



Optimizing SAP data conversion and related inventory management business processes including Salesforce.com integration using Winshuttle Studio  
John Nickerson | Pharmascience

The background of the slide features a stylized landscape with palm trees. The trees are rendered as silhouettes in various shades of blue and green, set against a white background. The trees are arranged in a way that suggests a tropical coastline with a blue sky and a blue horizon line at the bottom.

**WINSHUTTLE**  
**USER**  
**GROUP**  
SAN DIEGO | 2013

Pharmascience a leading manufacturing of generic drugs in a wide range of therapeutic categories. In this session, John Nickerson, Senior SAP Professional, will highlight key recommendations and best practices as it relates to Pharmascience's use of Winshuttle for Master Data migration, conversion and inventory management; and their current use cases and their up coming integration plans with Salesforce.com

# Agenda

- Introduction & Background
- SAP System
- Introduction to Winshuttle
- The Pilot
- Use cases
  - 1) PM Plant Maintenance – Data Migration
  - 2) Warehouse Management – Data Conversion
  - 3) Salesforce integration – credits & replacement orders
- Results – Winshuttle Log Analysis
- Best Practices
- Future Plans
- Questions



# WUGGIES - Polling Question #1

## Please describe your role at your company as it relates to SAP

Please select one

1. Line of business management
2. Business analyst
3. Information technology management
4. Programmer – system analyst



## What are some of the challenges that you currently face with SAP usability

Select all that apply

1. GUI very complex for our users to learn and use
2. process improvement requests take too long to build
3. Managing master data is time consuming and error prone
4. Creating queries are too complex for us
5. We spend too much time rekeying data



# Pharmascience Family



# Pharmascience Quick Facts



# IT Operations

## IT OPERATIONS: SUPPORT AND IMPROVEMENTS

Computer validation system (1 FTE)

**IT Security**  
0.75 FTE

**SAP BASIS**  
1 FTE  
3 environments, 780 security roles

**SYS ADMINS**  
3.25 FTE  
140 servers  
5 phone systems

**SAP ABAP**  
2.25 FTE  
1980 Custom programs

**SAP PROFESSIONALS**  
1.75 FTE

- BA Sales Distr. 0.5 FTE, 175 tickets/yr
- BA Mfg. 1 FTE, 397 tickets/yr
- BA Warehousing 1 FTE, 170 tickets/yr
- BA Proc. & MOM 0.75 FTE, 387 tickets/yr
- BA Forecasting 0.4 FTE, 50 tickets/yr
- BA Maintenance 0.5 FTE, 75 tickets/yr
- BA QA 0.25 FTE, 120 tickets/yr
- BA Lab testing 1 FTE, 811 tickets/yr
- BA Other 0.85 FTE, 810 tickets/yr

**BI -** 1 FTE, 250 queries

**LIMS DEV** 2 FTE, 1250 programs

**Other development** 0.75 FTE  
Sharepoint, Intranet, ...

Helpdesk + PC SUPPORT 5 FTE  
23000 Tickets/year    1300 PC's, 446 Mobile devices, 142 printers,    1300 supported users

## Business application users group

- Sales & Order entry: 51 SAP users
- Production: 87 SAP users
- Warehouse mngt: 64 SAP users
- Procurement: 36 SAP users
- Forecasting: 29 users
- Maintenance: 15 SAP users
- QA/QC: 90 SAP users
- Scientific affairs: 46 SAP users, 316 Lims users
- Solabs/IRMS/Sharepoint/other...

**Credit/Finance/IT/LSS**  
140 SAP Users

**Paladin users**  
21 SAP Users



# John Nickerson - Senior SAP Professional

## Experience

- 18 years with Pharmascience
- 13 years in Business Applications department
- 11 years SAP, MM,WM,SD,QM,PP
- 34 years supply chain
- 2 years Winshuttle

## Training

- SAP 3<sup>rd</sup> Level - MM, WM, SD (SAP Academy)
- Lean Six Sigma certification (Lean Org)
- Winshuttle training (Winshuttle WISE, Michael Management, videos, user guides, demos, WUGs)
- InfoPath, Designer, Central (Winshuttle - Adrian Jimenez)
- SharePoint (Lynda.com, and Adrian Jimenez)



# SAP Systems - Landscape

## SAP ECC 6.0, Release 700.

- FICO - Finance & Controlling (32 companies)
- FIAA - Asset Accounting (1 company)
- HR – Human Resources (light) (1 plant)
- SD - Sales & Distribution (3 organizations)
- MM - Material Management (4 companies)
- QM – Quality Management (light) (5 plants)
- WM – Warehouse Management (5 warehouses)
- RF – Radio Frequency (4 warehouses)
- PPPI – Production Planning for Process Industries (2 Plants)
- PM – Plant Maintenance (5 plants)



## SAP BW 7.0, Release 700.

- 50 Cubes and 30 ODS



# SAP System - Master Data Records

## Example of some records maintained.

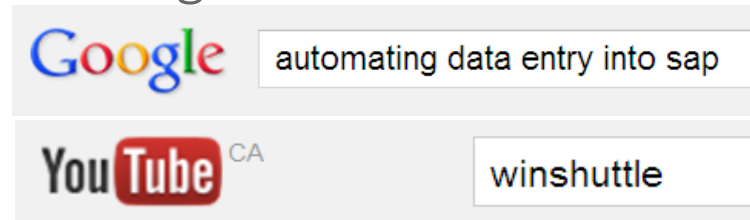
- 34,430 Material Masters (MARA)
- 67,036 Plant Material Masters (MARC)
- 23,177 Purchasing Info Records (EINA)
- 13,295 Vendors – 11 categories (LFA1)
- 10,386 BOMs – 3 categories (STKO)
- 5,739 Recipes – 2 categories (PLKO)
- 54,504 Customers – 20 categories (KNA1)
- 29,115 Source Lists (EORD)
- 28,023 Storage Bins (LAGP)



# Introduction to Winshuttle

## How were we introduced:

- Google—searched for SAP data loading software
- Watched on-line demos
- Got a Demo CD
- Assisted to live demo in Montreal (Beyond Technologies)
- Director of IT met with Winshuttle at May 2009 ASUG



About 1,110,000 results (0.26 seconds)

### [SAP Data Entry Automation | Winshuttle Software](#)

[www.winshuttle.com/solutions-sap/by-function.../data-entry-automation/](http://www.winshuttle.com/solutions-sap/by-function.../data-entry-automation/) ▼

Streamline **SAP Data Entry** and reduce labor costs by entering data via HTML, forms, and Microsoft products such as Excel.

### [SAP Transactions | Update and create SAP data from Excel ...](#)

[www.winshuttle.com/products/transaction/](http://www.winshuttle.com/products/transaction/) ▼

Winshuttle Transaction™ **automates** many **SAP data-entry** processes to increase productivity, protect data quality and maximize a company's return on its **SAP** ...



# The Pilot – Kick the tires

## Opportunity to test Whishuttle

- Purchase Non-Stock (ME21N),
- PO Single or Mass Change (ME22N)
- Time/Work sheet entry (CAT2)



## Project Scope – Scripts / Workflow

- Created scripts listed above
- Created Excel templates (Column & Cell Based)
- Create an InfoPath Form with workflow for CAT2

## Install Winshuttle Product Map

- SharePoint 2010, InfoPath 2007, Central, Studio (Transaction, Query, Workflow), Runner version 10.2



# The Pilot - Installation

## Virtual server created (6 hours)

- Base Installed SQL 2008 R2
- SharePoint 2010 Enterprise.

## WinShuttle Central Server (4 hours)

- This included license set-up for Transaction, Query,, Direct , Form, 2 Runners

## WinShuttle add-ons to SAP (1 hour)

- Transaction and Query function modules

## WinShuttle desk top (1 hour)

It's easy-to-install, well-documented, with excellent technical support.



“Winshuttle Support Team, Rocks!”

# Beyond the Pilot

## Other initiative during the Pilot

- Change Internal Orders (KO02)
- Change Assets (AS02)
- Post asset write-ups (ABZU)
- Post Unplanned depreciation (ABAA)
- Post Asset Retirements (ABAV)



## The benefits gained from this tool:

Elimination of technical specification documenting, development and testing efforts for custom SAP upload programs or using LSMW / SM35 or eCATT

# Use Case #1 – PM Project – Challenge

- Simplify the implementation of Plant Maintenance module by using Winshuttle for data migration.
- Replace work order paper form and e-mails for 95 employees by using Workflow and InfoPath form.
- Key challenges faced during implementation
  - No ABAP resources to create custom programs
  - Limited resources to create data in SAP
  - Need to create programs / scripts in a short period
  - No prior InfoPath & Workflow training
  - Limited budget



# Use Case #1– Solution – Linked Scripts

## Scripts created for data migration:

### Linked Scripts - Group 1

- MM01 Create Material Master (linked)
- ME11 Create Info Record (linked)
- ME01 Create Source List (linked)
- MM01 Create Material Master Extend (linked)
- ME01 Create Source List Extended Plant



### Linked Scripts - Group 2

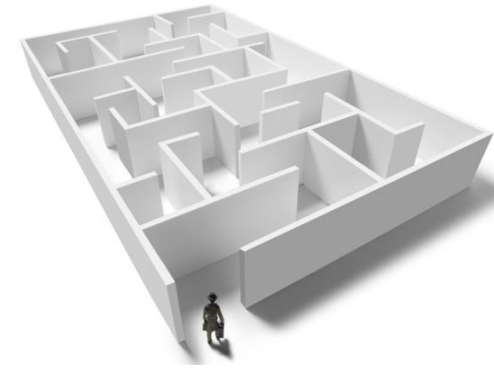
- MB1C Other Good Receipts (linked)
- MM02 Change Material to active code for MRP/MPS



# Use Case #1– PM Project – Form Solution

## IW21 – SAP

The screenshot shows the SAP 'Create PM Notification: Initial Screen' interface. It features a header with the title and a toolbar. The main area contains several data entry fields: 'Notification' (with a value of %00000000001 Z1), 'Status' (OSNO), 'Notification' (with a value of 00000000001), 'Notifctrn type' (Z1), 'Description', and another 'Notification' field (with a value of %00000000001 Z1). Below these are tabs for 'Notification', 'Others (Malfunctions & Codes)', 'Location data', and 'Tasks'. The 'Location data' section includes 'MaintPlant' and 'Location' fields. At the bottom, there is a text editor area with a '5' in the center.



- Complicated
- 5 screens to navigate to
- 16 Fields must fill
- Too easy to put data in the incorrect field.
- But I only wanted to see what that button does!
- Have to navigate to other screens to filter on List of values and must know the correct one.

# Use Case #1– PM Project – Form Solution

## InfoPath Form and Simple Work Flow

### Avis Correctif - Corrective Notification

#### Problème - Problem

Alarme "Flame fail" sur M2 (VENT0176)

#### Coordonnées - Contact Information

Demandeur - Requestor

Marius Burbulea

N° de téléphone - Telephone N°:

#### Suivi de l'information - Tracking Information

N° du modèle de l'avis - Reference Notification N°

Priorité - Priority

Moyenne

#### Localisation - Location

Division - Plant

ABRAMS

N° équipement - Equipment Number

Poste technique - Functional Location

Code d'entretien général - Maintenance code

N° équipement - Equipment Number:

VENT0176 - SYSTÈME DE VENTILATION AIR MAKE-UP

#### Désignation - Description

Unité M2 en alarme "flame fail"

Appel de service à Carmichael

cliquez sur le pointeur vers le bas pour ajouter une ligne pour les description

Résultat / Result

Avis 10033083 sauvegardé

Soumettre à SAP / Submit to SAP

Notification	10033083	Z1	Alarme "Flame fail" sur M2 (VENT0176)	
Status	NOCO ORAS			WAPP
Order	4032613			

#### Notification Others (Malfunctions & Codes) Location data

##### Location data

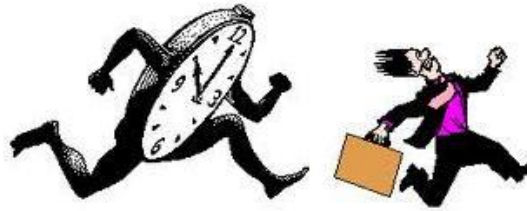
MaintPlant	1030	R&D Abrams
Location	ABRAMS	ABRAMS
Room	R00F6625	
Plant section		
Work center		
ABC indicator		
Sort field		

##### Account assignment

Company Code	1000	Pharmascience Inc.	Montreal
Asset		/	
Business Area			
Cost Center	18009	Abrams Bldg Maint.	CO Area 1000
WBS Element			
			SettlementOrder

# Use Case #2 – WM - Challenges

- Simplify the integration of a new plant by using Winshuttle for data creation and conversion.
- Key challenges faced during implementation
  - No ABAP resources to create custom programs
  - Limited resources to create data in SAP
  - MM17, LSMW, IBIP and eCATT too labor intensive and incorrectly used.
  - Needed to configure, create programs / scripts in a short period because Go-Live dates predetermined.
  - IT was not involved in early planning stages.



Who will win this race against time?



WINSHUTTLE  
USER  
GROUP

# Use Case #2 – WM - Solutions

Used one data file and 14 scripts linked together to extend materials.

## Material Creation

Scripts	Scripts Name	
01	MM01V-CREATE-FERT-SALES-PLANT	Create in plant 1080
02	MM01E-CREATE-FERT-PURCHASING	Create in plant 1080
03	MM01D-CREATE-MRP	Create in plant 1080
04	MM01A-CREATE-FERT-WORK-SCHEDULING	Create in plant 1080
05	MM01L-CREATE-FERT-GENERAL-PLANT-STORAGE	Create in plant 1080
06	MM01Q-CREATE-FERT-QM	Create in plant 1080
07	MM01B-CREATE-FERT-ACCOUNTING	Create in plant 1080
08	MM01G-CREATE-FERT-COSTING	Create in plant 1080
09	MM01S-CREATE-FERT-WAREHOUSE	Create in warehouse 080
10	MM01S-CREATE-FERT-WAREHOUSE-STYPE	Create in warehouse 080
11	MM02-CHANGE X-PLANT STATUS	Change in copy plant
12	MM02G-CHANGE FERT-COSTING1	Create in plant 1080
13	MM02V-CHANGE-FERT-SALES-DELIVERY	Change in copy plant
14	MM02-CHANGE PLANT-SPECIFIC-STATUS	Change in copy plant



# Use Case #2 – WM - Recommendation

- Check existing records to be copied before running scripts otherwise many error messages.
- Remove X-Plant, Plant Status, or Flagged for deletion before running scripts by using “Linked script” feature.
- To check if material is complete, create Excel macro to populate a column checking PSTAT status of table MARC.

Plant Storage

```
=IF(ISNUMBER(SEARCH("L",C2)),"X", "Not OK")
```

Warehouse Management

```
=IF(ISNUMBER(SEARCH("S",C2)),"X", "Not OK")
```

Do this for every view used in your company



# Use case #2 – WM-MM Challenges

## Have the right tool for the job

This screenshot shows the SAP MRP (Material Requirements Planning) transaction interface. The main window displays material data for 'TLE 40cc 33-400 WH RD HDPE - TEST' at plant '1020' (Royalmount). The 'General Data' section includes fields for Material (1011), Plant (1020), and Stor. Loc. (1020). The 'Planning' section shows 'BOM explosion/dependent requirements' and 'Component scrap (%)' set to 0.00. The 'Availability' section includes 'Discontin. ind.', 'Eff.-out', and 'Follow-up matl'. The 'Repetitive manufacturing / assembly / deployment strategy' section has 'Repetitive mfg' checked and 'REM profile' set to 'Fair share rule'. The 'Average plant stock' section shows 'Material memo' and 'Material memo exists' options. The 'Storage location MRP' section includes 'Sloc MRP indicator', 'Spec.proc.type: Sloc', 'Reorder point', and 'Replenishment qty'.

This screenshot shows the SAP 'Mass Maintenance: Materials (industry)' transaction. The main window displays a data table with columns for Material, Plant, Description, Fixed lot size (MARC-BST...), Fixed lot size (MARC-FIXL...), Maximum lot size, and Maximum Lot E... The table contains entries for materials 1011 through 1019. A 'Messages from the Update Task' dialog box is open, showing a list of messages: 'Long text', 'Details', 'Object', and 'Object'. Below the messages, a 'Display logs' section shows a table of log entries with columns for Date/Time/User, Nu..., External ID, Object txt, Sub-object text, Tran, Program, Mode, and Log number. The log entries include: '18.10.2013 10:02:00 JNICKERS 4 MASS0183... Material master... MASS Dialog pro... 0000000000003051627', 'Problem class very important 2', and 'Problem class Additional inform 2'. A 'Message Text' dialog box is also open, showing the following messages: 'Trying to create: 1011 1050', 'The material cannot be maintained since no maintainable data transferred', 'Trying to change: 1011 1050', and 'Minimum lot size may not be greater than maximum lot size'.



# Use Case #2 – WM – Other Solutions

Also created the other scripts rather than using ABAP, LSMW, IBIP, or eCATT.

## Material Creation

Scripts	Scripts Name	
15	ME01-COPY_SOURCE_LIST_IN_1080	Create in plant 1080
16	C201-CREATE RECIPE TP	Create in plant 1080
17	C201-CREATE RECIPE TP - SPEC WRITE	Create in plant 1080
18	C202-Change-SP key	Change in plant 1080
19	C223-PROD-VER-MASS-PROCESSING	Create in plant 1080
20	LT01-CREATE STAGING	Create in source plant
21	ZRF001-TRANSFER	Create in plant 1080
22	LT01-CREATE PLACEMENT	Create in plant 1080
23	QP02-MODIFY-INSPECTION-PLAN	Create in plant 1080
24	VA02-CHANGE-DELIVERY PLANT	Change open records
25	MB1B-CHANGE-SPECIAL STOCKS	Move to plant 1080
26	LT09-CREATE TRANSFER-STAGING	Create in source plant
27	LT09-CREATE TRANSFER-PLACEMENT	Create in plant 1080



# Use Case #3 – SF.com / SAP Integration - Challenge

Simplify the integration of Salesforce.com and SAP for credits and replacement orders.

- Key challenges

- Credit and replacement order information received in Excel format via email.
- Excel source file not optimal for use with Winshuttle script(s)
- Labor intensive, many steps, several SAP transactions for this process.



# Use Case #3 – SF.com / SAP Integration - Solution

- Solution:

- Format the Excel file by creating a macro that enables the use of multiple Winshuttle scripts in cell based mode.
- Creation of multiple scripts linked together referencing same sheet;



VA01\_ZS44\_C22\_SALES\_FORCE\_FORM\_STEP\_1  
VKM3\_SALES\_FORCE\_FORM\_STEP\_2  
VA01\_ZS30\_F24\_SALES\_FORCE\_FORM\_STEP\_3  
VA02\_ZS44\_C22\_SALES\_FORCE\_FORM\_STEP\_4  
VL01N\_ZS44\_C22\_SALES\_FORCE\_FORM\_STEP\_5  
VF01\_REOF\_STEP\_6

# Results – Winshuttle Log Analysis

## Usage – June 2012 to September 2013

- 53 Transactions used with Winshuttle
- 21,937 Winshuttle Script Executions
- 378,612 SAP Records Processed
- 6178 hours saved / 883 days
- 312 less training hours

## Other Wins

- 1060 development days



# Best Practices

- \*Establish Roles & Responsibilities

- T

- \*Script

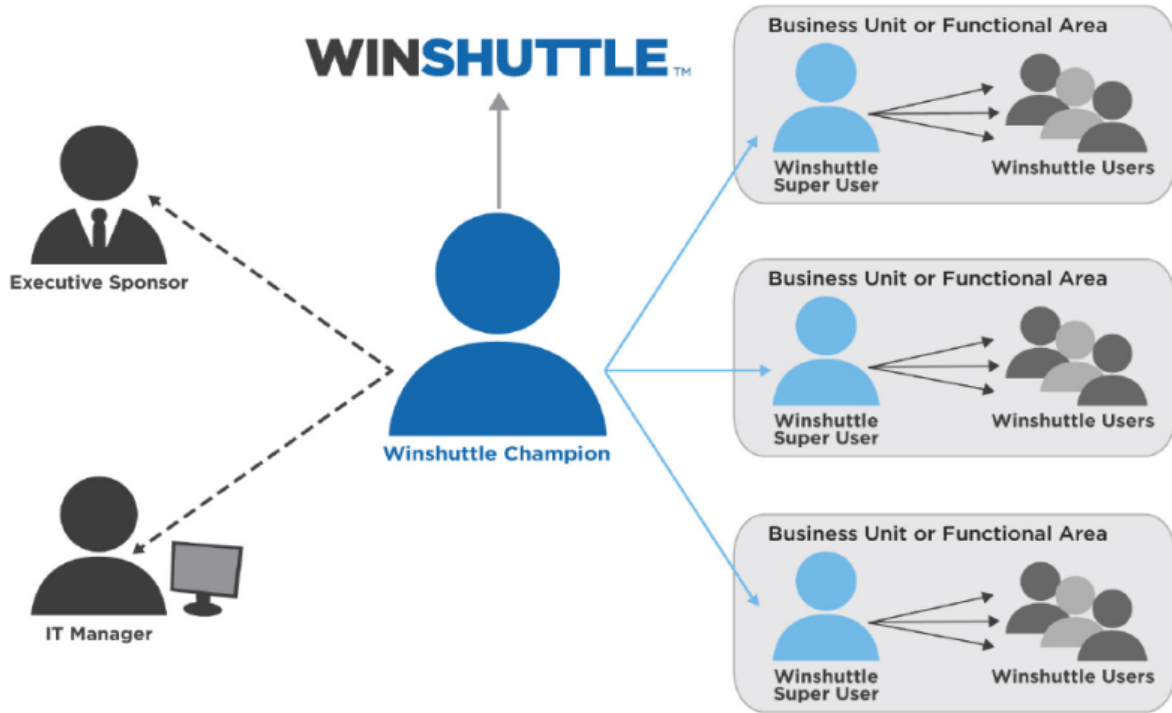
- E

- N

- S

- C

- A



\* Source: [whitepaper-2876-best-practices-for-winshuttle-enterprise-development](http://whitepaper-2876-best-practices-for-winshuttle-enterprise-development)



# Future Plans for Winshuttle Deployment

## Electronic form and workflow

- Master data creation
- Inventory destruction requests
- Inventory reservation

## Better integration with Salesforce.com

- Two-way flow of customer master data
- Push material and batch master to site
- Push sales data to site

## Implement Winshuttle Query

- Replace BI usage for 360
- Eliminate SQ01
- Load SharePoint lists



# Questions



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