
MPH_ACEN - SUITEBUILDER

Technical Part

OUTLINE

- Introduction
- Technical part logistics
- Syllabus


INTRODUCTION

- Libor Nekula
- ESF Graduate
 - Economic Information Systems
 - Business Management
- 4 years technical consultant in Y Soft
- 2 years senior technical consultant in NS
 - Consultant + developer
 - Code review owner
 - Technical interviewer

2006

2012

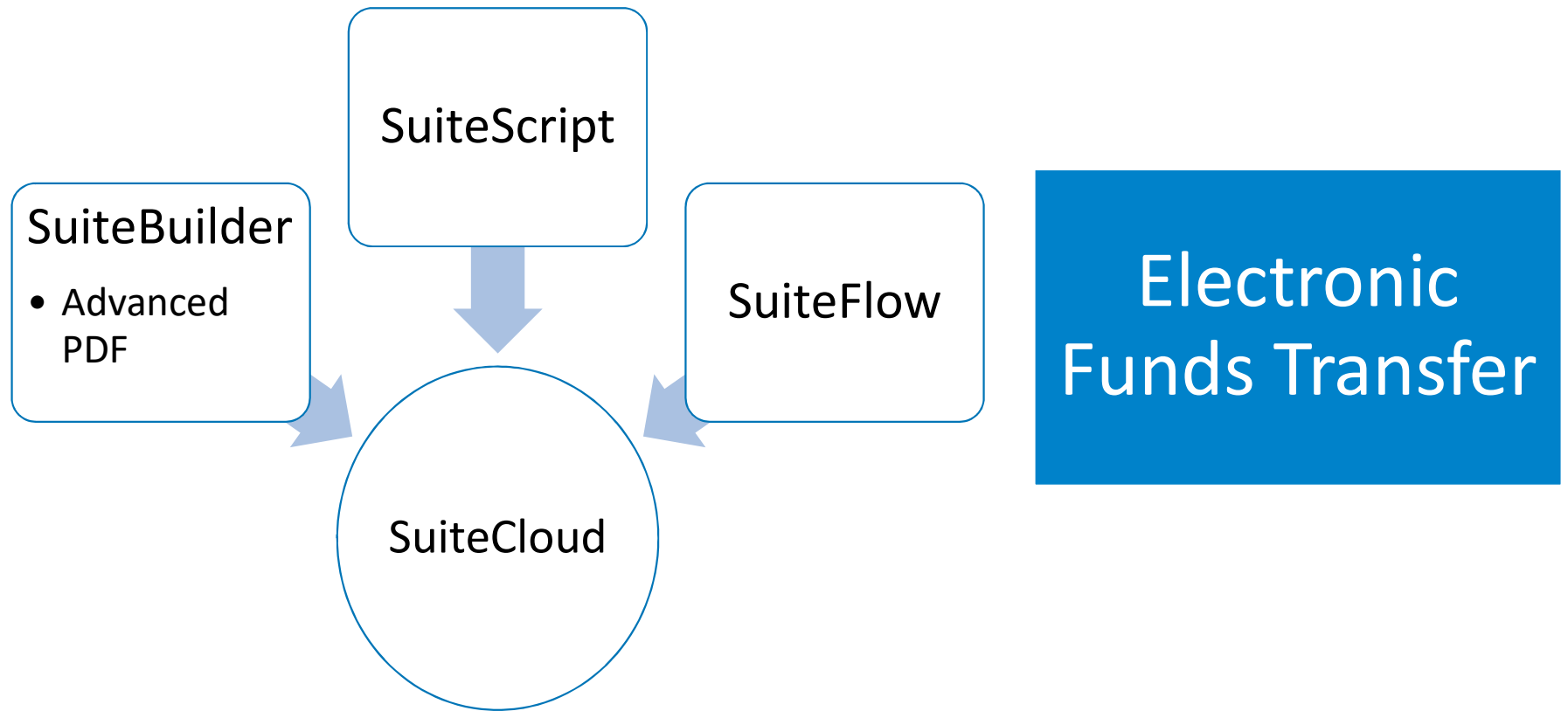
2016+



LOGISTICS OF TECHNICAL PART

- 6 Sections
- 6 Assignments
 - 5 points per assignment
 - 1 extra point when submitted via Git repository
- Final written exam/test
 - 25 points

TECHNICAL PART SYLLABUS

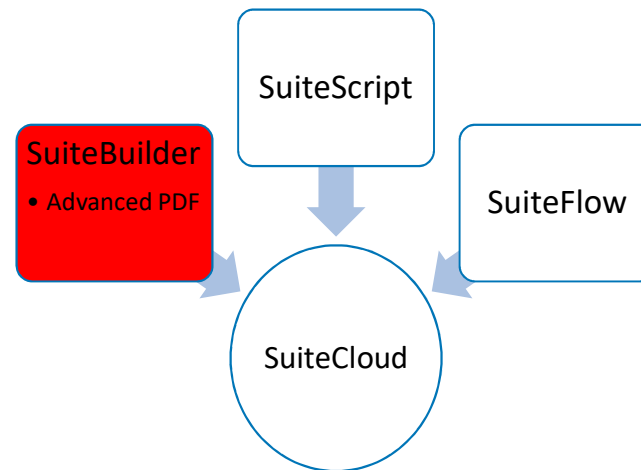


MPH_ACEN - SUITEBUILDER



AGENDA

- General Overview – NS Anatomy
- Initial setup
- Custom fields
- Custom forms
- Custom records



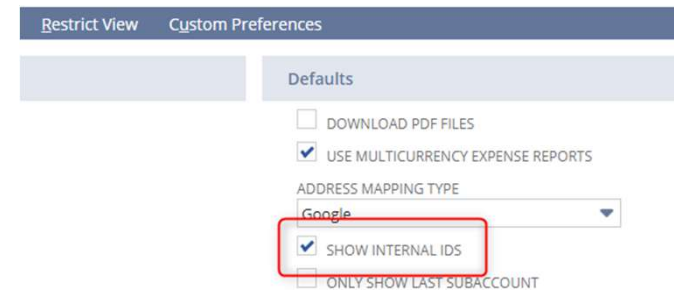
NetSuite Anatomy

- Record
- Form
- Field
- Subtab
- Custom List
- Sublist
- Script

WALKTHROUGHS

INITIAL SETUP

- Show internal ids
 - Home icon > Set Preferences
- Custom Records
 - Setup > Company > Enable features > SuiteCloud



Restrict View Custom Preferences

Defaults

- DOWNLOAD PDF FILES
- USE MULTICURRENCY EXPENSE REPORTS
- ADDRESS MAPPING TYPE
Google
- SHOW INTERNAL IDS
- ONLY SHOW LAST SUBACCOUNT

Enable Features

Save Cancel Reset

Company Accounting Tax Transactions Items & Inventory Employees CRM Analytics Web Presence SuiteCloud

VIEW SUITECLOUD [TERMS OF SERVICE](#)

SuiteBuilder

ITEM OPTIONS

ASSIGN CUSTOM TRANSACTION ITEM OPTION FIELDS TO THE LINE ITEMS OF YOUR TRANSACTION RECORDS. BY ENABLING THIS FEATURE, YOU AGREE TO [SUITECLOUD TERMS OF SERVICE](#)

CUSTOM RECORDS

COLLECT INFORMATION SPECIFIC TO YOUR BUSINESS THAT CAN BE INTEGRATED WITH STANDARD NETSUITE RECORDS. BY ENABLING THIS FEATURE, YOU AGREE TO [SUITECLOUD TERMS OF SERVICE](#)

ADVANCED PDF/HTML TEMPLATES

ENABLE POWERFUL, TEMPLATE-BASED RENDERING OF SELECTED TRANSACTIONS. BY ENABLING THIS FEATURE, YOU AGREE TO [SUITECLOUD TERMS OF SERVICE](#)

WT I - Creating a new custom list and subtab

- Customization > Forms > Subtabs
- Customization > Lists, Records, Fields > Lists



BEST PRACTICE FOR INTERNAL ID

include `_acen_sec`

Example:

`_acen_sec_voucher_code`

https://system.netsuite.com/app/help/helpcenter.nl?fid=section_n2852278.html

WT II - Creating a new custom field

- Customization > Lists, Records, Fields >
 - Item
 - Entity
 - Transaction

BEST PRACTICE FOR INTERNAL ID

include `_acen_sec`

Example:

`_acen_sec_voucher_code`

https://system.netsuite.com/app/help/helpcenter.nl?topic=EDIT_CUSTENTITYFIELD

WT III - Creating custom record

- Customization > Lists, Records, Fields > Record Types

BEST PRACTICE FOR INTERNAL ID

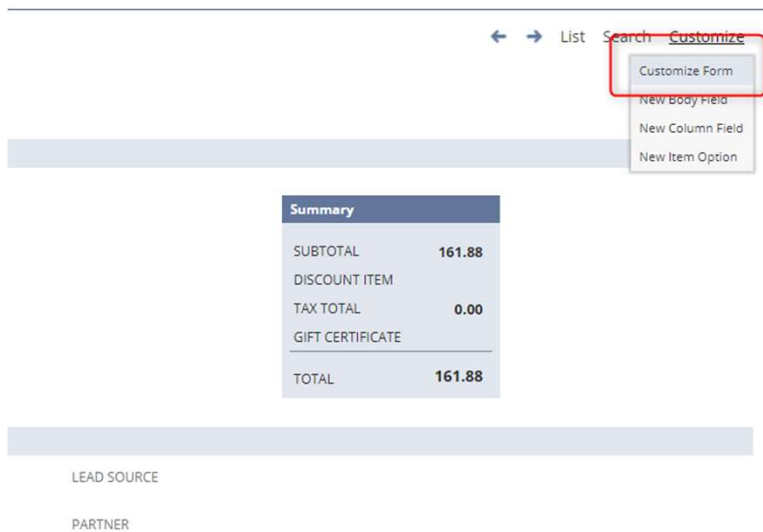
include `_acen_sec`

Example:

`_acen_sec_voucher_code`

https://system.netsuite.com/app/help/helpcenter.nl?topic=EDIT_CUSTRECORD

WT IV - Creating custom Form



BEST PRACTICE FOR INTERNAL ID

include `_acen_sec`

Example:

`_acen_sec_voucher_code`

https://system.netsuite.com/app/help/helpcenter.nl?topic=EDIT_CUSTENTITYFIELD

WT V – Creating a new script

Search

Documents Setup Customization Support

- Customization Manager
- Lists, Records, & Fields
- Forms
- Scripting
 - Scripts **New**
 - Script Deployments
 - Scripted Records
 - Scheduled Script Status
 - Map/Reduce Script Status
 - Priority Settings
 - Script Execution Logs
 - Script Debugger
- Workflow
- Plug-ins
- Centers and Tabs
- SuiteBundler

FILE	ID	VERSION	DEPLOYMENTS
customscript_cp_cs_cutslit_sales_order			Deployments
customscript209			Deployments
customscript_nsts_ci_validation_cs			Deployments
customscript_nsts_ci_online_suitelet_cs			Deployments
customscript_sdr_cs_relationships	1.0		Deployments
customscript_sdr_cs_salesorder_finance	1.0		Deployments

Upload Script File

Reset Cancel **Create Script Record**

SCRIPT FILE *
ns_mr_cleanPendingCIs.js

Script

Save Cancel Reset

TYPE
Map/Reduce
NAME *
ID

API VERSION
2.0

Scripts Parameters Unhandled Errors Deployments

SCRIPT FILE
ns_mr_cleanPendingCIs.js

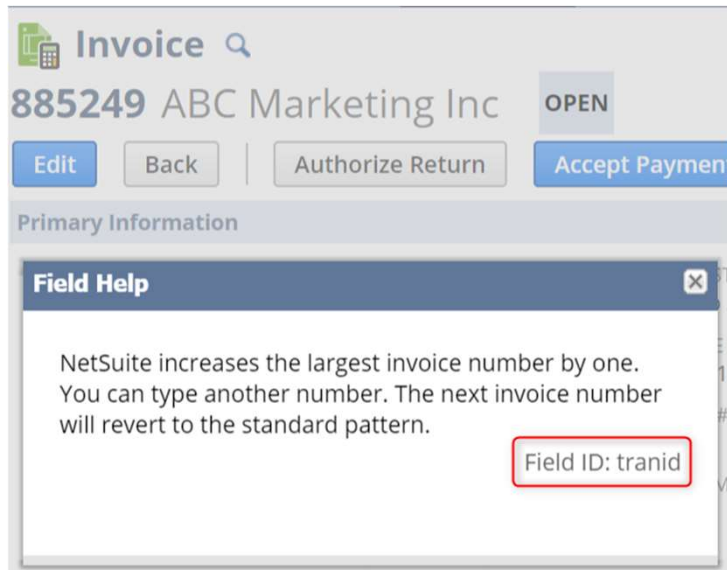
Custom Plug-In Types

CUSTOM PLUG-IN TYPE *
Add Cancel Insert Remove

Save Cancel Reset

VIEWING FIELD IDS

- Via field help



- &xml=t

This XML file does not appear to have any style information associated with it.

```
<nsResponse>
  <record recordType="invoice" id="23358" perm="4"
    fields="_eml_nkey_,_multibtstate_,selectedtab,nsapiPI,
  <_csrf>
    r_Q-14td5-
    dIz0LuFTuANBLNgKypAsi232uJEfI2j1c4SSk9mPjRTEERh9euBl
  </_csrf>
  <_eml_nkey_>172296206</_eml_nkey_>
  <account>129</account>
  <amountpaid>0.00</amountpaid>
  <amountremaining>161.88</amountremaining>
  <amountremainingtotalbox>161.88</amountremainingtotal
  <balance>132315.16</balance>
  <balreadyrefunded>F</balreadyrefunded>
  <baserecordtype>invoice</baserecordtype>
  <billaddr1>9902 Lakemont Drive</billaddr1>
  <billaddress>
    Larry Nelson<br>ABC Marketing Inc<br>9902 Lakemont I
  </billaddress>
  <billaddressee>ABC Marketing Inc</billaddressee>
  <billcity>Dallas</billcity>
  <billcountry>US</billcountry>
  <billingaddress>19815</billingaddress>
  <billingaddress_key>19815</billingaddress_key>
  <billoverride>T</billoverride>
  <billstate>TX</billstate>
  <billzip>75220</billzip>
  <canhavestackable>F</canhavestackable>
  <checkcommitted>F</checkcommitted>
  <cleared>F</cleared>
  <companyid>325</companyid>
  <createddate>9/10/2018 11:08 am</createddate>
```

MPH_ACEN - SUITEFLOW

MINOR CHANGES IN LOGISTICS

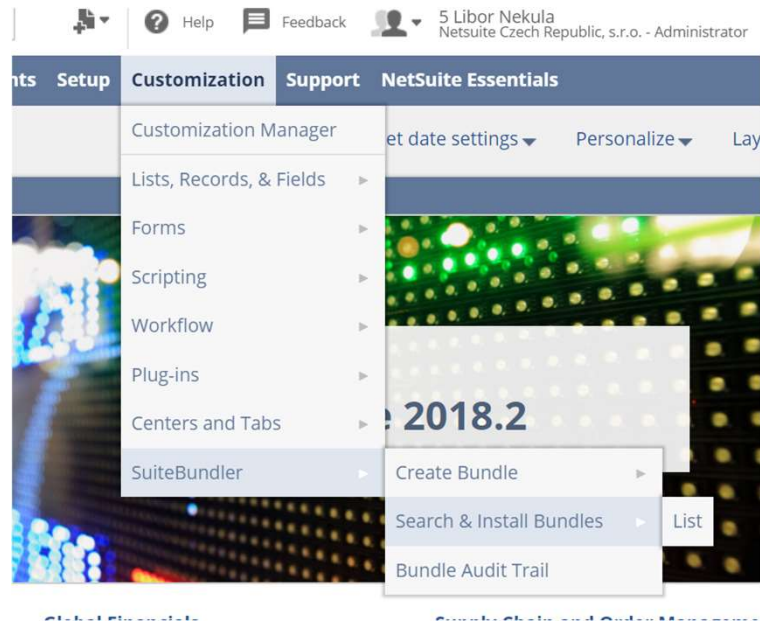
- First Assignment deadline – Fri, Nov 9, 2018
- Submissions done on or before Tue, Nov 6, 2018 for 1 bonus point
- 5 Late Days for everyone applicable to Assignments 2-6
 - 5x 1 day later
 - 1x 5 days later

INITIAL QUICK SETUP

- Show internal ids
 - Home icon > Set Preferences
- SuiteFlow
 - Setup > Company > Enable features > SuiteCloud
- Invoice in Advance of Fulfillment
 - Setup > Accounting > Accounting Preferences > Order Management

INSTALLING A BUNDLE

• MPH_ACEN_I – 256797



Search & Install Bundles

Search

Basic | Advanced

LEAVE THE KEYWORDS BOX BLANK AND CLICK SEARCH TO VIEW THE MOST POPULAR SUITEAPPS

KEYWORDS

256797

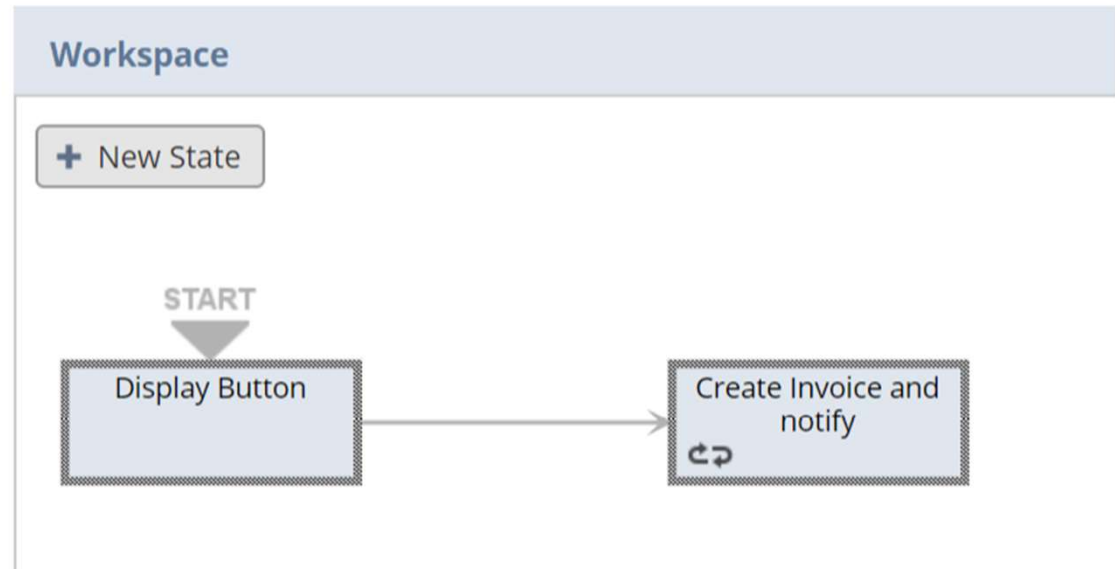
Installation Terms of Service

NAME	BUNDLE ID	VERSION	MANAGED	COMPANY NAME
MPH_ACEN_I	256797			Netsuite Czech Republic, s.r.o.

A BIT OF THEORY

- What is SuiteFlow?
- Workflow elements
 - States
 - Transitions
 - Actions
 - Triggers

Workflow: Approve and Invoice



Triggers

NEW WORKFLOW

- Customization > Workflow > Workflows > New

- Necessary values

Workflow

1 NAME *	<input type="text" value="Approve and Invoice"/>	DESCRIPTION	<input type="text"/>
ID	customworkflow1	OWNER	<input type="text" value="Cathy Cadigan Cathy Cadigan"/>
2 RECORD TYPE	Transaction	<input type="checkbox"/> EXECUTE AS ADMIN	
SUB TYPES *	<input type="list" value="Advanced Intercompany Journal Entry, Cash Refund, Cash Sale, Check"/>	4 RELEASE STATUS	<input type="text" value="Released"/>
3		<input checked="" type="checkbox"/> KEEP INSTANCE AND HISTORY	
		5 <input checked="" type="checkbox"/> ENABLE LOGGING	
		<input type="checkbox"/> INACTIVE	

NEW WORKFLOW II

- Necessary values

Initiation

1 EVENT BASED SCHEDULED

Event Definition

ON CREATE

2 ON VIEW OR UPDATE

3 TRIGGER TYPE
- All -

EVENT TYPES

USE VISUAL BUILDER CUSTOM FORM

CONDITION

SAVED SEARCH CONDITION

WALKTHROUGHS – Create and deploy a new workflow

SIMPLE WORKFLOW

-

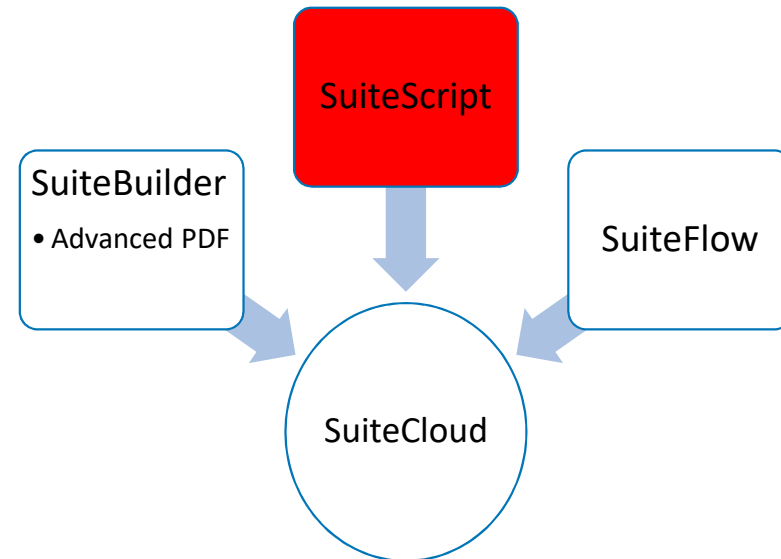
**SET DEPARTMENT
AND
SHOW CONFIRMATION**

MULTI-STATE WORKFLOW - CUSTOM APPROVE

MPH_ACEN - SUITESCRIPT

AGENDA I - SUITESCRIPT

- NS Data architecture
- Client Scripts
- User Event Scripts



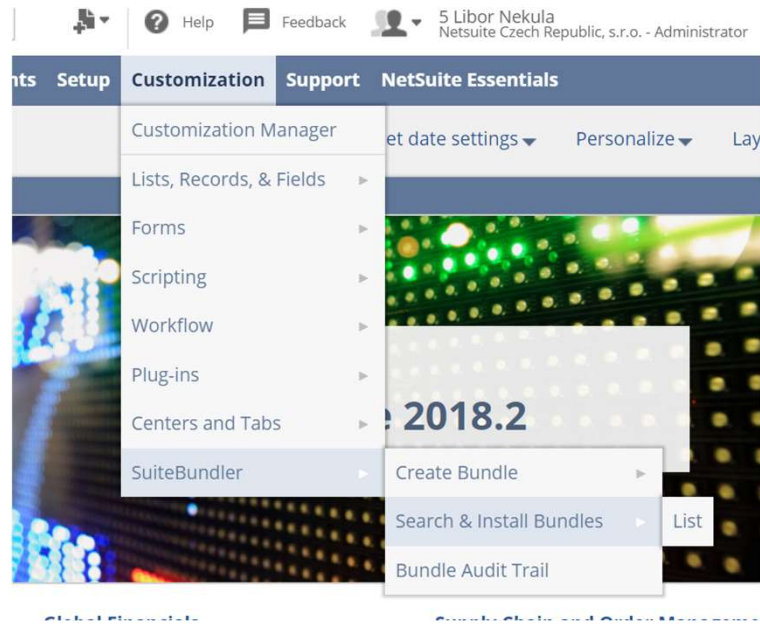
AGENDA II – SUITESCRIPT TODAY

- NS Data architecture
- Client vs Server
- Demo + Script anatomy
- Walkthroughs

DEMO - OUR FIRST SCRIPT – HELLO WORLD!

INSTALLING A BUNDLE

• MPH_ACEN_III – 257612



Search & Install Bundles

Search

Basic | Advanced

LEAVE THE KEYWORDS BOX BLANK AND CLICK SEARCH TO VIEW THE MOST POPULAR SUITEAPPS

KEYWORDS

256797

Installation Terms of Service

NAME	BUNDLE ID	VERSION	MANAGED	COMPANY NAME
MPH_ACEN_I	256797			Netsuite Czech Republic, s.r.o.

ENTRY POINTS

- Page init
- Field changed
- Validate Field
- Save record
- **HAS TO RETURN BOOL (T/F) value**

WALKTHROUGH – SAMPLE SCRIPT CREATION AND DEPLOYMENT

MPH_ACEN – SUITESCRIPT II

AGENDA – SUITESCRIPT TODAY

- Example of what can be done with SuiteScript
- Server side scripts – User Event + triggers
- Demo + Script anatomy
- Walkthrough

EXAMPLES

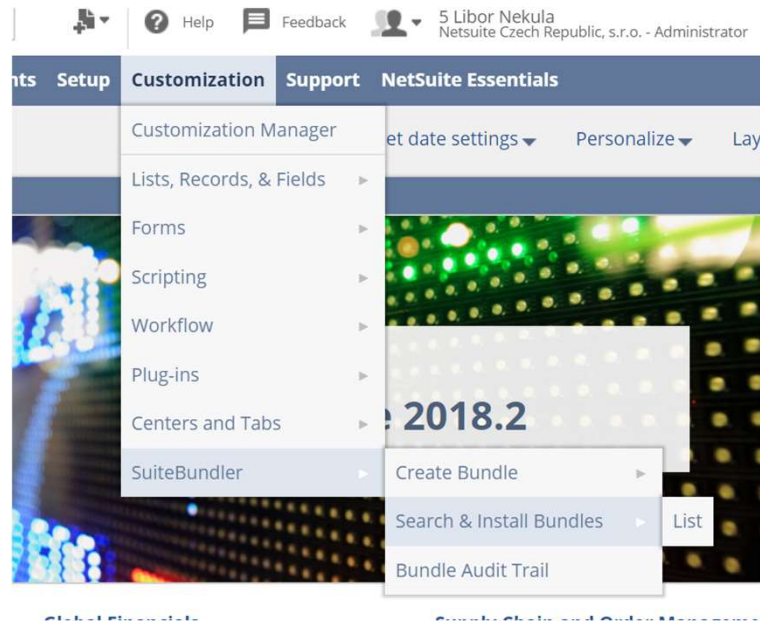
- RESTlet
- Suitelet + Client + Map/Reduce

USER EVENT

- Before Load
- Before Submit
- After Submit

INSTALLING A BUNDLE

• MPH_ACEN_IV – 258465



Search & Install Bundles

Search

Basic | Advanced

LEAVE THE KEYWORDS BOX BLANK AND CLICK SEARCH TO VIEW THE MOST POPULAR SUITEAPPS

KEYWORDS

256797

Installation Terms of Service

NAME	BUNDLE ID	VERSION	MANAGED	COMPANY NAME
MPH_ACEN_IV	256797			Netsuite Czech Republic, s.r.o.


WALKTHROUGH – SAMPLE SCRIPT

An aerial photograph of a city skyline, likely New York City, during sunset. The sky is a mix of blue and orange, with scattered clouds. The city is densely packed with skyscrapers of various heights and colors. The title 'PRINTING NS DOCUMENTS' is overlaid in large, white, bold, sans-serif font on the left side of the image.


PRINTING NS DOCUMENTS

PRINTING AND ADVANCED PDFS

- Printing documents in NetSuite is simple

 Invoice

1 2 Anonymous Customer Parent Company OPEN

Edit Back Authorize Return Accept Payment Credit Renew Manage Revenue Recognition 

ORACLE Essentials US
NETSUITE

Invoice #4
9/11/2018

TOTAL
\$25.00
Due Date:

Primary Information
 INVOICE # 1 POSTING PERIOD Jan 2014
 CUSTOMER 2 Anonymous Customer Parent Company DUE DATE
 DATE 9/10/2018 PO #
 START DATE MEMO
 END DATE

Sales Information
 SALES REP SALES EFFECTIVE DATE 9/10/2018
 OPPORTUNITY EXCLUDE COMMISSIONS

Classification
 SUBSIDIARY Parent Company LOCATION

Bill To Ship To

Terms	Due Date	PO #	Sales Rep	Shipping Method	Partner

Quantity	Item	Options	Rate	Amount
1	Printer Cables Printer Cables 6'		\$25.00	\$25.00

Subtotal	\$25.00
Tax (0%)	\$0.00
Total	\$25.00

Please provide your feedback by contacting us on email address feedback@nsdisc.com

PRINTING SETUP AND TEMPLATE CUSTOMIZATION

1. Let's customize an invoice PDF template
 - WYSIWYG
 - Freemarker - <https://freemarker.apache.org/docs/index.html>
2. Create a new transaction form to use our template for printing
 - Select printing type
 - And template

NAME *
NS Oracle Invoice Form

ID
custform_3_t2002652_568

TYPE
Invoice

PRINTING TYPE ADVANCED BASIC

PRINT TEMPLATE
NS Oracle Invoice PDF/HTML Template ▼

EMAIL TEMPLATE
NS Oracle Invoice PDF/HTML Template ▼

INTRO TO ADVANCED PDF/HTML TEMPLATES



Advanced PDF/HTML Templates

- Advanced PDF/HTML is a template-based model for printing transactions
- Output is either HTML or PDF (we will focus on the PDF output)
- Feature supports an alternate model for customizing printed transactions
- The template editor uses FreeMarker-based syntax

How does it work?

The PDF printing subsystem uses a combination of two 3rd party libraries

- **FreeMarker** scripting in XML, generates static XML for BFO
- **BFO (Big Faceless Report Generator)** Freemarker → PDF

BASIC CODING



BASIC JAVASCRIPT/Freemarker - EXPRESSIONS

- Expressions are usually surrounded by `{}`
- Variable is accessed by its name `{record.total}`
 - Conditions `<# if record.total > 0 >`
- Support for map keys and collection indexes `{person.phones[1]}`
- Logical operations: `&&`, `||`, `!`, `==`, `!=`, `<`, `>`, `<=`, `>=`

BASIC JAVASCRIPT/Freemarker - CONDITIONS

- `<#if expression>`, `<#elseif expression>`, `<#else>`
- `<#if>` is pair tag, it must be closed
- Character `<` must be escaped or surrounded by `()` , `<#if x > 1 >` vs. `<#if (x > 1)>`

```
<#if x == 1> "x is 1"
```

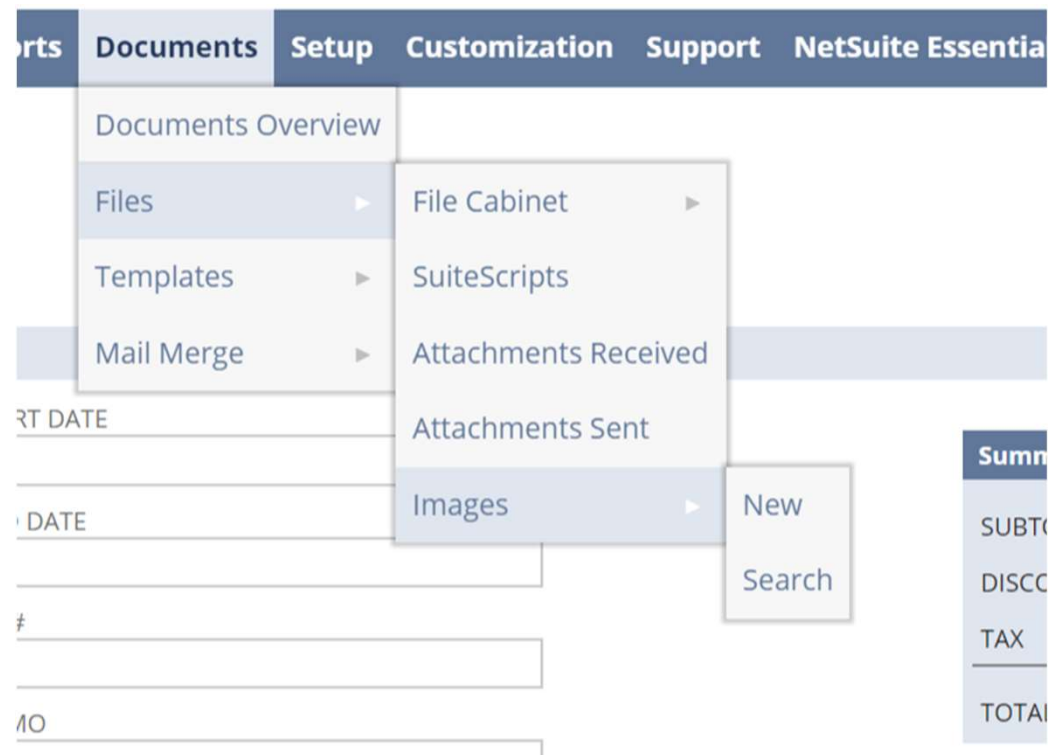
```
<#elseif x == 2> "x is 2"
```

```
<#elseif x == 3> "x is 3"
```

```
</#if>
```

UPLOAD AN IMAGE

- Documents > Files > Images > New



WALKTHROUGH – SAMPLE PDF

THANK YOU FOR ATTENTION!