



# Creating Projects in SAP

(Not Manually...With Winshuttle)

**Corey B. Holstege**  
Project Lead, The Home Depot

**WINSHUTTLE**  
**USER**  
**GROUP**

**ANNUAL**  
**CONFERENCE**  
ATLANTA 2017

# Agenda



- 📍 Introduction
- 📍 The Challenge
- 📍 The Solution
- 📍 Benefits, Lessons Learned & Future Plans
- 📍 Q&A

# About The Home Depot



- Founded in 1978
- World's largest home improvement retailer
- More than 2,200 stores across North America.
- \$88.5 Billion in Revenue in 2015
- 385,000+ Associates
- More than 35,000 products in store and more than 1 million products online





# About me

- Transplant to Atlanta, GA from Grand Rapids, MI
- Project Lead in Finance Integration
- At The Home Depot for 2 years
- 4 years as an SAP Consultant with Accenture
- Worked with SAP for 8 years
- Avid DIY-er and bookworm



# The Challenge

- A Finance group annually creates between 300 and 1,000 projects in SAP.
- One Associate would key these in manually, one at a time.
- It took approximately 5 minutes per project totaling 1 to 2 weeks full time (i.e. 40-80 hours) to create all the necessary projects.
- This Associate would literally do nothing else for up to 2 weeks.
- A 23 page SOP existed for this process, utilizing two Tcodes: IMA11 and CJ20N.



# The Solution

- Transaction V10.7
- 7 scripts total
- 6 of the scripts chained together
- 1 Excel workbook
- 1 Text file
- 1 macro



# Script 1: Create Appropriation Request

- Tcode: IMA1N
- Mode: Batch
- Number of Fields uploaded: 10

**Display Appropriation Request:**

Worklist on [Icons]

Appropriation req. [Field] App. req. type [Field]

Name [Field]

General Data | Control data | Organizational Units | Measures/Assets | User Fields | Var

**General data**

Reason for investmt [Field]  
Envir. investment [Field]  
Scale [Field]  
Priority [Field]  
Approval year [Field]  
Planned approval [Field]  
Implementation start [Field]  
Trading partner [Field]

External authorities  
 Strategic appropriation request

**Persons involved**

Func	Partner	Name	A Address
[Redacted]			

Need to enter multiple "Persons involved"



# Script 1: Create Appropriation Request

## Create Appropriation Request: Initial screen

Approp.request type

Reference

Appropriation req.

Using "Reference" can "insert" values you need!

### Create Appropriation Request:

Approp. request [REDACTED]

App. req. type [REDACTED]

General Data | Control data | Organizational Units | Measures/Assets | User Fields | Vari

General data

Name [REDACTED]

Reason for investmt [REDACTED]

Approval year [REDACTED]

Planned approval [REDACTED]

Implementation start [REDACTED]

Strategic appropriation request

Persons involved

Func	Partner	Name	A	Address
[REDACTED]	[REDACTED]	[REDACTED]		Jones, , ,
[REDACTED]	[REDACTED]	[REDACTED]		Holstege, , ,
[REDACTED]	[REDACTED]	[REDACTED]		REA_Grp2, , ,

"Persons involved" is filled out!





# Script 2: Create Capital and Expense WBS Elements

- Tcode: IMA2N
- Mode: GUI Scripting
- Number of Fields uploaded: 3

You can map multiple SAP fields from multiple Scripts to the same Column in Excel

Sno.	Field Description	Fi	Fi Mapping Type	Value/Action	Notes
1	Log Column			M	
2	Internal number for appropriation request	c.. S...	→	C	
3	Standard WBS to be copied	c.. S...	→	L	
4	Character string to be searched	t.. S...	→	L	
5	Character string to be inserted	t.. S...	→	C	
6	Character string to be searched	t.. S...	→	L	
7	Character string to be inserted	t.. S...	→	C	

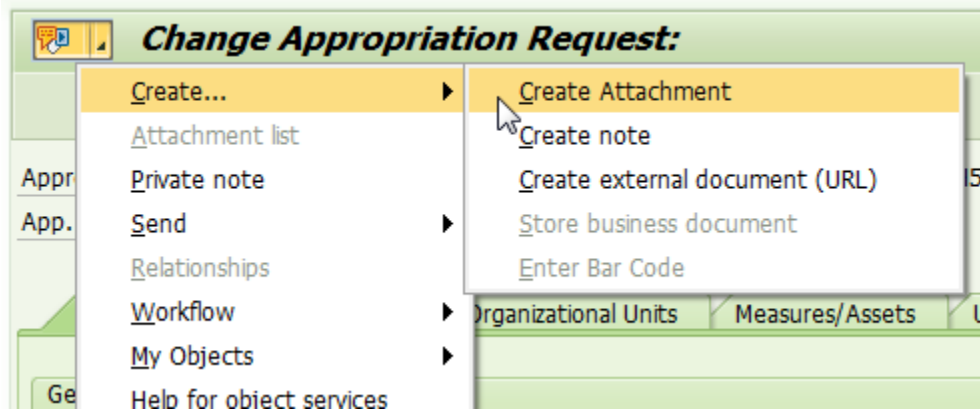
  

	C	L	M
1	Script 1, Script 2, Script 3, Script 4, Script 5, Script 6, Script 8 Appropriation Request Number (Formatted for Coding Mask) IMAK-POSID	Script 2 Standard WBS to be copied cbxtRAIA1-PS_VORSPSP.text	Log Winshuttle TRANSACTION 10.7 Hotfix 2 Script 2_IMA2N.TxR 8/9/2017 1:57:25 PM Mode: Gui Scripting QS1-500, cxh5037 Start Row: 3 End Row: 0 Number of Errors: 0
2			Log Winshuttle TRANSACTION 10.6 IMA2N - S2.TxR 10/4/2016 12:15:26 PM Mode: Gui Scripting QS1-500, MPB7GY7
3	IT-80026	TE-30051	Appropriation request IT-80026 was changed
4	IT-80027	TE-30051	Appropriation request IT-80027 was changed
5	IT-80028	TE-30051	Appropriation request IT-80028 was changed



# Script 3: Attach Documentation in SAP

- Tcode: IMA2N
- Mode: GUI Scripting
- Number of Fields uploaded: 3



You can upload attachments!

“No changes were made”  
doesn’t mean nothing was  
done.

	C	N	O	P
				Log Winshuttle TRANSACTION 10.7 Hotfix 2 Script 3_IMA2N.TxR 8/9/2017 1:57:56 PM Mode: Gui Scripting Q51-500, cxh5037 Start Row: 3 End Row: 0 Number of Errors: 0
1	Script 1, Script 2, Script 3, Script 4, Script 5, Script 6, Script 8 Appropriation Request Number (Formatted for Coding Mask) IMAK-POSID	Script 3 Directory cbtDY_PATH.text	Script 3 File Name cbtDY_FILENAME.text	Log Winshuttle TRANSACTION 10.6 IMA2N - Attachment.TxR 10/4/2016 12:22:03 PM Mode: Gui Scripting Q51-500, MPB7GY7
2				
3	IT-80026	C:\Users\cxh5037\Documents	IT-01668 Project Name One Pager or CBA.xlsx	No changes were made to appropriation request IT-80026

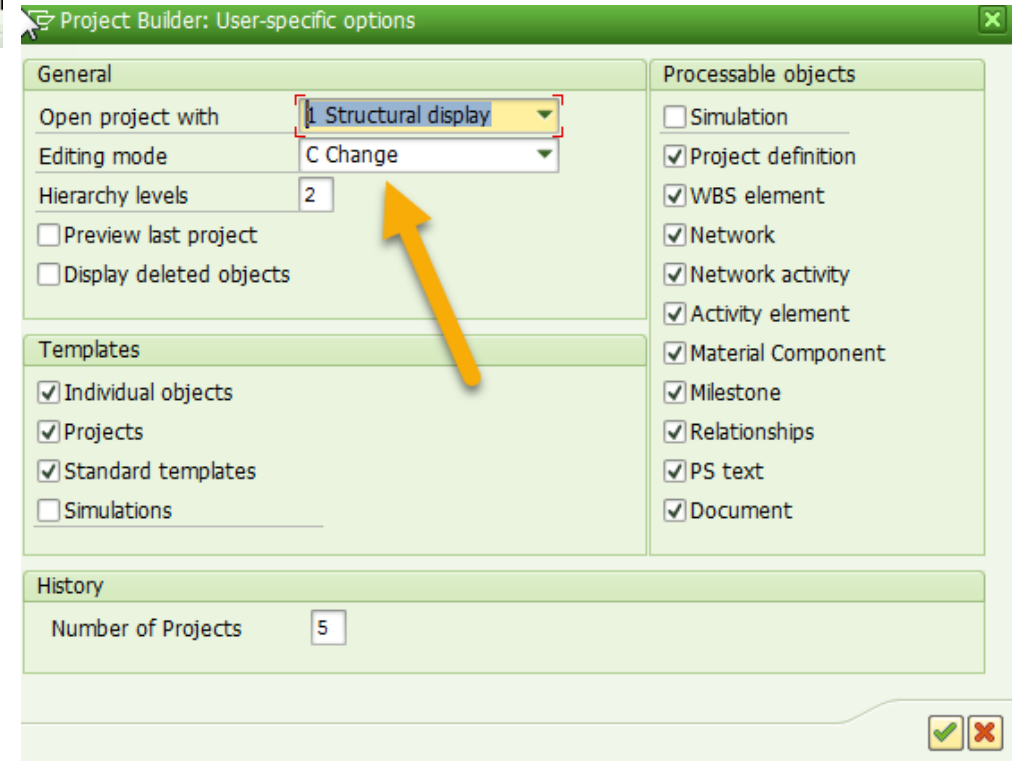
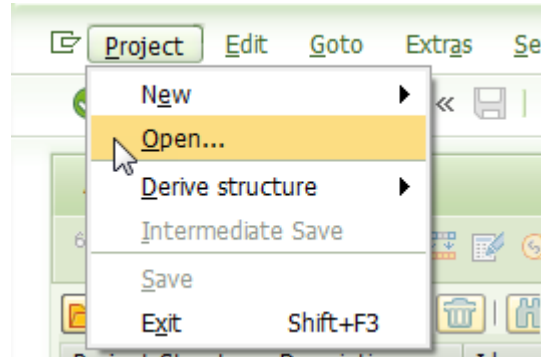


# Script 4: Enter additional Data

- Tcode: CJ20N
- Mode: Non-batch with Controls
- Number of Fields uploaded: 3

Always use the Menus in CJ20N.

There is a setting that controls if CJ20N opens in “Display” or “Change” mode.





# Script 5: Enter additional Data

- Tcode: CJ20N
- Mode: Non-batch with Controls
- Number of Fields uploaded: 4

IT-80029 - Assignment to investment program position

Investment program	CAPITAL
Position ID	CORPORATE IT TTL
Approval version	Corporate IT TTL

Multiple assignment

Deviate from the SOP where necessary.

Don't search....enter the value directly!

Structure of CAPITAL/2016

CAPITAL/2016 Capital Investment Program

- TOTAL CAPITAL BUDGET Total Capital Budget
- IT PROJECTS TOTAL IT PROJECTS TOTAL



# Script 6: Retrieve WBS elements

- Tcode: SQ01
- Mode: Batch
- Number of Fields uploaded: 1

Project Builder: Project IT-80029

Identification and view selection

P.. Project Def. IT-80029 Winshuttle Test- 081417 - CXH500

Detail: [icon]

Overview(s): [icon] [icon]

Basic Data Organization Respo Over.

S	Lev	WBS element	CA...	Resp...	CA...	Res.cost c...
[icon]	1	IT-80029	1000	19100231	1000	10100000
[icon]	2	IT-80029.2000	1000	19100231	1000	10100000
[icon]	2	IT-80029.2002	1000	19100231	1000	10100000
[icon]	2	IT-80029.2003	1000	19100231	1000	10100000
[icon]	1	IT-80029.1900	1000	19100231	1000	10100000
[icon]	2	IT-80029.2900	1000	19100231	1000	10100000
[icon]	3	IT-80029.3901	1000	19100231	1000	10100000
[icon]	3	IT-80029.3902	1000	19100231	1000	10100000
[icon]	3	IT-80029.3903	1000	19100231	1000	10100000
[icon]	3	IT-80029.3904	1000	19100231	1000	10100000
[icon]	3	IT-80029.3905	1000	19100231	1000	10100000
[icon]	3	IT-80029.3906	1000	19100231	1000	10100000



# Script 6: Retrieve WBS elements

- Create Variant in SQ01 to store file location of text file
- Set User Parameters in SU3 to default Query Area and User Group in SQ01

Set this to the name of the User Group you Created.

Set/Get parameter ID	Parameter value	Short Description
AQB	Z_IT_FIN	ABAP Query: User group
AQW		ABAP Query: Query area



# Script 6: Retrieve WBS elements

- Default the name of the query and the name of the variant in the script
- This reduces the input fields on the excel workbook
- Keeps the workbook clean for the user

The screenshot shows the Winshuttle TRANSACTION interface. The top window displays a mapping table with the following data:

Sno.	Field Description	File	File	Mapping Type	Value	Notes
1	Log Column				X	
2	SAP Query: Query name / QuickView name	R...	S...		Z_ITFIN_PRPS	
3	SAP Query: Variant name	R...	S...		V1	
4		S...	S...		C	

Two callouts point to the 'Value' column: 'Name of the script' points to 'X' in row 1, and 'Variant Name.' points to 'C' in row 4.

The bottom window shows an Excel spreadsheet with the following data:

	C	X	Y	Z	AA	AB
1	Script 1, Script 2, Script 3, Script 4, Script 5, Script 6	Log Winshuttle TRANSACTION 10.7 Hotfix 2 Script 6_SQ01.TxR 8/9/2017 1:59:17 PM Mode: Batch Q51-500, cxh5037 Start Row: 3 End Row: 0 Number of Errors: 0				
2	Appropriation Request Number (Formatted for Coding Mask) IMAK-POSID	Log Winshuttle TRANSACTION 10.7 Hotfix 2 SQ01.TxR 10/4/2016 2:32:39 PM Mode: Batch PS1-500, cxh5037 Start Row: 2 End Row: 0 Number of Errors: 0				
3	IT-80026	1,511 bytes transferred				

An orange arrow points from the 'Variant Name' callout in the mapping table to the 'Appropriation Request Number' cell in the Excel spreadsheet.



# Script 6: Retrieve WBS elements

- End result is a text file that lists:
  - Project #
  - WBS Element
  - Description
  - Level of the WBS Element in the project

Z\_ITFIN\_PRPS.txt - Notepad

File	Edit	Format	View	Help
IT-80026	IT800263002	Store Storage	3	
IT-80026	IT800263003	Store Software	3	
IT-80026	IT800263004	Store Facilities	3	
IT-80026	IT800260000	Winshuttle Test- 080917 - CXH5037	1	
IT-80026	IT800262000	Store Hard Capital	2	
IT-80026	IT800263001	Store Servers	3	
IT-80026	IT800263005	Store Network Infrastructure	3	
IT-80026	IT800263006	Store Hardware	3	
IT-80026	IT800263007	Store Deployment	3	
IT-80026	IT800263008	Store Other	3	
IT-80026	IT800262002	Distribution Center Hard Capital	2	
IT-80026	IT800263017	DC Servers	3	
IT-80026	IT800263018	DC Storage	3	
IT-80026	IT800263019	DC Software	3	
IT-80026	IT800263020	DC Facilities	3	
IT-80026	IT800263021	DC Network Infrastructure	3	
IT-80026	IT800263022	DC Hardware	3	
IT-80026	IT800263023	DC Deployment	3	
IT-80026	IT800263024	Distribution Center Other	3	
IT-80026	IT800262003	Other Hard Capital	2	
IT-80026	IT800263025	Other Servers	3	
IT-80026	IT800263026	Other Storage	3	
IT-80026	IT800263027	Other Software	3	
IT-80026	IT800263028	Other Facilities	3	
IT-80026	IT800263029	Other Network Infrastructure	3	
IT-80026	IT800263030	Other Hardware	3	
IT-80026	IT800263031	Other Deployment	3	
IT-80026	IT800263032	Other Other	3	
IT-80026	IT800261900	Winshuttle Test- 080917 - CXH5037	1	
IT-80026	IT800262900	TOTAL EXPENSE Level 2	2	
IT-80026	IT800263901	TBD	3	
IT-80026	IT800263902	TBD Cost Center 1	3	
IT-80026	IT800263903	TBD Cost Center 2	3	
IT-80026	IT800263904	TBD Cost Center 3	3	
IT-80026	IT800263905	TBD Cost Center 4	3	
IT-80026	IT800263906	TBD Cost Center 5	3	
IT-80027	IT800270000	Winshuttle Test- 080917 - CXH5037	1	
IT-80027	IT800272000	Store Hard Capital	2	
IT-80027	IT800273001	Store Servers	3	



# Load text file into Excel



- Link the text file to a worksheet in the Excel Workbook.
- After first load, uncheck “Prompt for file name on refresh”

Appropriate project	WBS Element	Description	Lev
IT-80026	IT800263002	Store Storage	3
IT-80026	IT800263003	Store Software	3
IT-80026	IT800263004	Store Facilities	3
IT-80026	IT800263028	Other Facilities	3
IT-80026	IT800263029	Other Network Infrastructure	3
IT-80026	IT800263030	Other Hardware	3
IT-80026	IT800263031	Other Deployment	3
IT-80026	IT800263032	Other Other	3
IT-80026	IT800261900	Winshuttle Test- 080917 - CXH5037	1
IT-80026	IT800262900	TOTAL EXPENSE Level 2	2
IT-80026	IT800263901	TBD	3
IT-80026	IT800263902	TBD Cost Center 1	3
IT-80026	IT800263903	TBD Cost Center 2	3
IT-80026	IT800263904	TBD Cost Center 3	3
IT-80026	IT800263905	TBD Cost Center 4	3



# Remember...

- Remember SQ01 script downloaded ALL WBS #s for the project
- We only need to update the WBS #s under the Second Level 1

- Level 1
  - Level 2
    - Level 3
  - Level 2
- Level 1
  - Level 2
  - Level 2
  - Level 2
    - Level 3
    - Level 3

# Macro to prep data for script 7



- Refreshes data connection to populate worksheet from text file
- Finds the 2<sup>nd</sup> level 1 for each project and copies the project # and WBS # to another worksheet

	A	B	C	D
1	Appropriate project	WBS Element		Lev
5	IT-80026	IT800260000	Winshuttle Test - 080917 - CXH5037	1
6	IT-80026	IT800262000		2
7	IT-80026	IT800263001		3
8	IT-80026	IT800263005	Store Network Infrastructure	3
9	IT-80026	IT800263006	Store Hardware	3
10	IT-80026	IT800263007	Store Deployment	3
11	IT-80026	IT800263008	Store Other	3
12	IT-80026	IT800262002	Distribution Center	2
13	IT-80026	IT800263017		3
14	IT-80026	IT800263018		3
15	IT-80026	IT800263019	DC Software	3
16	IT-80026	IT800263020	DC Facilities	3
17	IT-80026	IT800263021	DC Network Infrastructure	3
18	IT-80026	IT800263022	DC Hardware	3
19	IT-80026	IT800263023	DC Deployment	3
20	IT-80026	IT800263024	Distribution Center Other	3
21	IT-80026	IT800262003	Other Hard Capital	2
22	IT-80026	IT800263025	Other Servers	3
23	IT-80026	IT800263026	Other Storage	3
24	IT-80026	IT800263027	Other Software	3
25	IT-80026	IT800263028	Other Facilities	3
26	IT-80026	IT800263029	Other Network Infrastructure	3
27	IT-80026	IT800263030		3
28	IT-80026	IT800263031		3
29	IT-80026	IT800263032		3
30	IT-80026	IT800261900	Winshuttle Test - 080917 - CXH5037	1
31	IT-80026	IT800262900	TOTAL EXPENSE Level 2	2
32	IT-80026	IT800263901		3
33	IT-80026	IT800263902	TBD Cost Center 3	3
34	IT-80026	IT800263903	TBD Cost Center 4	3
35	IT-80026	IT800263904	TBD Cost Center 5	3
36	IT-80026	IT800263905	TBD Cost Center 4	3
37	IT-80026	IT800263906	TBD Cost Center 5	3
38	IT-80027	IT800270000	Winshuttle Test - 080917 - CXH5037	1
39	IT-80027	IT800272000	Store Hard Capital	2
40	IT-80027	IT800273001	Store Servers	3

1st level 1

But not these!

2nd level 1

We need these!



# Macro to prep data for script 7

- Copies the Cost Center # in Cell C3 down for every row that was put on the worksheet.
- Data is prepped for Script 7

	A	B	C	D
1	Script 7	Script 7	Script 7	Log Winshuttle TRANSACTION 10.7 Hotfix 2 Script 7_CJ02.TxR 8/9/2017 2:01:00 PM Mode: Non-Batch without Controls Q51-500, cxh5037 Start Row: 3 End Row: 0 Number of Errors: 0
2	*PROJ-PSPID	*PRPS-POSID	Requesting cost center PRPS-AKSTL(01)	Log Winshuttle TRANSACTION 10.6 CJ02 - 56.TxR 10/5/2016 10:14:14 AM Mode: Non-Batch without Controls Q51-500, MPB7GY7
3	IT-80026	IT-80026.0000	18090200	Project IT-80026 is being changed
4	IT-80026	IT-80026.2000	18090200	Project IT-80026 is being changed
5	IT-80026	IT-80026.3001	18090200	Project IT-80026 is being changed
6	IT-80026	IT-80026.3005	18090200	Project IT-80026 is being changed
7	IT-80026	IT-80026.3006	18090200	Project IT-80026 is being changed
8	IT-80026	IT-80026.3007	18090200	Project IT-80026 is being changed
9	IT-80026	IT-80026.3008	18090200	Project IT-80026 is being changed
10	IT-80026	IT-80026.2002	18090200	Project IT-80026 is being changed
11	IT-80026	IT-80026.3017	18090200	Project IT-80026 is being changed
12	IT-80026	IT-80026.3018	18090200	Project IT-80026 is being changed



# Script 7: Retrieve WBS elements

- Tcode: CJ02
- Mode: Non-batch without controls
- Number of Fields uploaded: 3+

Sometimes you need to update items one by one.

**Change Project: Initial Screen**

Project Def. IT-80026

WBS Element IT-80026.3001

**Change Project: WBS Element Overview**

Proj. def. IT-80026 Winshuttle Test- 080917 - CXH5037

Basic Data Dates Assignments Responsibilities Control T...

S	Lev	WBS element	CA...	Resp. cost...	CA...	Req.cost c...	RqCC
	3	IT-80026.3001	1000	19100231	1000	18090200	
	1						



# Wrap it up in a bow

- Additional worksheets:
  - Index
  - Instructions
  - SAP Setup
  - Winshuttle Instructions
  - Visual Mapping
  - Data Dictionary

	A	B	C	D	E	F	G
1	SAP Field Name	Description	Worksheet	Column	Script	Mandatory/ Optional	Instructions
2	Approp. request type	The appropriation request type	Upload_1	A	Script 1	Mandatory.	IT projects will always be "Y3" (Information Technology C Requests
3	[Reference] Appropriation req.	The appropriation request you will reference when creating the new appropriation request. SAP will copy certain field values from the reference request to the new request (e.g. approvers)	Upload_1	B	Script 1	Mandatory.	Choose a reference appropriation request that has the sa (specifically, the approvers) as the new appropriation re
4	Approp. request	The new appropriation request number	Upload_1	C	Script 1, Script 2, Script 3, Script 4, Script 5, Script 6	Mandatory.	Winshuttle does not find the "next available AR number" need to be done manually. Once you find the next availa populate the remaining rows with the AR number plus on example, if the next available number is IT-00001 you w 00001 in the first row, IT00002 in the second row, and so
5	Name	The description of the appropriation request	Upload_1	D	Script 1	Mandatory.	Enter the project name.
6	Reason for investmt	The reason for investment	Upload_1	E	Script 1	Mandatory.	IT projects will always be "06" (SSC Initiative)
7	Approval year	The year in which the AR will be approved	Upload_1	F	Script 1	Mandatory.	Enter the year in which the AR will be approved.
8	Planned approval	The date by which the AR will be approved	Upload_1	G	Script 1	Mandatory.	Enter the date of the first day of the new fiscal year.
9	Implementation start	The date on which the project will be implemented	Upload_1	H	Script 1	Mandatory.	Format: MMDDYYYY Enter the date of the first day of the new fiscal year.
10	Requesting co. code	The company code to which the AR should be attached	Upload_1	I	Script 1	Mandatory.	Format: MMDDYYYY Enter the company code
11	Req. cost center	The cost center to which the AR should be attached	Upload_1	J	Script 1	Mandatory.	Format: #### Enter the cost center
12	N/A	Winshuttle Log Column	Upload_1	K	Script 1	N/A	Format: ##### DO NOT USE THIS COLUMN. ANYTHING YOU PUT IN THIS CO



# Results

- Manually: approximately 5+ minutes per project
- Solution: approximately 2 minutes per project
- Allows the user to multi-task while the scripts are executing, improving productivity
- Improves accuracy of data entry



# Lessons Learned

- Understand the business process that you are scripting
- Partner with IT
- Ensure that all Tcodes your scripts use are assigned to an SAP role in Production
- Ensure the Associate has access to all Tcodes that need to be utilized
- You can map multiple SAP fields, from multiple Scripts, to the same Column in Excel
- There are many ways to do the same thing in ECC
- As simple as possible, as complex as necessary
- It will always take longer than you planned
- Sometimes you have to scrap a script
- Communication
- You can upload attachments!





# What's next

- Transition to Studio
- Continue to refine the current scripts
- Expand the solution to other departments



Thank you

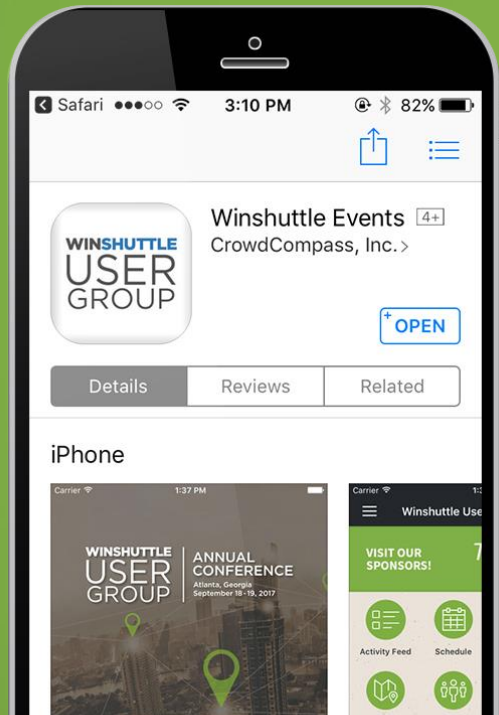
Remember to complete your session evaluation!

WINSHUTTLE  
USER  
GROUP

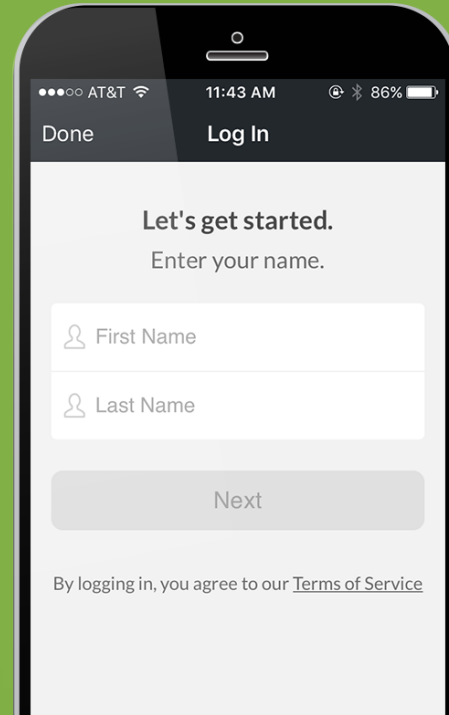
ANNUAL  
CONFERENCE  
ATLANTA 2017

# Download & login to the WUG app!

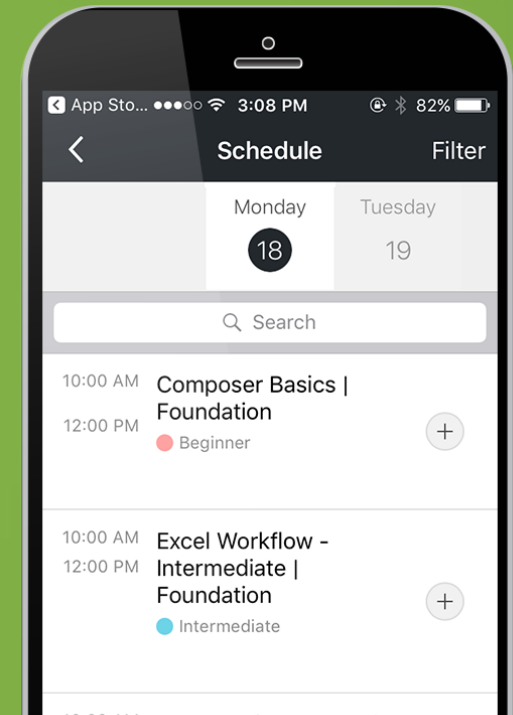
Download from the AppStore or Google Play



Click the menu icon & select Login for more features



Find sessions, build a schedule, network & more!



**Have questions? Ask a Winshuttle team member!**

Remember to  
complete the  
session survey!

