



outsystems[®]

About Agility

OutSystems

Projects presentation for UMinho MFES 2012/2013

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Who is OutSystems?



- Founded in 2001
- HQ in Lisbon Portugal
 - OutSystems US, San Ramon & Atlanta
 - OutSystems Benelux, Maarsse Netherlands
- 150+ Employees and growing
- Profitable with cash on hand & a strong financial position
- Core capability is to enable rapid innovation via a solution that integrates and facilitates application development, delivery, management, and change
- This core capability is further enhanced by our solutions delivery teams and unique approach to Agile methods

Who is OutSystems?

Maker of the Agile Platform



Since 2001

6,100+ Community Members

250+ Enterprise Customers

Across 22 Industries

In 15 Countries

59 Partners

800+ Agile Projects

agileplatform™

Some of our Customers

22 Different Industries, Similar Challenges



Utilities



Telecom



Financial/
Insurance



Life
Sciences



Retail &
Distribution



Transportation/
Travel



High Tech



What Problems We Solve

The Need for a New 'Custom' Application

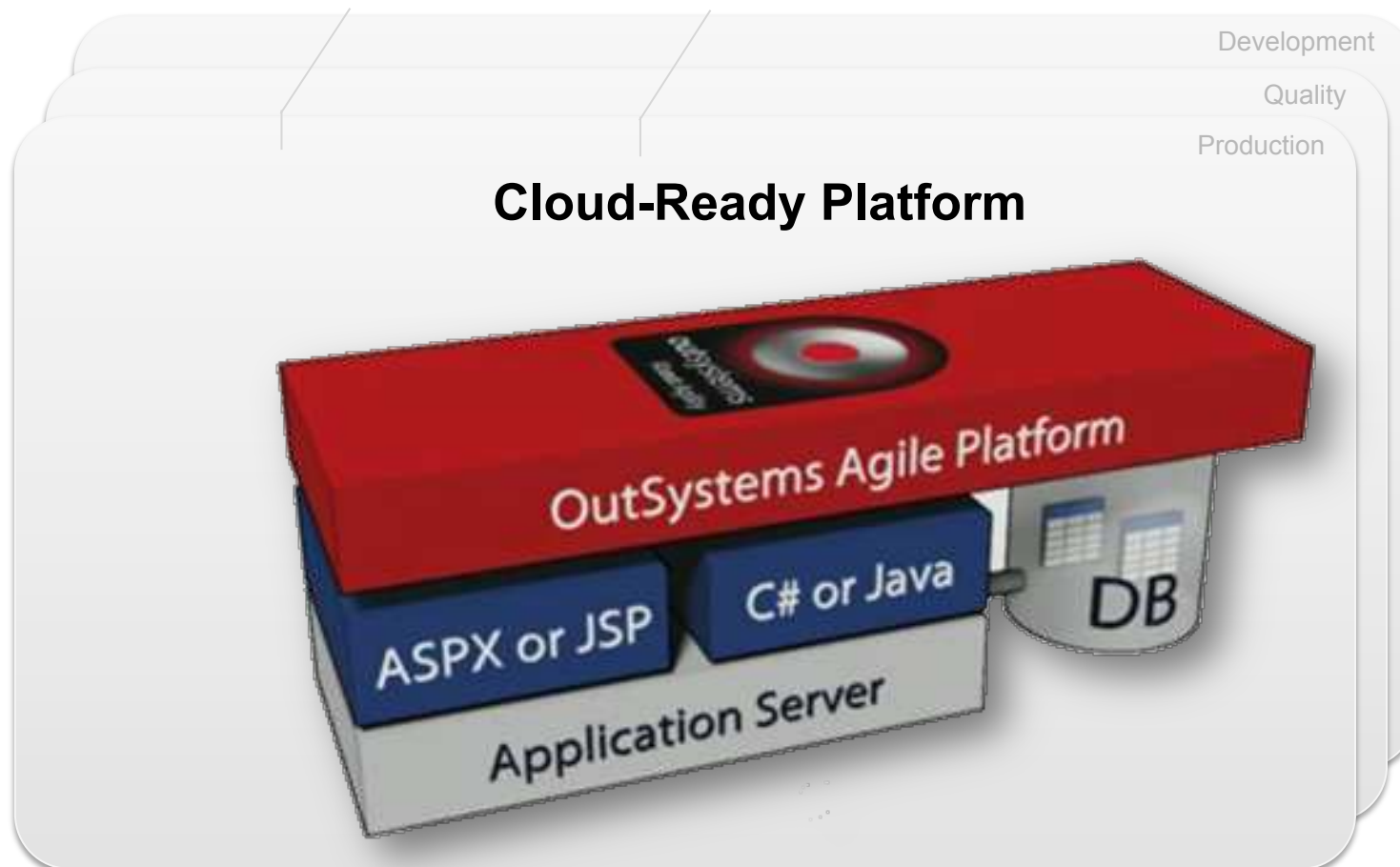


- Current Information System is hard to maintain or a new system is needed
- Available packages don't do exactly what the business needs plus they are costly and hard to customize
- IT does not have the resources to deliver a custom solution on-time and in-budget

OutSystems offers a complete turn-key solution that delivers your business requirements on-time, in-budget, and enables future adaptation to changing business needs.

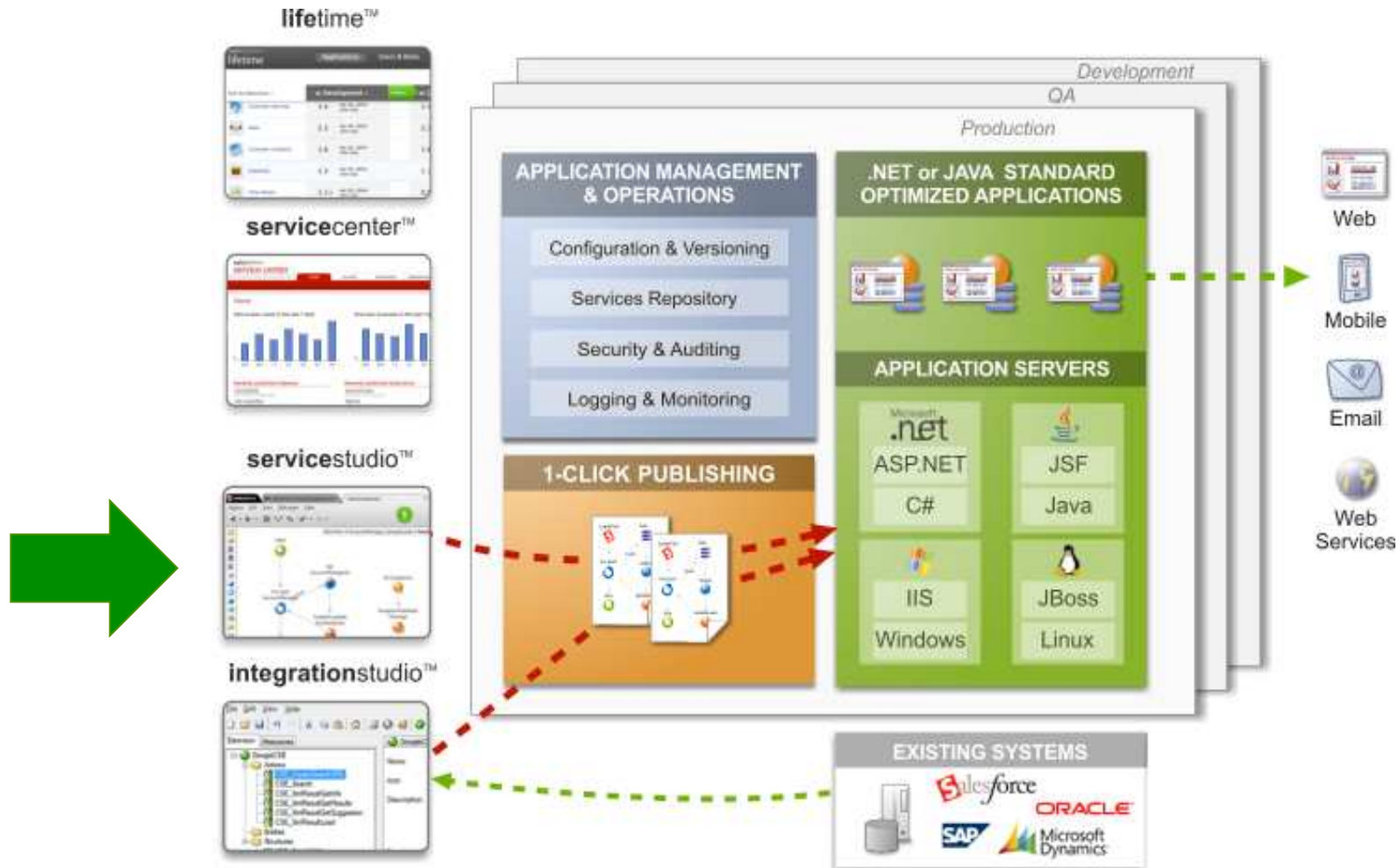
the agileplatform

End-to-end App Development and Deployment Platform



the agileplatform

End-to-end App Development and Deployment Platform



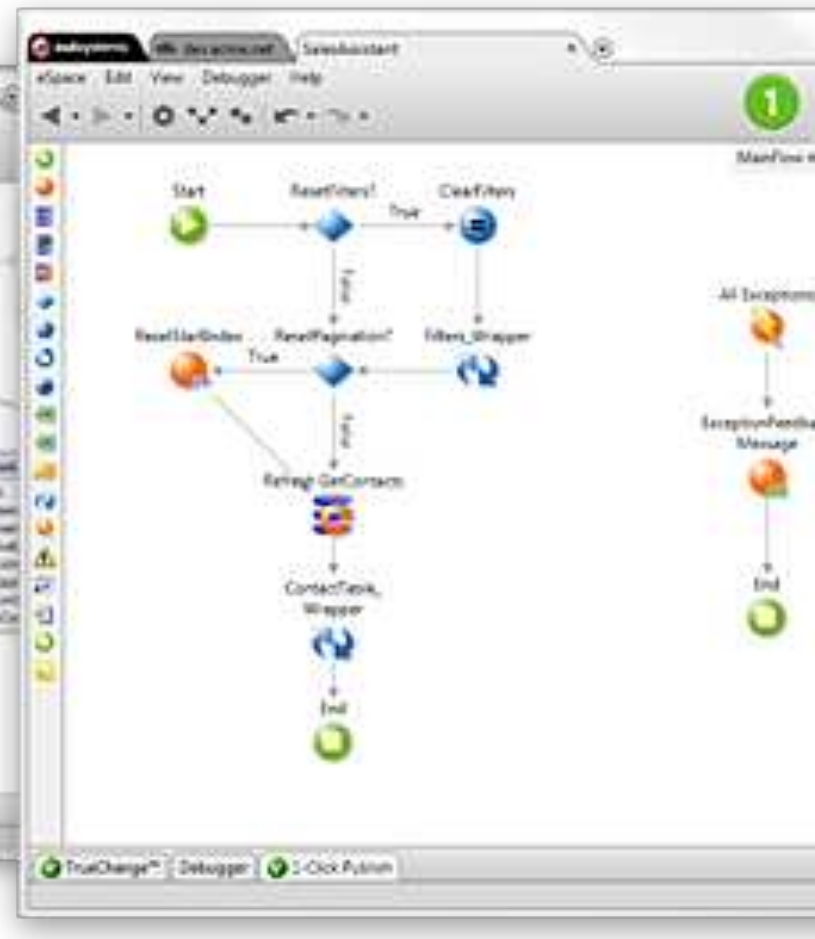
Service Studio



UI

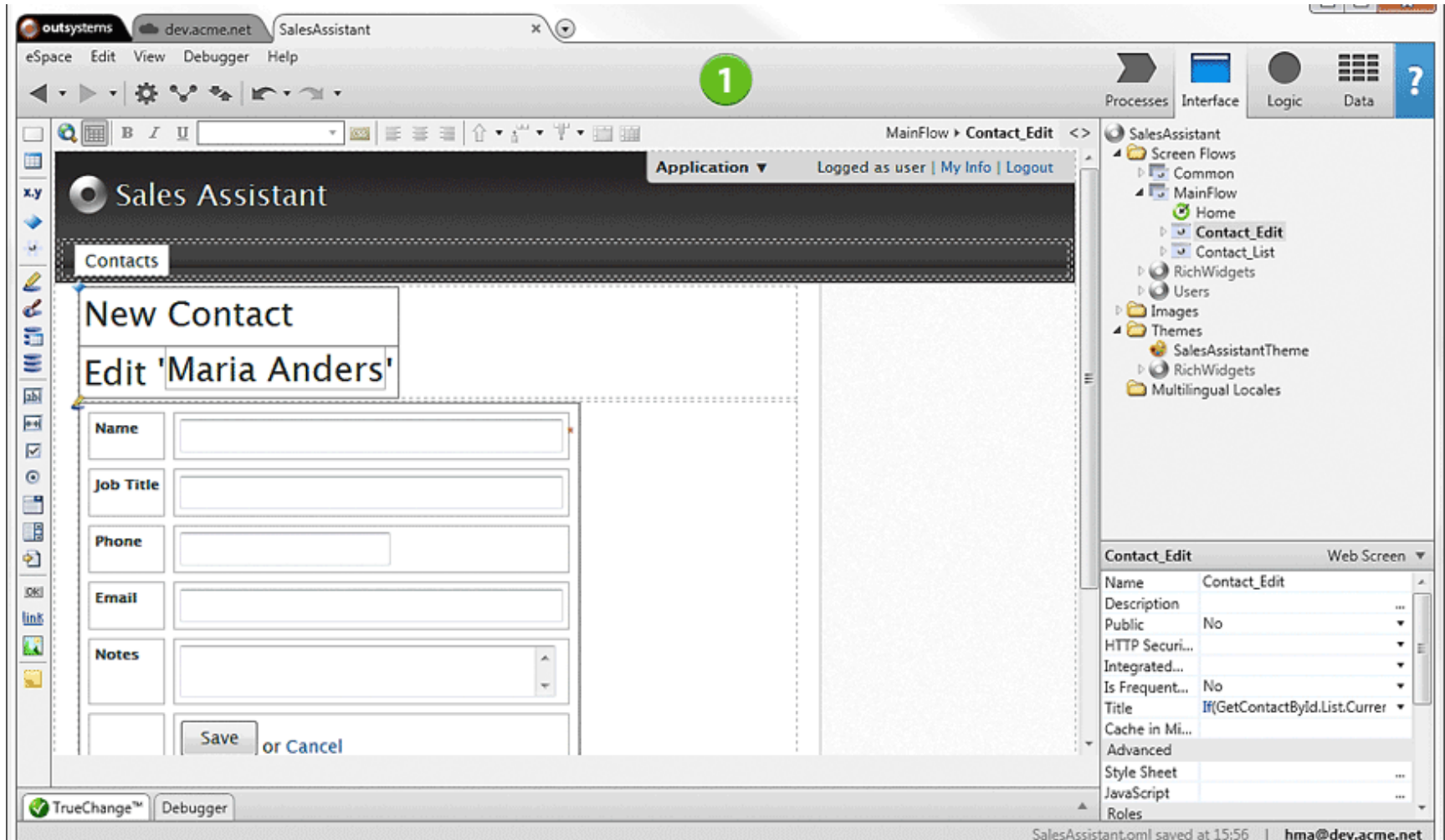


Data



Logic

Service Studio: UI



outsystems dev.acme.net SalesAssistant

eSpace Edit View Debugger Help

1

Processes Interface Logic Data

MainFlow > Contact_Edit

Application Logged as user | My Info | Logout

Sales Assistant

Contacts

New Contact

Edit 'Maria Anders'

Name

Job Title

Phone

Email

Notes

Save or Cancel

SalesAssistant

- Screen Flows
 - Common
 - MainFlow
 - Home
 - Contact_Edit
 - Contact_List
 - RichWidgets
 - Users
 - Images
 - Themes
 - SalesAssistantTheme
 - RichWidgets
 - Multilingual Locales

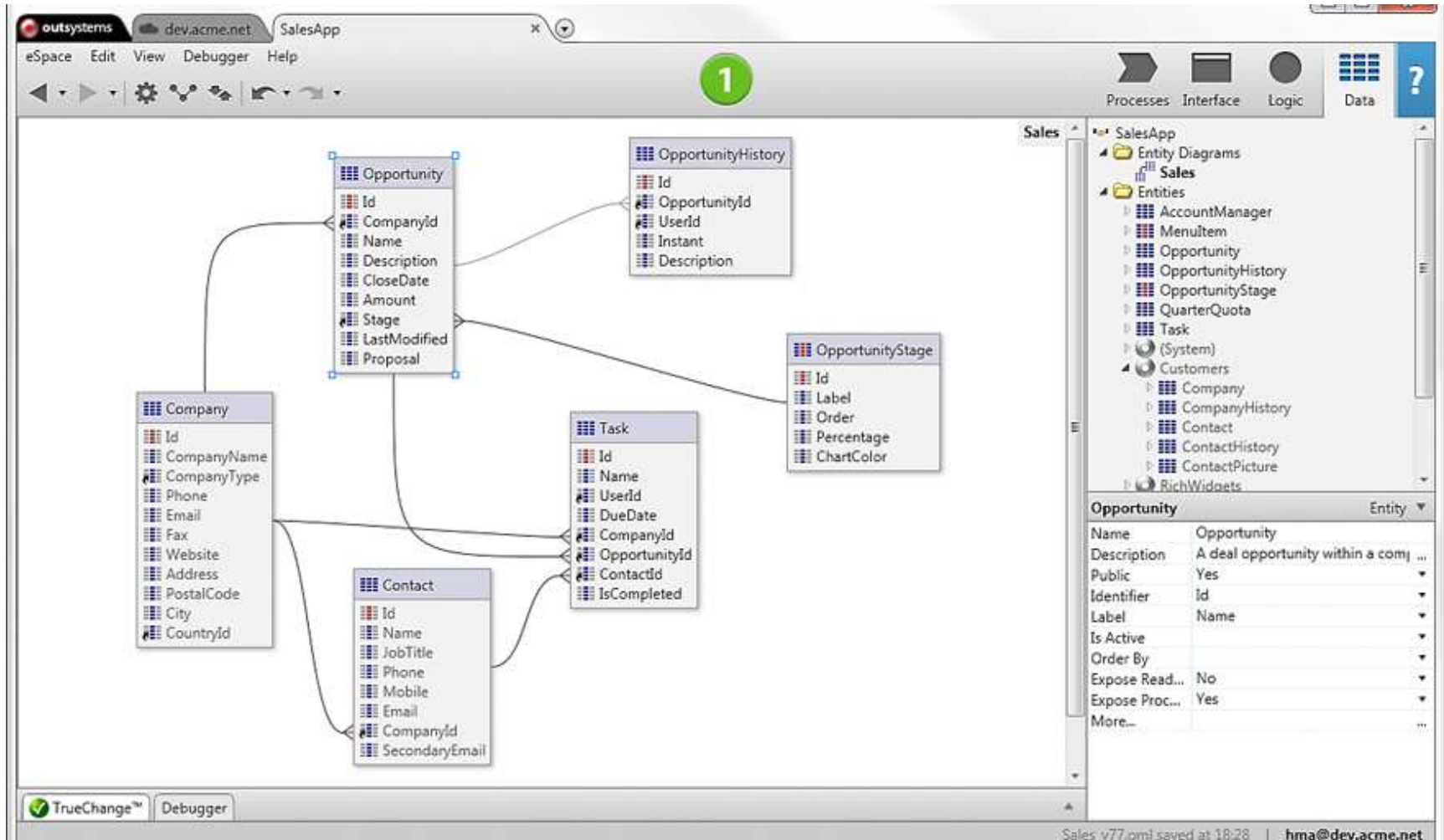
Contact_Edit Web Screen

Name	Contact_Edit
Description	...
Public	No
HTTP Security	...
Integrated...	...
Is Frequent...	No
Title	If(GetContactById.List.Currer
Cache in Mi...	...
Advanced	...
Style Sheet	...
JavaScript	...
Roles	...

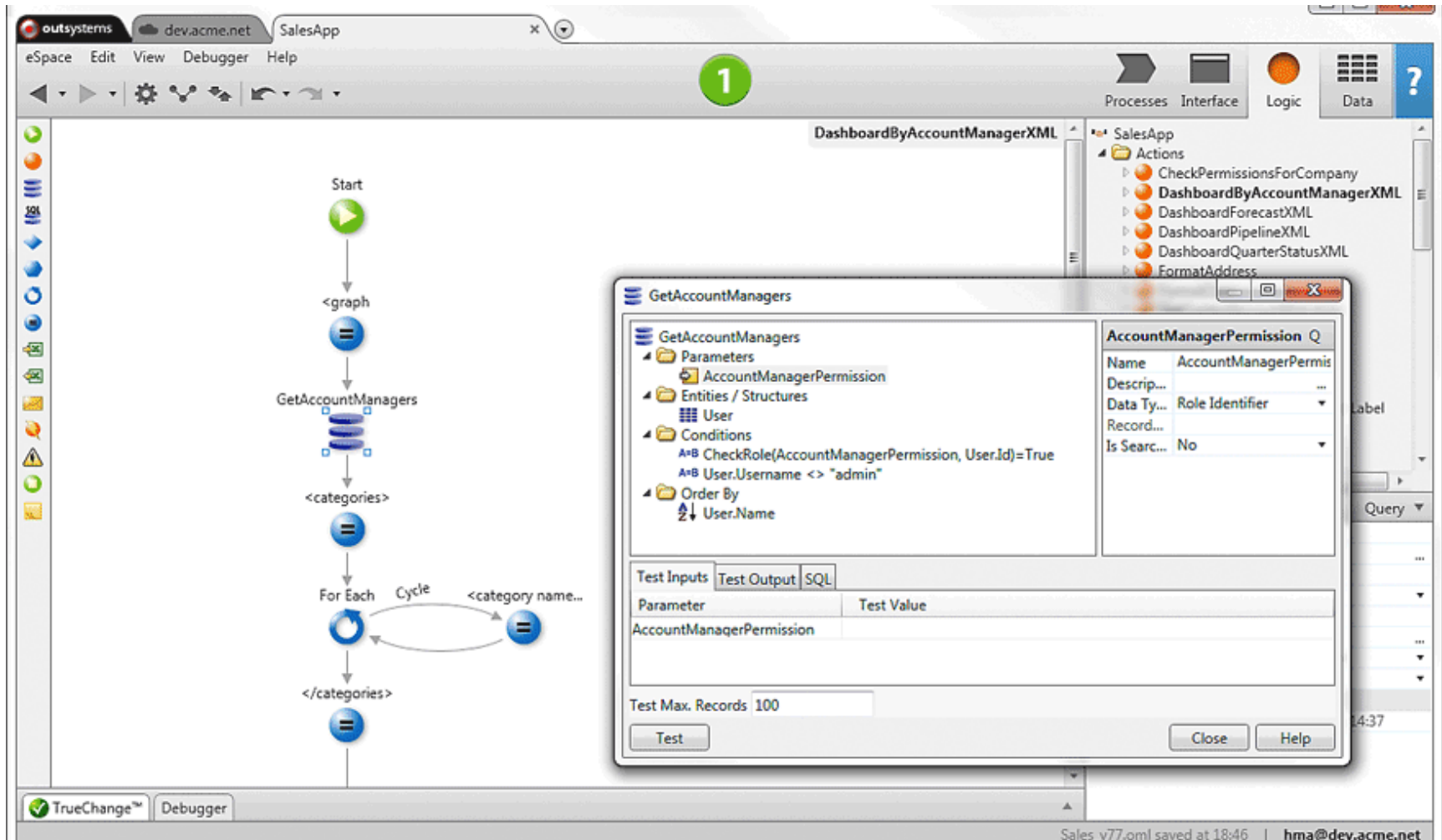
TrueChange™ Debugger

SalesAssistant.ttml saved at 15:56 | hma@dev.acme.net

Service Studio: Data



Service Studio: Data #2



Start

<graph>

GetAccountManagers

<categories>

For Each

Cycle

<category name...>

</categories>

GetAccountManagers

- Parameters
 - AccountManagerPermission
 - User
- Entities / Structures
- Conditions
 - A=B CheckRole(AccountManagerPermission, User.Id)=True
 - A=B User.Username <> "admin"
- Order By
 - User.Name

Parameter	Test Value
AccountManagerPermission	

Test Max. Records 100

Test Close Help

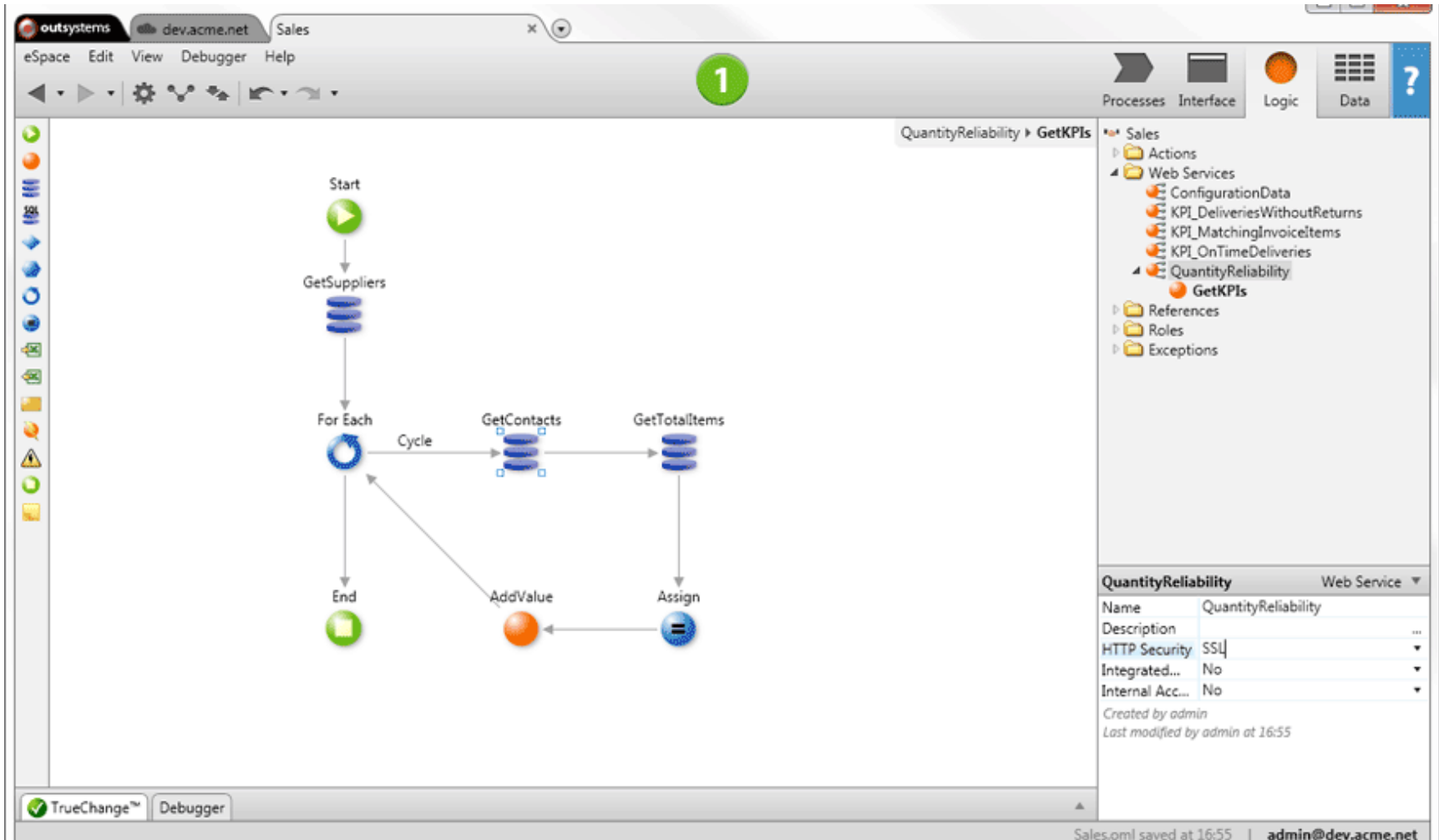
SalesApp

- Actions
 - CheckPermissionsForCompany
 - DashboardByAccountManagerXML
 - DashboardForecastXML
 - DashboardPipelineXML
 - DashboardQuarterStatusXML
 - FormatAddress

TrueChange™ Debugger

Sales_v77.oml saved at 18:46 | hma@dev.acme.net

Service Studio: Logic



QuantityReliability > GetKPIs

Start

GetSuppliers

For Each

Cycle

GetContacts

GetTotalItems

End

AddValue

Assign

Sales

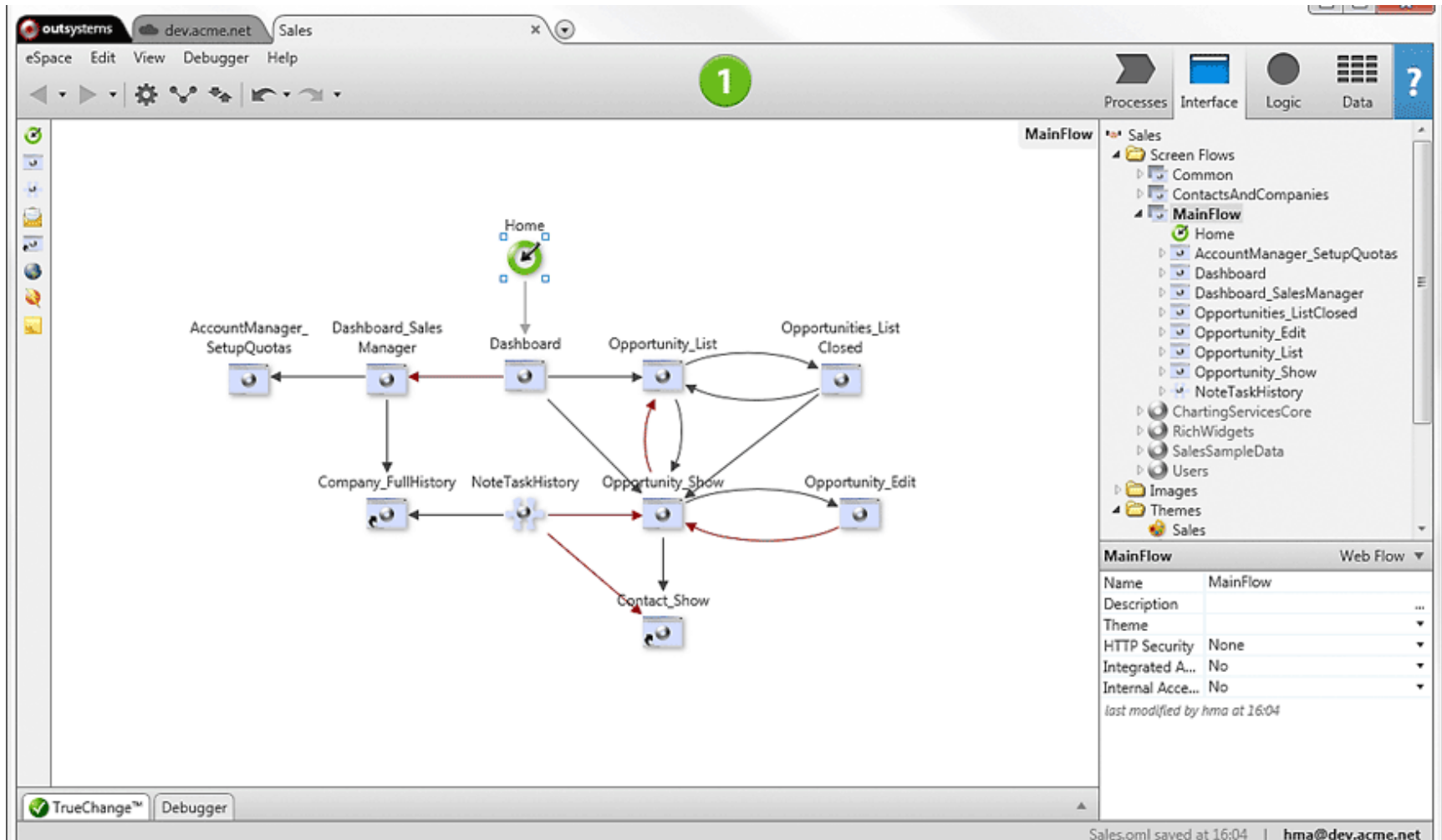
- Actions
- Web Services
 - ConfigurationData
 - KPI_DeliveriesWithoutReturns
 - KPI_MatchingInvoiceItems
 - KPI_OnTimeDeliveries
 - QuantityReliability
 - GetKPIs
- References
- Roles
- Exceptions

QuantityReliability		Web Service
Name	QuantityReliability	
Description		...
HTTP Security	SSL	▼
Integrated...	No	▼
Internal Acc...	No	▼
Created by admin		
Last modified by admin at 16:55		

TrueChange™ Debugger

Sales.omi saved at 16:55 | admin@dev.acme.net

Service Studio: Logic #2



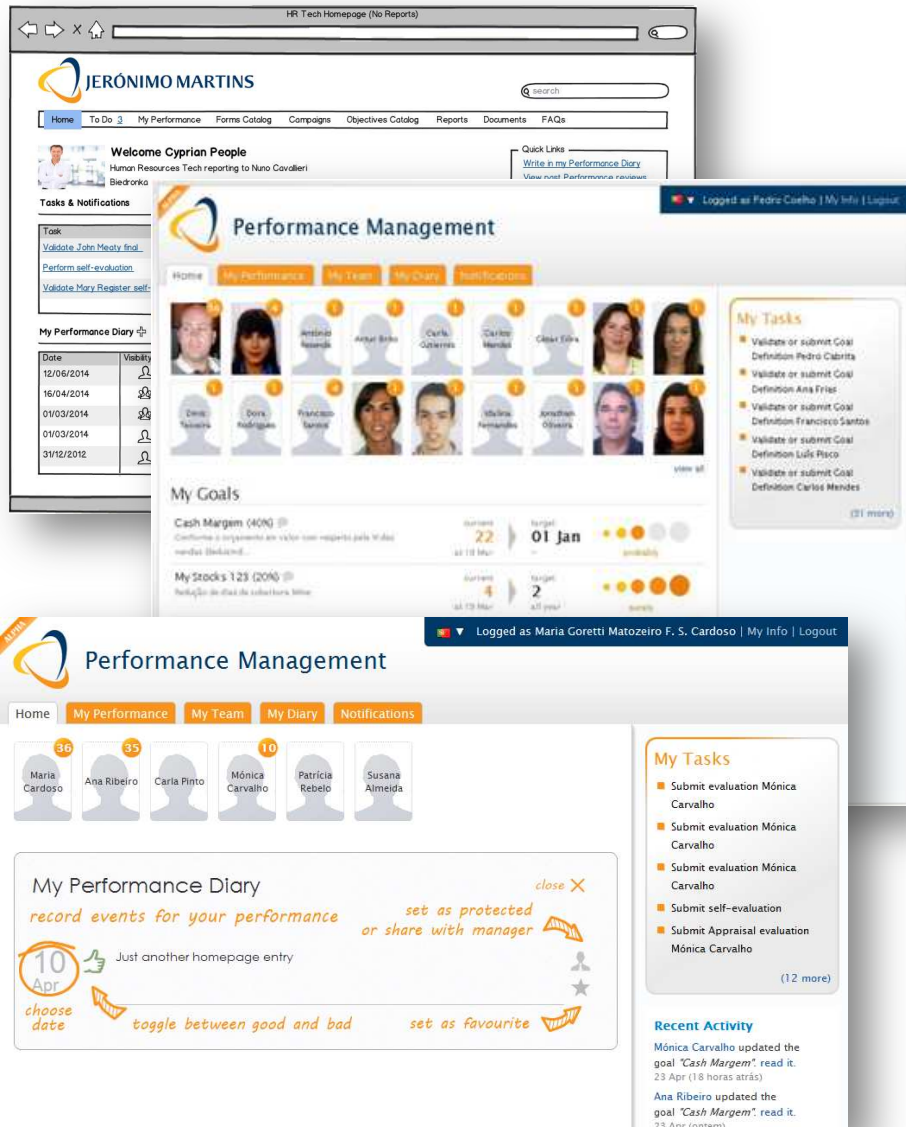
The screenshot displays the OutSystems Service Studio interface for a project named "Sales". The main workspace shows a logic diagram for the "MainFlow" web flow. The diagram consists of several screen nodes connected by arrows, representing the application's navigation logic. The screens include "Home", "Dashboard", "Opportunity_List", "Opportunities_List", "Opportunities_List_Closed", "Opportunity_Show", "Opportunity_Edit", "Company_FullHistory", "NoteTaskHistory", "Contact_Show", "Dashboard_SalesManager", and "AccountManager_SetupQuotas". A green circle with the number "1" is positioned in the top toolbar. The right sidebar shows a project tree with "Sales" selected, and a properties panel for the "MainFlow" web flow.

Name	MainFlow
Description	...
Theme	▼
HTTP Security	None
Integrated A...	No
Internal Acce...	No

last modified by hma at 16:04

Employee Performance Mgmt.

Agile + Usability Focus = Success



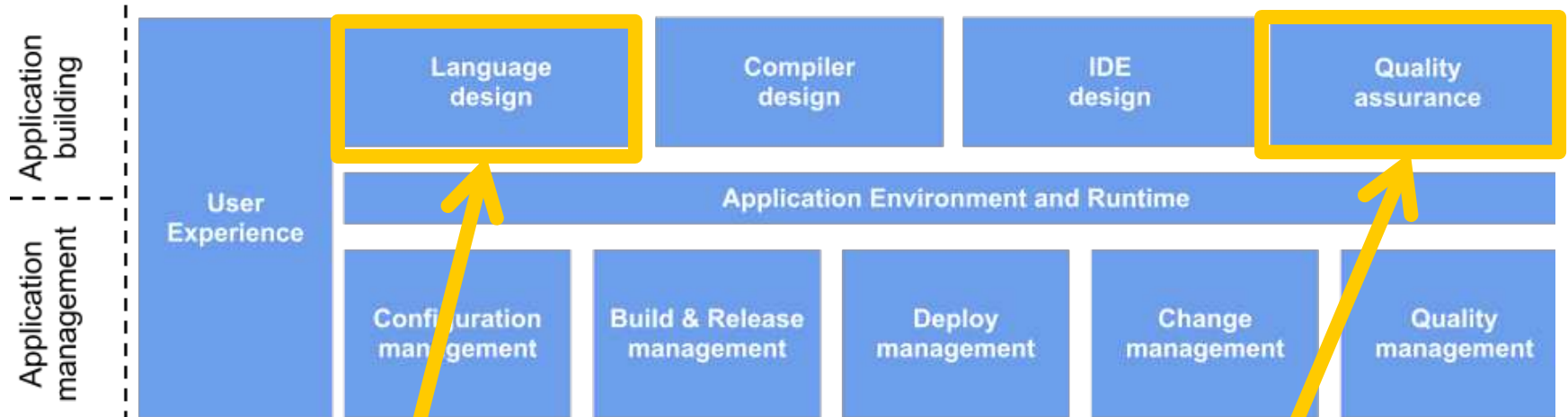
- Wanted to facilitate a cultural shift in employee performance management
- Needed an application that was easy to use and reinforced the desired behavior
- The new application had to support a diverse multi-country user base with different backgrounds
- Strong focus on usability with more than 30 user tests



R&D @ OutSystems



R&D areas



Project #1: Formalization of the OutSystems Visual Language

Project #2: Quality Indicators for Agile Platform Applications

Project #1: Motivation

Formalization of the OutSystems Visual Language



Visual Language model

- near 500 generated classes
- 150 generated interfaces
- 70 manually-written interfaces

- Model created “organically” as features necessary
- Likely to have redundancy

Project #1: Tasks

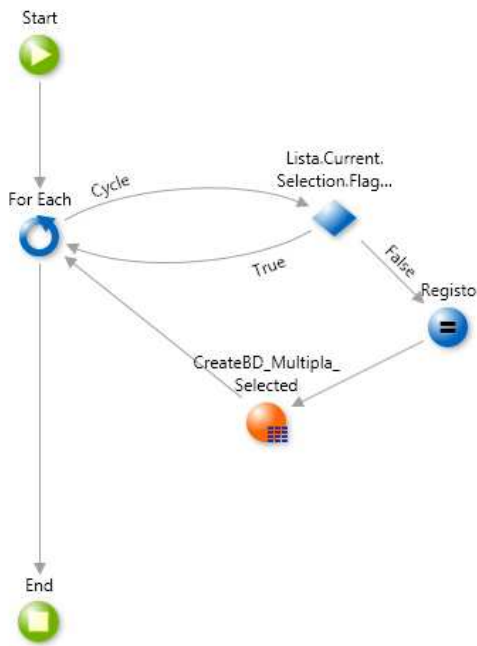
Formalization of the OutSystems Visual Language



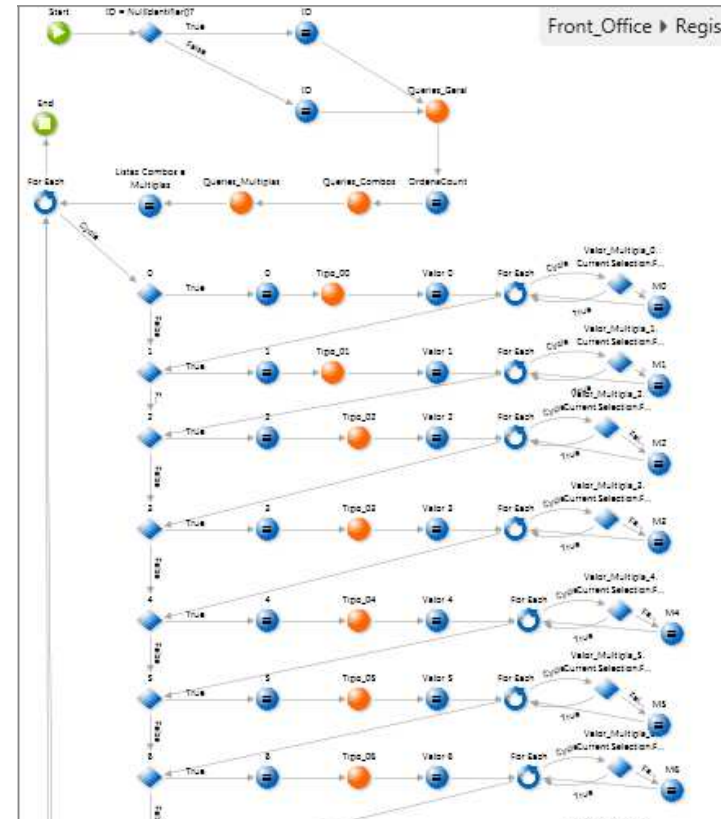
- Specification of the language & semantic rules
- Validation of the specification against the IDE
- Contribution with language improvements

Project #2: Motivation

Quality Indicators for Agile Platform Applications



- ▶ M16
- ▶ M17
- ▶ M18
- ▶ M19
- ▶ M20
- ▶ M21
- ▶ M22
- ▶ M23
- ▶ M24
- ▶ M25
- ▶ M26
- ▶ M27
- ▶ **M28**
- ▶ M29
- ▶ M30
- ▶ M31
- ▶ M32
- ▶ M33
- ▶ M34
- ▶ M35
- ▶ M36
- ▶ M37
- ▶ M38
- ▶ M39
- ▶ M40



Simple diagram but there are 50 other exactly the same

Unreadable diagram (image shows 1/5 of overall size)

Project #2: Tasks

Quality Indicators for Agile Platform Applications



- Selection of software product metrics
- Implementation of prototype tool to collect measurements
- Analysis of metric references



