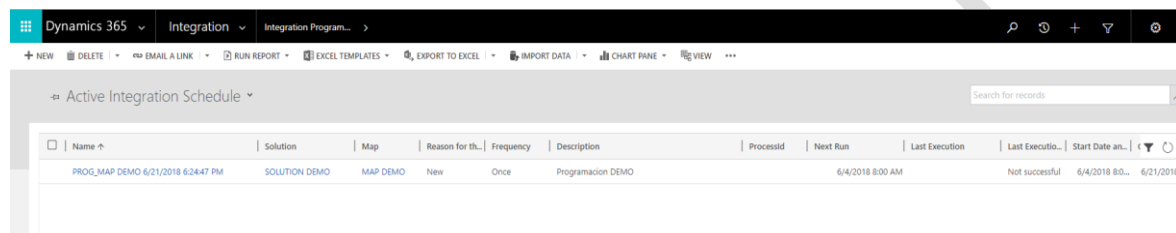
NOTE: A practical example where the equivalence tables are used are the data of the lists or set of options that usually the origin value never coincides with the destination, therefore by value it creates an equivalence register.

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3.5 Programming Integration

Programming logs refer to events that trigger a complete integration (Integration solution with all your maps), or a specific map.

- In the **Integration** Module (Img-20) in the **Operations** section, press **Integration Programming**. There you will see the screen (Img-37) and click on the **New** command bar.

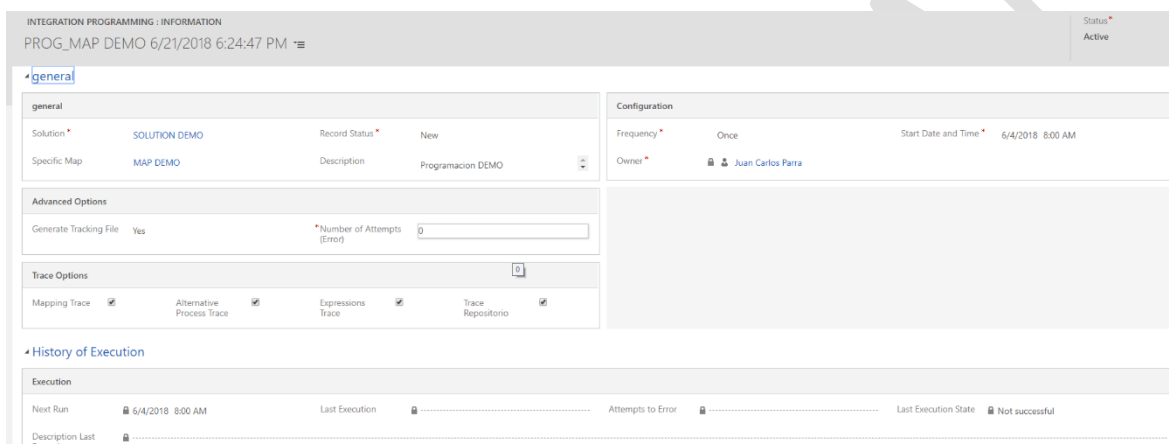


Img-37

- A screen (Img-38) will be displayed, which will contain the following fields to fill out.
 - Name:** Text field to fill out with a name.
 - Specific Map:** If you want to program a specific map please fill in this field with the map to integrate.
 - Description:** Text field to fill out with a description
 - Frequency:** Field of options that gives us the frequency with which the integration is executed.
 - Once:** It is executed only once its start corresponds to the date and time of the field **DATE AND TIME OF START**.
 - Daily:** It is executed every day starting at the date of the field **DATE AND TIME OF START**, additional the daily execution time is the time of said field; Note the field **Daily Repeat** which is of numeric type the value of this field indicates how many times the integration is repeated every day, if it does not have data it runs every 24 hours and has for example a 2 runs every 12 Hours and so on

$$\text{Daily Executions} = 24 / \text{Number Daily Repeat}$$

- c) **Weekly:** when selecting this option the days of the week are displayed where you can choose in which to perform the integration periodically, the start time is the field **DATE AND TIME OF START**
- d) **Monthly:** selecting this option displays the months in which you can choose in which to perform the integration periodically, the start time is the field **DATE AND TIME OF START**



INTEGRATION PROGRAMMING : INFORMATION
PROG_MAP DEMO 6/21/2018 6:24:47 PM

Status: Active

general

general

Solution * SOLUTION DEMO Record Status * New
Specific Map MAP DEMO Description Programacion DEMO

Advanced Options

Generate Tracking File Yes Number of Attempts (Error) 0

Trace Options

Mapping Trace ☒ Alternative Process Trace ☒ Expressions Trace ☒ Trace Repositorio ☒

Configuration

Frequency * Once Start Date and Time * 6/4/2018 8:00 AM
Owner * Juan Carlos Parra

History of Execution

Execution

Next Run	Last Execution	Attempts to Error	Last Execution State
5/4/2018 8:00 AM			Not successful

Img-38

- **Start Date and Time:** Day and time when the integration of the specified solution and map is executed
- **Generate Tracking File:** When activating this option, the "Trace Options" section is shown, which you can choose to generate a tracking file, which is hosted in:

C:\Program Files (x86)\Smart Process\Smart 365\Files\Trace
- **Number of Attempts(Error):** It is the number of attempts to relaunch the integration if it falls
- After the fields have been completed, be sure to place the field **Reason for status** in **Scheduled**, and then proceed to create the record, automatically wait for the engine in about 3min or less to automatically place it on release, and being in that state is generated An integration log; At the end of the integration this record is inactive if it is frequency once, otherwise it is reprogrammed automatically with the new date and time depending on the stipulated frequency.

4 MONITORING OF INTEGRATION

4.1 Integration Log

The log of integrations is the entity that refers to the visualization of what happening happening in the integration, and additional to its final indicators.

- In the Integration Module (Img-20) in the **Operations** section, click on **Integration Log**. There you will see the screen (Img-39) with the integration log view.

Log de Integraciones activo

✓	Nombre	Fecha Inicio	Fecha Final	Registros a Procesar	Número de Registros Proc...	Total Registros Creados	Total Registros Actualizado...	Total Reg
	Log_MAPA CONTACTO	22/12/2015 18:16						
	Log_MAPA CONTACTO	22/12/2015 18:01	22/12/2015 18:35	9.959	9.959	2	9.957	
	Log_MAPA CONTACTO	22/12/2015 15:46	22/12/2015 15:57	1.000	1.000	0	1.000	
	Log_update cliente campana apocyp	17/12/2015 12:17	17/12/2015 12:29	7.062	7.062	0	7.062	
	Log_update cliente campana apocyp	17/12/2015 11:11	17/12/2015 11:23	7.062	7.062	0	7.062	
	Log_update cliente campana apocyp	16/12/2015 12:23	16/12/2015 12:35	7.061	7.061	0	7.061	
	Log_update cliente campana apocyp	16/12/2015 11:56	16/12/2015 11:56					
	Log_MAPA DE ACTUALIZACIÓN CONTACTOS	15/12/2015 19:17	15/12/2015 19:32	13.510	13.510	0	13.510	
	Log_MAPA SUCURSAL TRANSACCION	07/12/2015 16:59	08/12/2015 10:16	1.688.899	1.688.899	0	1.680.160	
	Log_MAPA CLIENTE TRANSACCION	05/12/2015 18:26	06/12/2015 18:24	1.746.482	1.746.482	0	1.737.382	
	Log_MAPA DETALLE TRANSACCION	04/12/2015 13:05	05/12/2015 2:01	2.227.703	2.227.703	2.089.159	0	
	Log_MAPA DETALLE TRANSACCION	04/12/2015 12:41	04/12/2015 12:50	1.000	1.000	1.000	0	
	Log_MAPA DE PRODUCTOS	04/12/2015 12:14	04/12/2015 12:30	29.113	29.113	22.506	0	

Img-39

- In the Active Logging View, we have the following columns:
 - Name:** Is the name of the log that refers to the map that is executed or executed.
 - Start Date:** It is the date and time that the integration started.
 - End Date:** This is the date on which the integration ended.

NOTE: When the map is being integrated this date appears blank when it is full, because it completes the integration and the log log goes to the inactive state.

- Record to Process:** It is the number of records that the query brings to the data source, this data appears at the beginning of the integration.

- **Number of records processed:** When the map is being integrated this value is changing from 1000 to 1000, thus we know how many records are processed, at the end must give the same number as the previous item.
- **Total Created Records:** If the operation is Insert, Insert if it does not exist or insert / Refresh, this column shows the records created
- **Total Updated Records:** If the operation is Update, Update if Exist, or Insert / Update, this column shows the updated records.
- **Total Records deleted:** If the operation is Delete or Delete if it exists, this column shows the records deleted.
- **Total Warnings:** Total number of records with warnings, configured in attribute mapping.
- **Total Errors:** Total number of records with errors, configured in attribute mapping.
- **Error Detail:** If an error is generated before starting to launch the data this field contains the description of the general error Eg: Connectivity.
- **Global Solution Log:** field of two options YES / NO, if it contains YES these values are the sum of all integration of all integrated maps.

5 EXPRESSIONS

5.1 Definition

Expressions are functions that allow us to inject in the mapping relationship attributes certain business rules to transform the information from the source to the destination, to activate an expression within the relationship form mapping attribute go to the Transformations session and there you will find the option Of Expression (Img-40), the functions are sometimes composed of arguments that are separated by a character (Separator of Terms).

Tranformaciones

Expresión
Sí

Img-40

When you place the option in YES, at the bottom of the form you will see an Expression tab (Img-41) which contains two fields: Expression, Terms Separator

Expresión

Expression

Expresión *

--

Separador de Termin

Coma(,)
Punto y Coma(,)
Vertical Line(|)

Img-41

- **Expression:** Text where you inject the functions that perform the data transformation
- **Terms Separator:** Some functions contain more than 1 argument, so a separator is required that is selected in this option

NOTE: Expressions are returned as text except for = NULL, Smart Integrator handles the conversion at the end depending on the destination data type.

5.2 Components

Expressions have several components.

a) \$VAR#

Variables where the results of the functions are saved, are composed of a prefix \$, and in the end it carries the number of the Variable

E.g.

\$VAR1, \$VAR2.....\$VAR20

b) \$RESULT

Final variable that is the one that is loaded to the destination attribute of the attribute relation.

E.g.

\$RESULT

c) =

Identifier that separates the variable of the function, on the left side are placed the variables where the resulting values that generate the functions will be stored

E.g.

- \$VAR1=FUNCION Load the result in variable 1
- \$RESULT=FUNCION Load the result of the function in the final variable
- =FUNCION Load the result of the function in the final variable

d) FUNCTION

It is the method that performs a transformation on the data, the functions are composed of the following components:

- 1) **Name** Refers to the name of the function.
- 2) **()** The parentheses carry within the arguments necessary for the function, some have parentheses and some do not.
- 3) **Arguments** are values necessary for some functions, which can be Variables (\$ VAR #), Result (\$ RESULT), Source Attributes, Constants.
- 4) **Separator** Characters responsible for separating arguments, because there are functions with more than 1 argument.

NOTE: Source Attributes that are part of the arguments, require that their logical name (e.g. **sp_name**) be placed, additional values can be placed from the source attributes, this is when this attribute refers to another table (attribute type Lookup), for it is placed Name of the related table: Logical name of the attribute of that related table.

account:emailaddress1

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5.3 List of Functions

5.3.1 =EMPTY

Function that places a text in void, has no arguments.

E.g.

=EMPTY

5.3.2 =TODAY

Function that places the current date and time, has no arguments.

E.g.

=TODAY

5.3.3 =NULL

Function that places a null, has no arguments.

E.g.

=NULL

5.3.4 =UTCTODAY

Function that places the current date in UTC format (regardless of the locale), has no arguments.

E.g.

=UTCTODAY

5.3.5 =YEAR

Function that subtracts the year component from a date type attribute, takes only 1 argument.

E.g.

- **=YEAR(createdon)**
It extracts the component coming year into an origin attribute creation date, and places it in the final result.
- **\$VAR1=YEAR(createdon)**
Extracts the component coming year in an origin attribute created date, and places it in Variable 1.
- **\$RESULT=YEAR(\$VAR1)**
Extracts the component next year in variable 1, and places it in the final result.

5.3.6 =MONTH

Function that subtracts the month component from a date type attribute, takes 1 single argument.

E.g.

- **=MONTH(createdon)**
Extracts the next month component in a source attribute creation date, and places it in the final result.
- **\$VAR1=MONTH(createdon)**
Extracts the next month component in an origin attribute created date, and places it in Variable 1.
- **\$RESULT=MONTH(\$VAR1)**
Extracts the next month component in variable 1, and places it in the final result.

5.3.7 =DAY

Function that subtracts the day component from a date type attribute, takes 1 single argument

E.g.

- **=DAY(createdon)**
Extracts the next day component in an origin attribute created date, and places it in the final result.
- **\$VAR1=DAY(createdon)**
Extracts the next day component in an origin attribute created date, and places it in Variable 1
- **\$RESULT=DAY(\$VAR1)**
Extracts the next day component in variable 1, and places it in the final result

5.3.8 =ADDY

Function that adds a numeric value to the year component to a date type attribute, takes 2 arguments

E.g.

- **=ADDY(createdon,5)**
Adds 5 years to the origin attribute (creation date), and places it in the final result, the arguments are separated by the term,
- **\$VAR1=ADDY(account:createdon;10)**
Adds 10 years to the related source attribute (Creation date of the account entity), and places it in variable 1, the arguments are separated by the term;
- **\$RESULT=ADDY(\$VAR1|15)**
Adds 15 years to variable 1, and places it in the final result, the arguments are separated by the term.

5.3.9 =ADDM

Function that adds a numeric value to the month component to a date type attribute, takes 2 arguments

E.g.

- **=ADDM(createdon,5)**
Adds 5 months to the origin attribute (creation date), and places it in the final result, the arguments are separated by the term,
- **\$VAR1=ADDM(account:createdon;10)**
Adds 10 months to the related source attribute (Creation date of the account entity), and places it in variable 1, the arguments are separated by the term;
- **\$RESULT=ADDM(\$VAR1|15)**
Adds 1 month to variable 1, and places it in the final result, the arguments are separated by the term.

5.3.10 =ADDTIME

Function that adds the Time component (Days, Hours, Minutes, Seconds) to a date type attribute, takes 5 arguments.

E.g.

- **=ADDTIME(createdon,5,10,30,10)**
Adds 5 days, 10 hours, 30 minutes and 10 seconds to the source attribute (creation date), and places it in the final result, the arguments are separated by the term,
- **\$VAR1=ADDTIME(account:createdon;10;12;45;10)**
Adds 10 days, 12 hours, 45 minutes and 10 seconds to the related source attribute (Creation date of the account entity), and places it in variable 1, the arguments are separated by the term;
- **\$RESULT=ADDTIME(\$VAR1|15|1|10|5)**
Adds 15 days, 1 hour, 10 minutes and 5 seconds to variable 1, and places it in the final result, the arguments are separated by the term.

5.3.11 =TAKETIME

Function that subtracts the Time component (Days, Hours, Minutes, Seconds) to a date type attribute, takes 5 arguments.

E.g.

- **=TAKETIME(createdon,5,10,30,10)**
Subtracts 5 days, 10 hours, 30 minutes and 10 seconds from the source attribute (creation date), and places it in the final result, the arguments are separated by the term,
- **\$VAR1=TAKETIME(account:createdon;10;12;45;10)**
Subtracts 10 days, 12 hours, 45 minutes and 10 seconds from the related source attribute (Creation date of the account entity), and places it in variable 1, the arguments are separated by the term;
- **\$RESULT=TAKETIME(\$VAR1|15|1|10|5)**
Subtracts 15 days, 1 hour, 10 minutes and 5 seconds to variable 1, and places it in the final result, the arguments are separated by the term.

5.3.12 =OPER

5.3.13 =DATETOJULIANA

5.3.14 =DATEFROMJULIANA

5.3.15 =TOINT

5.3.16 =CONCATENATE

5.3.17 =TOUPPER

5.3.18 =TOLOWER

5.3.19 =TRIMSTART

5.3.20 =TRIMEND

5.3.21 =TRIM

5.3.22 =PADLEFT

5.3.23 =PADRIGHT

5.3.24 =REPLACE

5.3.25 =REMOVE

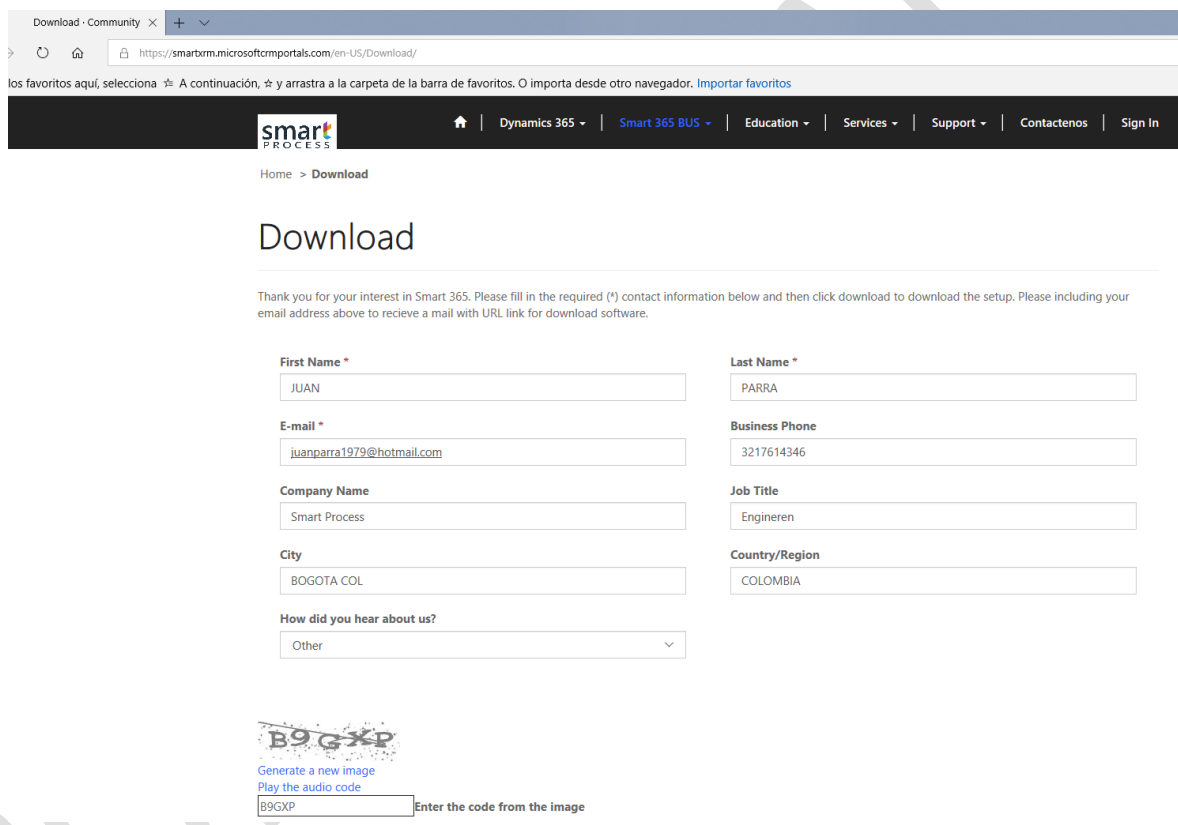
5.3.26 =SUBSTRING

5.3.27 CONSTANTE

6 DEMO BASIC

In this section we will perform an example integration, for this we will follow the following steps:

- 1- Go to the following link <https://smartxrm.microsoftcrmportals.com/en-US/Download>, Fill in the data as shown in Img-50, and press submit, wait for a moment that will automatically load the file



Download · Community × + ▾

https://smartxrm.microsoftcrmportals.com/en-US/Download/

los favoritos aquí, selecciona ☆ A continuación, ☆ y arrastra a la carpeta de la barra de favoritos. O importa desde otro navegador. [Importar favoritos](#)

smart PROCESS

Home > Download

Download

Thank you for your interest in Smart 365. Please fill in the required (*) contact information below and then click download to download the setup. Please including your email address above to receive a mail with URL link for download software.

<p>First Name *</p> <input type="text" value="JUAN"/>	<p>Last Name *</p> <input type="text" value="PARRA"/>
<p>E-mail *</p> <input type="text" value="juanparra1979@hotmail.com"/>	<p>Business Phone</p> <input type="text" value="3217614346"/>
<p>Company Name</p> <input type="text" value="Smart Process"/>	<p>Job Title</p> <input type="text" value="Engineren"/>
<p>City</p> <input type="text" value="BOGOTA COL"/>	<p>Country/Region</p> <input type="text" value="COLOMBIA"/>
<p>How did you hear about us?</p> <input type="text" value="Other"/>	

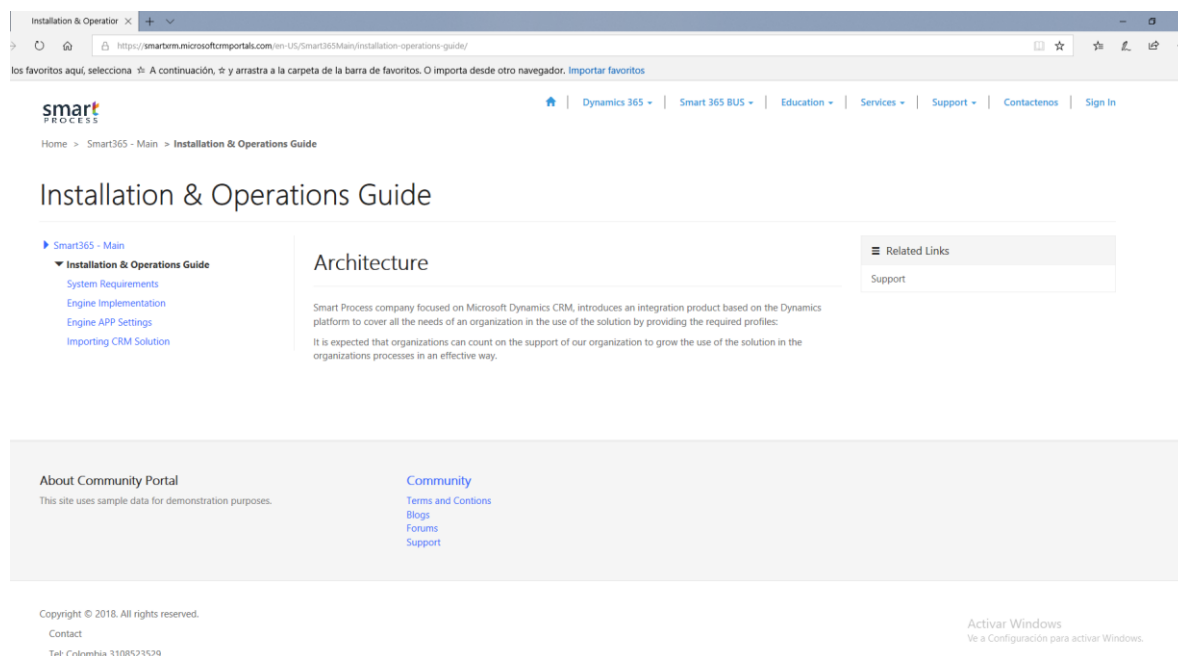
B9GXP

[Generate a new image](#)
[Play the audio code](#)

Enter the code from the image

Img-50

- 2- Proceed with the installation of the Smart Engine, for more information see the following link <https://smartxrm.microsoftcrmportals.com/en-US/Smart365Main/installation-operations-guide>, there you will find the step by step in the statement as shows the Img-51



Img-51

On the left side you will find the requirements of the system, the implementation of the engine, the configuration of the Smart Engine with the Smart Designer, and the import of the CRM solution.

Sample Connexion Smart Engine and Smart Designer(Img-52)

The screenshot shows the 'Smart 365 Enterprise Application Integration BUS' interface. On the left is a dark sidebar with the 'smart INTEGRATOR' logo and a menu with options: 'Connect Smart Design', 'Import Solution CRM', 'Integration Connections', 'Export Maps', 'Import Maps', 'Metadata Copy', and 'Help Smart 365'. The main area displays a 'Connect' form for 'SMART 365'. The form includes fields for 'Connect Name' (SMART 365), 'Discovery URL' (https://disco.crm8.dynamics.com/XRMServices/2011), 'Domain' (empty), 'User' (v-bhboda@cmpgappsource.onmicrosoft.com), 'Password' (masked with dots), and 'Key' (kqzz/n8ZEKdsI/PpwnX3ISr5nZ0IEQsKGmLhEZ2Z6rI). There is a dropdown menu with 'org7' selected and a 'Get Organization' button. At the bottom are 'Connect' and 'Cancel' buttons. Below the form, it says 'No Connected'.

Img-52

- 3- After installed and configured, proceed to create two integration connections, the first is a flat file type connection and the second a CRM type connection (page 25 manual operations), as well as choose to create another type of connection. connection, for the example we will use these two, the purpose of this example is to take information from a flat file (.csv, xls, xlsx) to the CRM account entity.

- a) On the site map go to **Integration -> Integration Connections** and press the button **+ New**

- b) The connection form is displayed, and fill in the following information:

Connection name: CONNECTION FLAT FILE ACCOUNTS

Connection type: Flat File(csv, excel)

CRM attachment archive: No

File Type: Excel 2007(*.xlsx, xml)

File Location: Local Directory

File directory: C:\Program Files (x86)\Smart Process\Smart 365\Files\Docs

Nota: Es la ubicacion donde se instalo el SMART APP, alli se encuentran archivos para la demo

FileName: DemoAccounts.xlsx

Oprima **SAVE & CLOSE**

Img-53

c) Return to the step a. to create another connection record in **+ New** and fill in the following data

Connection name: CONNECTION CRM ACCOUNTS

Connection type: Dynamics CRM

Embedded Integration: SI

Oprima **SAVE & CLOSE**

INTEGRATION CONNECTION : INFORMATION

New Integration Connection

Name
CONNECTION CRM ACCOUNTS

Creation date

general

Connection name * CONNECTION CRM ACCOUNTS

Connection type * Dynamics CRM

Key * x3vdj75tEpWpaju3KIJQNbG49OOqqRw5AmWTb6N+Dk1eEZRLg/Rh6Z1nISojrBphLNWF/60pu/kDmztOTmRjl+J/Tht

Owner * Juan Carlos Parra

Dynamics CRM

Embedded Integration Yes

Implementation Type

Discovery URL

Organization

Domain

User

Password

Img-54

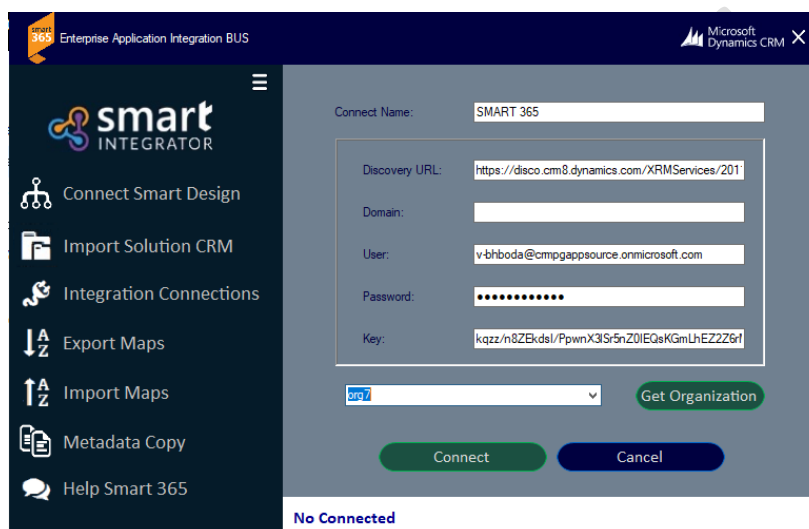
Connections active

<input type="checkbox"/>	Name ↑	Connection t...	Update Titles ...	Editor	Status	Creation date
	CONNECTION CRM ACCOUNTS	Dynamics CRM	No		Active	8/19/2018 7:29 PM
	CONNECTION FLAT FILE ACCOUNTS	Flat File (Csv, ...	No		Active	8/19/2018 7:27 PM

Img-55

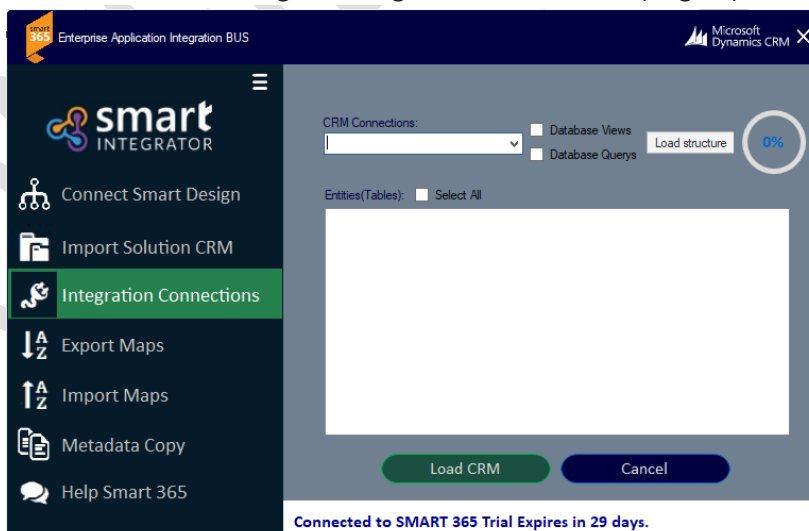
- 4- The next step is to create the data structures of the entities to be integrated in each connection, in order to do so, run the Smart 365 program again, and connect to Smart Designer (Img-56).

C:\Program Files (x86)\Smart Process\Smart 365\Files\Smart integration.exe o search smart 365 in windows



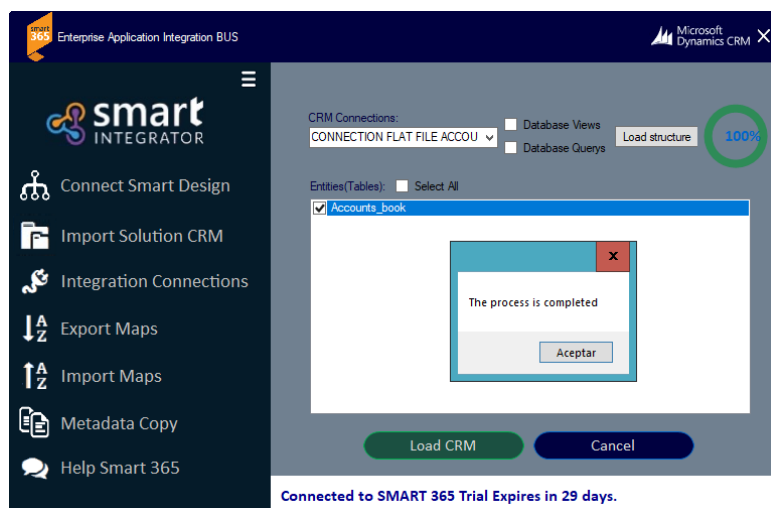
Img-56

Then in the menu on the left side go to Integrations Connection (Img-57)



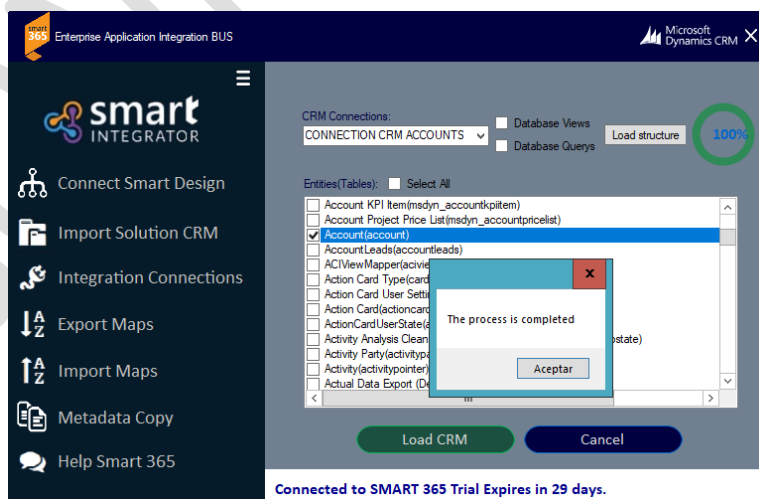
Img-57

In the CRM Connections drop-down list, choose the first connection (CONNECTION FLAT FILE ACCOUNTS) and click **Load structure**, select **Accounts_book** and press **Load CRM** and wait for it to the process is completed(Img-58).



Img-58

In the CRM Connections drop-down list, choose the second connection (CONNECTION CRM ACCOUNTS) and click **Load structure**, select **Account(account)** and press **Load CRM** and wait for it to the process is completed(Img-59).



Img-59

Check the structure of the entities in **Integration -> Entities** and **Integration -> Attributes**

5- CREATING INTEGRATION:

- On the site map go to **Integration -> Integration Solutions** and press the button **+ New**.
- The solution form is displayed, and fill in the following information:

Name: SOLUTION DEMO

Press **SAVE**

Img-60

- On the same form of the created solution, go to the maps grid and add a map record (+).

d) The Map form is displayed, and fill in the following information:

Name: MAP DEMO

Integration Solution: SOLUTION DEMO

Description: Demo map Smart 365

Connection Origin: CONNECTION FLAT FILE ACCOUNTS

Origin Entity: Accounts_book

Process All Records: Yes

All Columns: Yes

Specify Order: No

Destination Connection: CONNECTION CRM ACCOUNTS

Entity Destination: Accounts

Operation: Insert/Update (Key)

Operation Type: Run

Alternate Process: No

Press **SAVE**.

INTEGRATION MAP : INFORMATION				Order of Execution *	Validate Execution P...	Create Relationship ...
MAP DEMO				0	No	No
<div> <div>General</div> <div> <div>Name *</div> <div>MAP DEMO</div> </div> <div> <div>Description</div> <div>Demo map Smart 365</div> </div> <div> <div>Integration Solution *</div> <div>SOLUTION DEMO</div> </div> </div>						
<div> <div>Map</div> <div> <div> <div>Origin</div> <div> <div>Connection Origin *</div> <div>CONNECTION FLAT FILE ACCOUNTS</div> </div> <div> <div>Origin Entity *</div> <div>Accounts_book</div> </div> <div> <div>Process all records</div> <div>Yes</div> </div> <div> <div>All Columns</div> <div>Yes</div> </div> <div> <div>Specify Order</div> <div>No</div> </div> <div> <div>Top</div> <div>1,500</div> </div> </div> <div> <div>Destination</div> <div> <div>Destination Connection *</div> <div>CONNECTION CRM ACCOUNTS</div> </div> <div> <div>Entity Destination *</div> <div>Account</div> </div> <div> <div>Operation *</div> <div>Insert / Update (Key)</div> </div> <div> <div>Operation Type *</div> <div>Run</div> </div> <div> <div>Alternate Process</div> <div>No</div> </div> </div> </div> </div>						

Img-61

e) On the same form of the created map, go to the Attributes grid and add a map attributes attribute (+).

f) The Map Attributes form is displayed, and fill in the following information:

Origin Attribute: Name

Destination Attribute: Account Name

It is required: Yes

Press **SAVE & CLOSE**

g) Return to item h, and create another map attribute record and fill the record with the following data

Origin Attribute: NumberDoc

Destination Attribute: Account Number

It is required: Yes

Press **SAVE & CLOSE**

h) Return to item h, and create another map attribute record and fill the record with the following data:

Origin Attribute: Phone

Destination Attribute: Main Phone

Minimun Value: 7

Maximum Value: 10

Error Message: Yes

Press **SAVE & CLOSE**

- i) Return to item h, and create another map attribute record and fill the record with the following data:

Origin Attribute: MobilePhone

Destination Attribute: Other Phone

Minimun Value: 7

Maximum Value: 10

Error Message: Yes

Press **SAVE & CLOSE**

- j) Return to item h, and create another map attribute record and fill the record with the following data:

Origin Attribute: Fax

Destination Attribute: Fax

Press **SAVE & CLOSE**

- k) Return to item h, and create another map attribute record and fill the record with the following data:

Origin Attribute: Address

Destination Attribute: Address 1: Street 1

Expression: Yes

Expression: =TOUPPER(Address)

Press **SAVE & CLOSE**

l) On the form of the map in the **keys grid** add a record with the following data:

Attibute: Account Number

Relation Attribute: NumberDoc-Account Number

Press **SAVE & CLOSE**

KEY : INFORMATION	Name	Cod Import	Creation date
Llave Account Number	Llave Account Number	1	8/19/2018 8:50 PM

General

Attribute *	Account Number	Relation Attribute *	NumberDoc-Account Number
Entity *	Account	Map *	MAP DEMO
Logical name	accountnumber	Field Type	14
		Owner *	Juan Carlos Parra

Img-62

m) On the site map go to **Integration -> Integration Programming** and press button **+ New**.

n) The Integration Programming form is displayed, and fill in the following information:

Solution: SOLUTION DEMO

Specific Map: MAP DEMO

Record Status: Programmed

Description: Descripcion DEMO

Frecuency: Once

Start Date and Time: Today's date or before

Generate Tracking File: Yes

Select Mapping Trace, Expressions Trace.

Note: Trace file created in the following location:

C:\Program Files (x86)\Smart Process\Smart 365\Files\Trace\Trace_YearMonthDay_Hour

Press **SAVE & CLOSE**

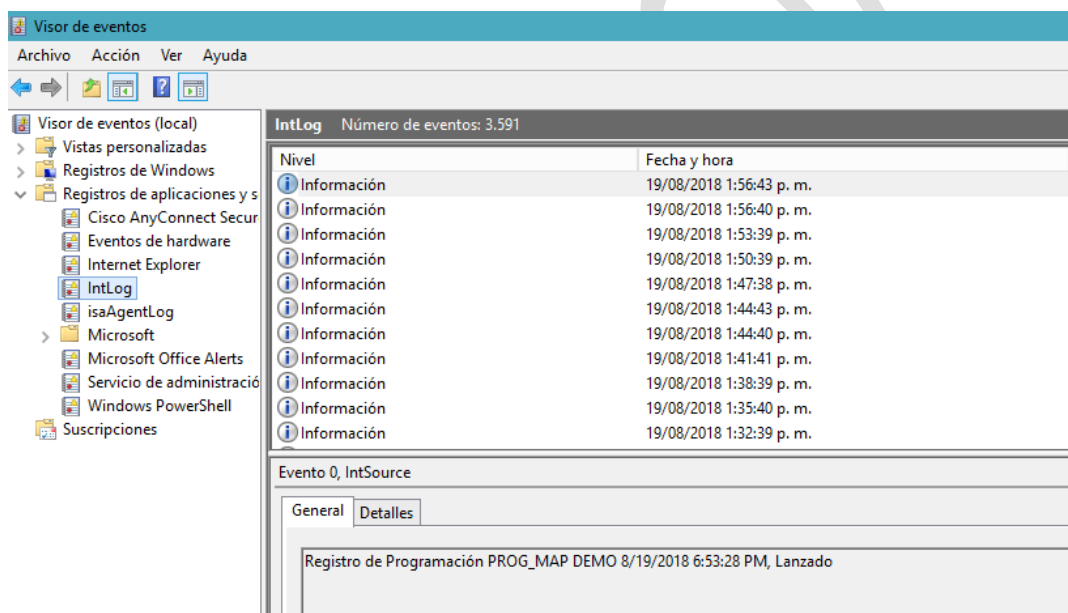
The screenshot shows the 'INTEGRATION PROGRAMMING : INFORMATION' window for 'PROG_MAP DEMO' as of 8/19/2018 6:41:07 PM. The status is 'Active'. The 'general' tab is selected, showing fields for Solution (SOLUTION DEMO), Record Status (Programmed), Specific Map (MAP DEMO), and Description (Descripcion DEMO). The 'Advanced Options' section shows 'Generate Tracking File' set to 'Yes' and 'Number of Attempts (Error)' set to '0'. The 'Trace Options' section has checkboxes for 'Mapping Trace' (checked), 'Alternative Process Trace' (unchecked), 'Expressions Trace' (checked), and 'Trace Repositorio' (unchecked). A 'Configuration' panel on the right shows 'Frequency' as 'Once', 'Start Date and Time' as '8/18/2018 8:00 AM', and 'Owner' as 'Juan Carlos Parra'.

Img-63

Note: Maximum trial version processes 2000 records

Check the event viewer to know what time it is running(Img-64), Wait max 3 Minutes while smart engine launches the integration at that moment generates an integration log record in **Integration** -> **Integration Log (Img-65)** and trace file in:

C:\Program Files (x86)\Smart Process\Smart 365\Files\Trace\Trace_YearMonthDay_Hour



Img-64

INTEGRATION LOG : INFORMATION
Log_MAP DEMO

Name
Log_MAP DEMO

Reason for the status
Completed

General

Name	Log_MAP DEMO	Integration Solution *	SOLUTION DEMO
Integration Map *	MAP DEMO	Start Date *	8/19/2018 8:56 PM
Reason for the status	Completed	Final Date	8/19/2018 9:01 PM
Global Solution Log	No	External Integration	Yes
Father Integration Log	Alternate Process	No
Actual start date Integration		

ACTIVITIES

NOTES

Enter a note

Archivo 0 de Errores en la creación del crm
Errores Crear CRM 0.csv
Juan Carlos Parra - Today 9:00 PM

Archivo 0 de Errores del Integrador
Errores Integrador 0.csv
Juan Carlos Parra - Today 9:00 PM

Data

Records to Process	Number of Records Processed	Total Records Deleted
1,500	1,500	0
Total Created Records	Total Updated Records	Average Time per Record (sec)
954	0
Description	

Img-65