

# Introduction to Rapide



# Objectives



- ▲ Provide a general introduction to Rapide
- ▲ Understand the key advantages of using Rapide to build cross-platform applications using CA Gen

# Agenda



- ▲ Background
- ▲ Rapide Objectives
- ▲ Technical Overview
- ▲ Demonstration

# Reasons you are still using Gen



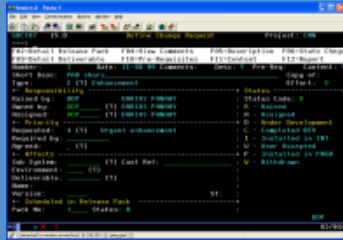
- ▲ Maintainability of applications
- ▲ Stability of generated applications
- ▲ Platform Independence
- ▲ Reduced need for technical skills
- ▲ Scalability of development team size
- ▲ +
- ▲ +
- ▲ +

# Typical Customer Situation

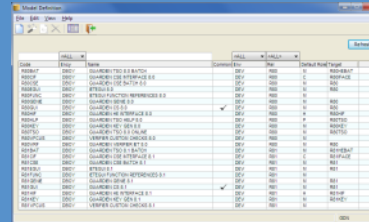


- ▲ Gen used for many years
- ▲ Significant Investment
  - ▲ CA Gen Models = Applications & Business Knowledge
  - ▲ CA Gen Skills, Processes and Know-how
- ▲ Servers / Batch - very happy
- ▲ UI...

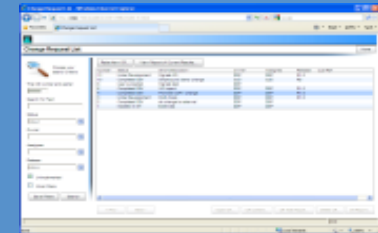
# User Interface(s)



Block Mode



Windows GUI



Browser



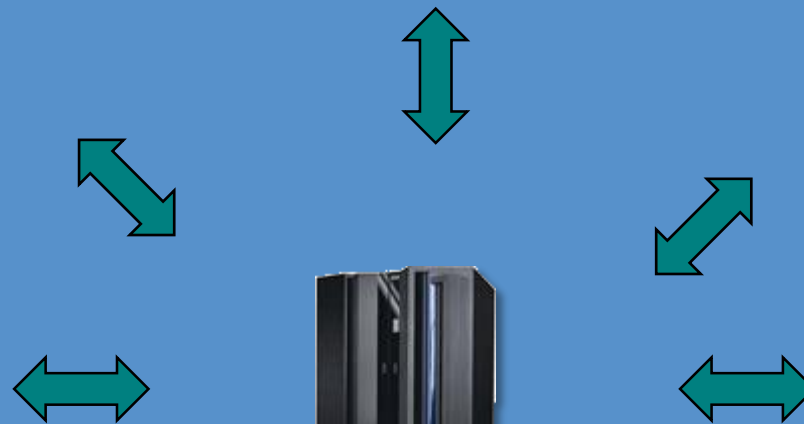
Mobile



Server



External + Proxy



# Rapide Objectives



- ▲ Develop modern, dynamic user interfaces with CA Gen
- ▲ Multiple Platform choice
  - ▲ Desktop
  - ▲ Browser
  - ▲ Mobile
- ▲ Easy implementation for existing Gen applications
  - ▲ Enable transition from Windows GUI and Block Mode
- ▲ Use same Gen skills and models

# Rapide Architecture



Modelling



Multiple Platforms



Runtime



Rapide API

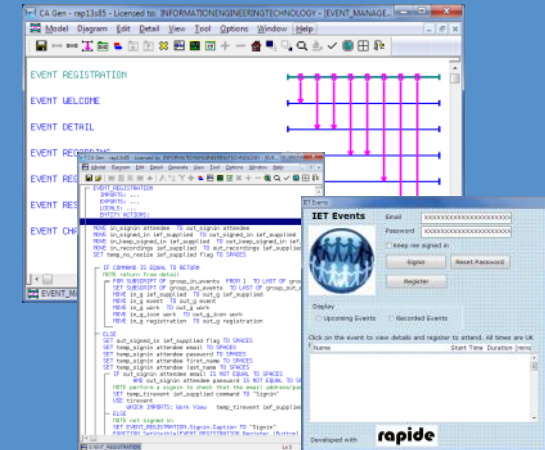




# Modelling

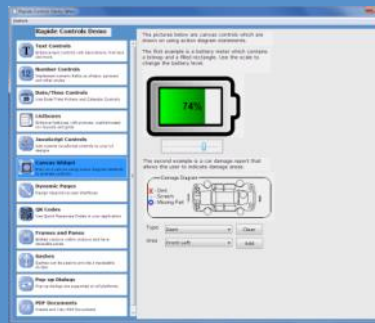


- ▲ Design using Gen Toolset
  - ▲ Using standard Gen techniques
    - ▲ Action Diagramming
    - ▲ Dialog Flow Design
    - ▲ User Interface Design
- ▲ Rapide Plug-in
  - ▲ Enhance UI Design
- ▲ Definitions stored in the model
  - ▲ Migrated with procedure step
  - ▲ No change to model management procedures





# Multiple Platforms



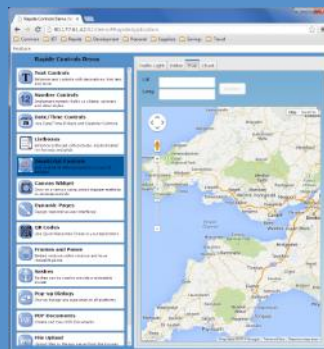
Desktop



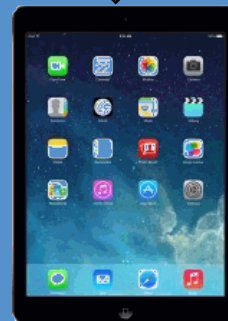
Gen Server



Application Server



Browser



iOS



Android



# Runtime



## ▲ Client Platform

- ▲ CA Gen generated Java code for action diagrams and client/server comms runtime
- ▲ Rapide Runtime for window/dialog management
  - ▲ Java Based
  - ▲ Uses standard, proven frameworks

## ▲ Gen Servers

- ▲ No Change, No Re-generation, Unaffected
- ▲ Same servers can support both CA Gen and Rapide clients



# Rapide API



## ▲ Comprehensive API

- ▲ Uses action diagram methods
- ▲ Over 180 methods and properties

## ▲ Examples

- ▲ Control dialog flow
- ▲ Local persistent storage
- ▲ UI interaction
- ▲ JavaScript
- ▲ File Upload / Download

```
IF in_keep_signed_in ief_supplied flag IS EQUAL TO "Y"  
NOTE save details in cookie  
INVOKE temp rapide object.clientDataStorePut("IetEventUser", out_signin attendee email)  
INVOKE temp rapide object.clientDataStorePut("IetEventPwd", out_signin attendee password)
```

# Rapide Mobile API



## ▲ Action Diagram Functions

- ▲ Geo-location
- ▲ Camera
- ▲ Phone
- ▲ Mail
- ▲ Mapping
- ▲ etc.



## ▲ Push Notification

- ▲ Uses APNS (Apple Push Notification Service) for iOS
  - ▲ Includes Badge support
- ▲ GCM (Google Cloud Messaging) for Android





# Extension Libraries



- ▲ Access Java Libraries using Gen Action Diagram Code
- ▲ Examples
  - ▲ Reporting using JasperReports
  - ▲ PDF File Creation using Apache PDFBox
  - ▲ Quick Response Codes using Google zxing



# Advanced User Interface



Widgets and Controls



Responsive Layout



Frames



Multi-Lingual



Block-Mode Option

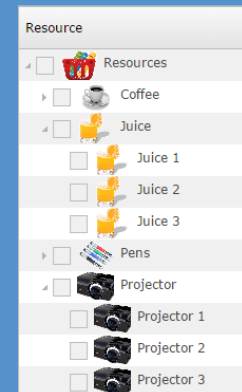
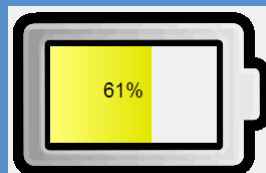
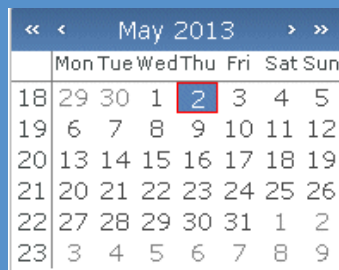
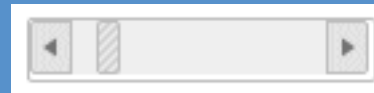
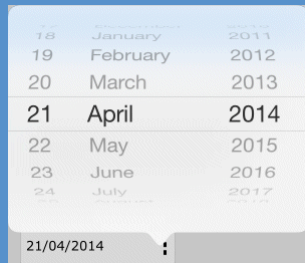




# Widgets



- ▲ Extended set of widgets
  - ▲ Date/Time Picker, Progress Bar, Slider and much more
- ▲ Comprehensive Listbox support
  - ▲ Trees, Editable Grids, etc
- ▲ Native controls on Mobile devices
- ▲ Support for custom Java and JavaScript controls



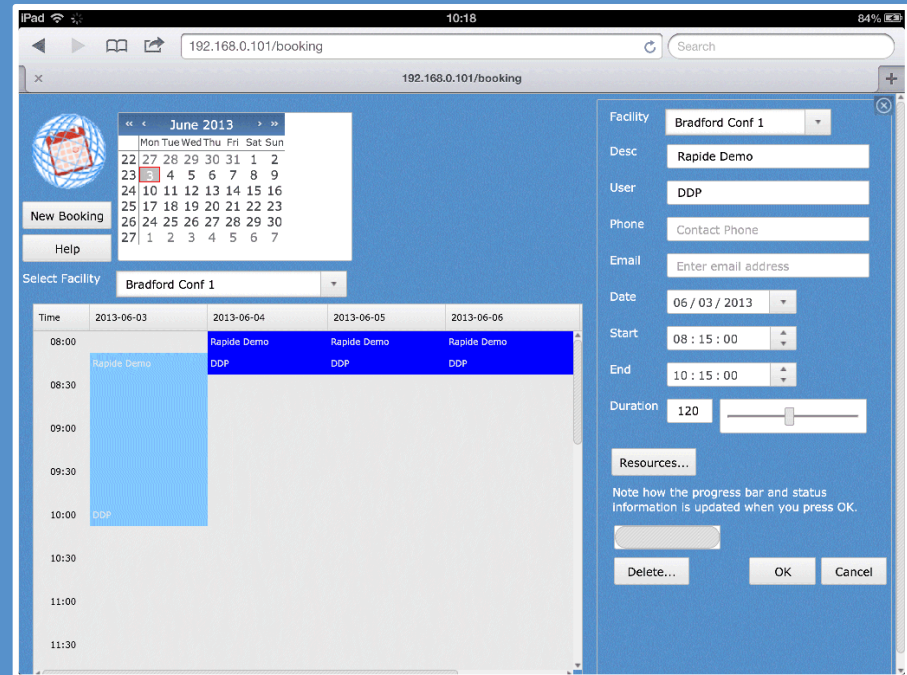
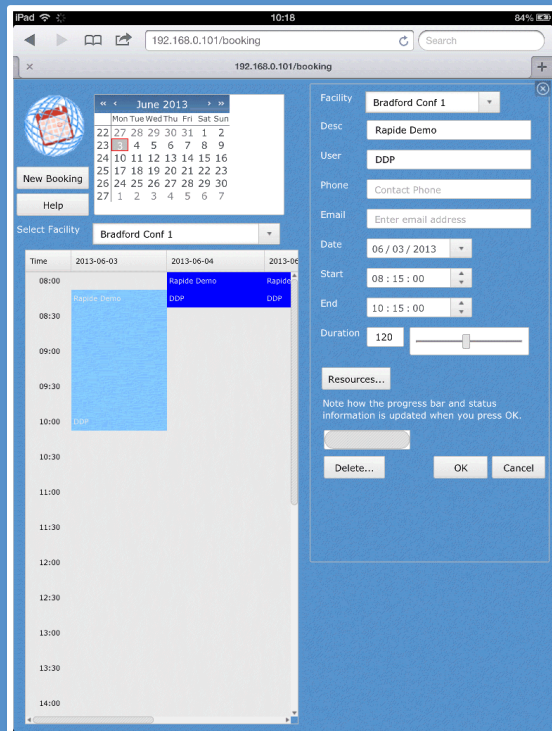




# Responsive Layout



- ▲ Responsive applications
- ▲ Automatic re-size / re-position controls

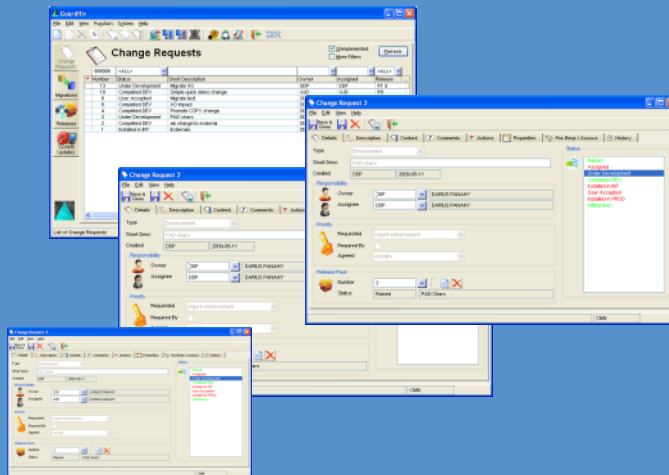




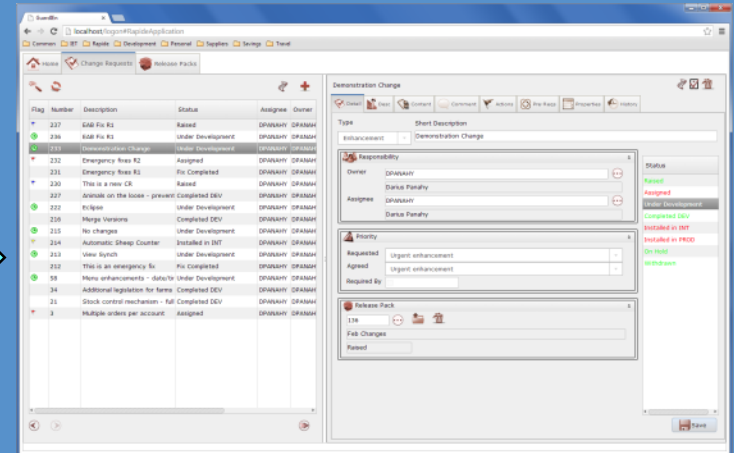
# Frames



- ▲ Frames allow embedded windows / dialogs including tabs and multiple-instance tabs
- ▲ Much more simple to design and implement sophisticated user interfaces



Windows GUI



Browser



# Multi-Lingual



- ▲ Strings generated into string resources file (Unicode)
- ▲ String resources translated into language specific files
- ▲ Language dynamically loaded based on User's Locale



# Block-Mode Option



- ▲ Uses Existing Screen Design
- ▲ Automated Enrichment of the UI
- ▲ Automated Conversion to GUI Design
- ▲ Options for window or co-operative packaging
  - ▲ Automated conversion to co-operative clients & servers

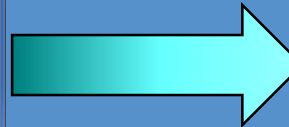
Application Execution Facility

MEMP EMPLOYEE DETAIL MAINTENANCE 05-29-14 15:05:31

Command MODIFY (ADD or MODIFY)

Number	000001	Division	001
Name	DARIUS PANAHY	Department	0001
Address	DUCKMEAD HOUSE	Service Date	02-01-13
	FARLEIGH WICK	Pay Type	H
	BRADFORD ON AVON	Pay Rate	00001000.00
	WILTSHIRE	Mail Stop	1
Home Phone	01225 864003	Work Phone	01225 863060
Full Time	Y		

LNK004 Selected Employee displayed - enter changes.  
F01=HELP F03=MENU F12=RETURN  
[4] B LOCAL



EMPLOYEE DETAIL MAINTENANCE

Rapide Sample Model Application

Command  (ADD or MODIFY)

Number

Name

Address

Division

Department

Service Date ☒ 01/02/2015

Pay Type

Pay Rate

Mail Stop

Work Phone

Home Phone

☒ Full Time

Functions

Process Menu Add Modify Return



# Block-Mode Option



- ▲ Provides an easy approach to transform existing Gen block-mode screens to a web and/or mobile UI
  - ▲ Low Cost
  - ▲ Low Risk
  - ▲ Quick
  - ▲ Minimise changes to the model
  - ▲ Minimise changes in development techniques
- ▲ Improves user productivity and satisfaction
- ▲ Enable phased transition based on business benefits
- ▲ Enables platform change

# Summary



- ▲ Protect investment in CA Gen Models
- ▲ Utilise existing skill-sets
- ▲ Build State of the Art Applications
- ▲ Cross-Platform Capability
- ▲ Integrated Development Tool
- ▲ Native look and feel on Mobile/Tablet

For more information: [www.iet.uk/rapide](http://www.iet.uk/rapide)