

Acumatica Summit 2018

Jan. 28 – Feb. 2 • Nashville, TN



xRP Framework Fundamentals

Dhiren Chhapgar & Ruslan Devyatko

Acumatica Labs Team Members



Collaborate. Innovate. Accelerate

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xRP Framework Fundamentals

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Collaborate. Innovate. Accelerate.

Why attending this session?



Is it really fast to create new screens with xRP Framework?



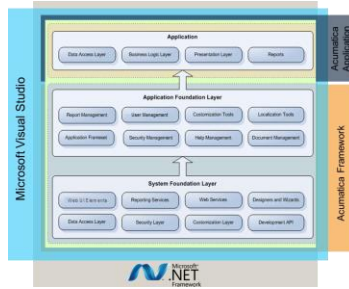
Is it easy to customize standard Acumatica ERP screens?



How can a custom screen be exposed via Web services?



xRP Framework



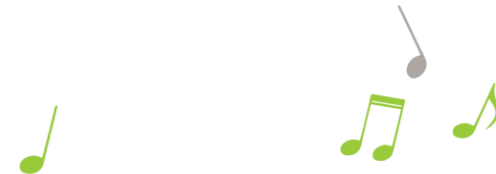
Architected for scale, performance,
and flexibility



Spend time building your application
leveraging Acumatica platform and
not building the basics



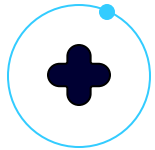
Application to market in months, not
years by leveraging rich platform
features and pre-built ERP
functionalities



xRP Framework



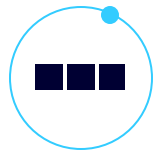
Create custom Fields



Add Business Logic



Create new Pages



And much more!



Building a Custom Data Entry Screen

Rental Orders Example





Is your next event covered by our tent?



Rental Orders – Document Details



Revision Two HQ ▾ Rental Orders ★

NOTES FILES CUSTOMIZATION TOOLS ▾



Order Nbr.:	SO004118	* Customer:	ABARTENDE - USA Bartendi	Ordered Qty.:	29.00
<input type="checkbox"/> Hold		* Due Date:	2/16/2017	Order Total:	2,547.02
Status:	In Process	Description:	Afterparty event in Nashville		
* Date:	12/21/2017				

[DOCUMENT DETAILS](#) [SHIPPING INFORMATION](#)

Inventory ID	Quantity	Rental Price	Ext. Price
CONBABY2	20.00	54.98	1,099.60
CONGRILL	4.00	199.98	799.92
CONAIRT1	5.00	129.50	647.50



Rental Orders – Shipping Information



Revision Two HQ ▾ Rental Orders ★

NOTES FILES CUSTOMIZATION TOOLS ▾



Order Nbr.:	<input type="text" value="SO004118"/>	* Customer:	<input type="text" value="ABARTENDE - USA Bartendi"/>	Ordered Qty.:	29.00
	<input type="checkbox"/> Hold	* Due Date:	<input type="text" value="2/16/2017"/>	Order Total:	2,547.02
Status:	<input type="text" value="In Process"/>	Description:	<input type="text" value="Afterparty event in Nashville"/>		
* Date:	<input type="text" value="12/21/2017"/>				

DOCUMENT DETAILS SHIPPING INFORMATION

SHIP-TO CONTACT	SHIP-TO ADDRESS
Business Name: <input type="text" value="USA Bartending School"/>	Address Line 1: <input type="text" value="203 Lower Notch Rd"/>
Attention: <input type="text"/>	Address Line 2: <input type="text"/>
Phone: <input type="text" value="+1 (908) 532-9522"/>	City: <input type="text" value="Little Falls"/>
Email: <input type="text" value="barkeep@usabartend.com"/>	* Country: <input type="text" value="US - United States of America"/>
	State: <input type="text" value="NJ - NEW JERSEY"/>
	Postal Code: <input type="text" value="07424"/>



Entity–Relationship Model



Rental Order

RentalOrder		
PK	CompanyID	int
PK	OrderNbr	nvarchar(15)
	OrderDate	datetime2
	Status	char(1)
	Hold	bit
	CustomerID	int
	DueDate	datetime2
	Description	nvarchar(255)
	OrderQty	decimal(25, 6)
	OrderTotal	decimal(19, 6)
	FullName	nvarchar(255)
	Salutation	nvarchar(255)
	Phone1	nvarchar(50)
	Email	nvarchar(255)
	AddressLine1	nvarchar(50)
	AddressLine2	nvarchar(50)
	City	nvarchar(50)
	State	nvarchar(50)
	CountryID	nvarchar(2)
	PostalCode	nvarchar(10)
	LineCntr	int
	NoteID	uniqueidentifier
	CreatedByID	uniqueidentifier
	CreatedByScreenID	char(8)
	...	
	LastModifiedDate	datetime
	tstamp	timestamp

RentalLine		
PK	CompanyID	int
PK	OrderNbr	nvarchar(15)
PK	LineNbr	int
	ProductID	int
	OrderQty	decimal(25, 6)
	RentalPrice	decimal(19, 6)
	LinePrice	decimal(19, 6)
	NoteID	uniqueidentifier
	CreatedByID	uniqueidentifier
	CreatedByScreenID	char(8)
	CreatedDateTime	datetime
	LastModifiedByID	uniqueidentifier
	LastModifiedByScreenID	char(8)
	LastModifiedDate	datetime
	tstamp	timestamp



Rental Line



Creating a New Page in Browser



Business Logic Controller



Aspx page



Site Map node

Create New Screen

* Screen ID:

* Graph Name:

* Graph Namespace:

* Page Title:

* Template:

* Site Map Parent:

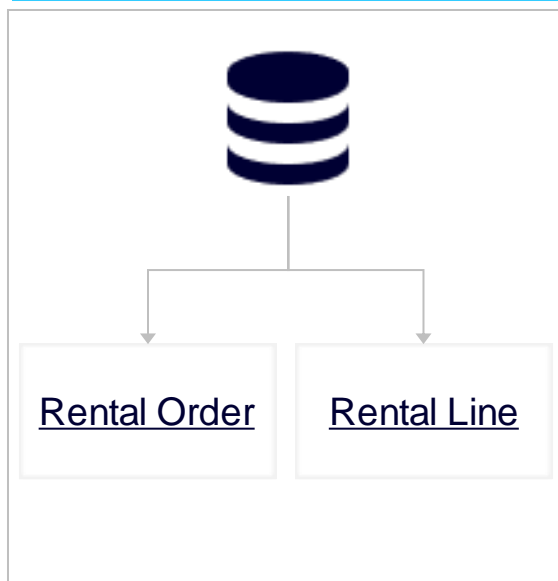
OK CANCEL



Rental Orders – Document Details



Data Access



BLC Code

```
public PXSelect<RentalOrder>
RentalDocument;

public PXSelect<RentalLine,
Where<RentalLine.orderNbr,
Equal<Current<
RentalOrder.orderNbr>>>>
RentalDocumentLines;
```

Layout Editor

The screenshot shows the Layout Editor interface. At the top, there are icons for undo, save, and a "PREVIEW CHANGES" button. Below that is a toolbar with refresh, delete, and filter icons. The main area displays a tree view of the document structure:


- DataSource: RentalOrderEntry
- Form: RentalDocument
 - Column
 - Column
 - Column
- Tab: CurrentRentalDocument
 - Document Details
- Dialogs




Implementing Business Logic



On Hold





Order Nbr.: 

Hold


Status:

In Process





Order Nbr.: 

Hold

Status: 

Completed



Order Nbr.: 

Hold

Status:



Rental Orders – Shipping Information



BLC Code

```
public PXSelect<RentalOrder> RentalDocument;  
  
public PXSelect<RentalOrder,  
    Where<RentalOrder.orderNbr,  
        Equal<Current<RentalOrder.orderNbr>>>>  
    CurrentRentalDocument;  
  
public PXSelect<RentalLine,  
    Where<RentalLine.orderNbr,  
        Equal<Current<RentalOrder.orderNbr>>>>  
    RentalDocumentLines;
```

Layout Editor

The screenshot shows the Layout Editor interface with a toolbar at the top containing icons for undo, save, preview changes, and actions. Below the toolbar is a tree view showing the form structure:

- Data Source: RentalOrderEntry
 - Form: RentalDocument
 - Tab: CurrentRentalDocument
 - Document Details
 - Shipping Information
 - Column
 - Group
 - Column
 - Group
 - Dialogs



AUTOMATIC Numbering Machine.

DIAL SETTING.

Numbers Consecutively.
Duplicates and Repeats.

STEEL FIGURES!
PERFECT PRINTING!
ABSOLUTELY ACCURATE!

Indispensable for general
office and factory use. *Sys-
tematizing and Labor-sav-
ing.*

Sent on Ten Days Trial
to Responsible Parties.

Send for circulars.

Bates Mfg. Co.

EDISON BUILDING,

BROAD ST., N. Y.

U. S. A.

HIGHEST AWARD—
Medal and Diploma,
World's Fair.



Adding Auto-Numbering for Rental Orders



Customizing an Acumatica Screen

Business Accounts Example



Customizing Business Accounts

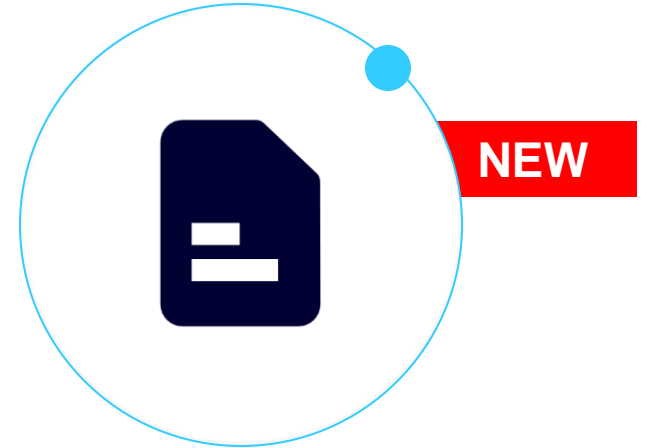
Business Accounts

Create Rental Order

Specify Rental Order Details ✕

Inventory ID:

Rental Order

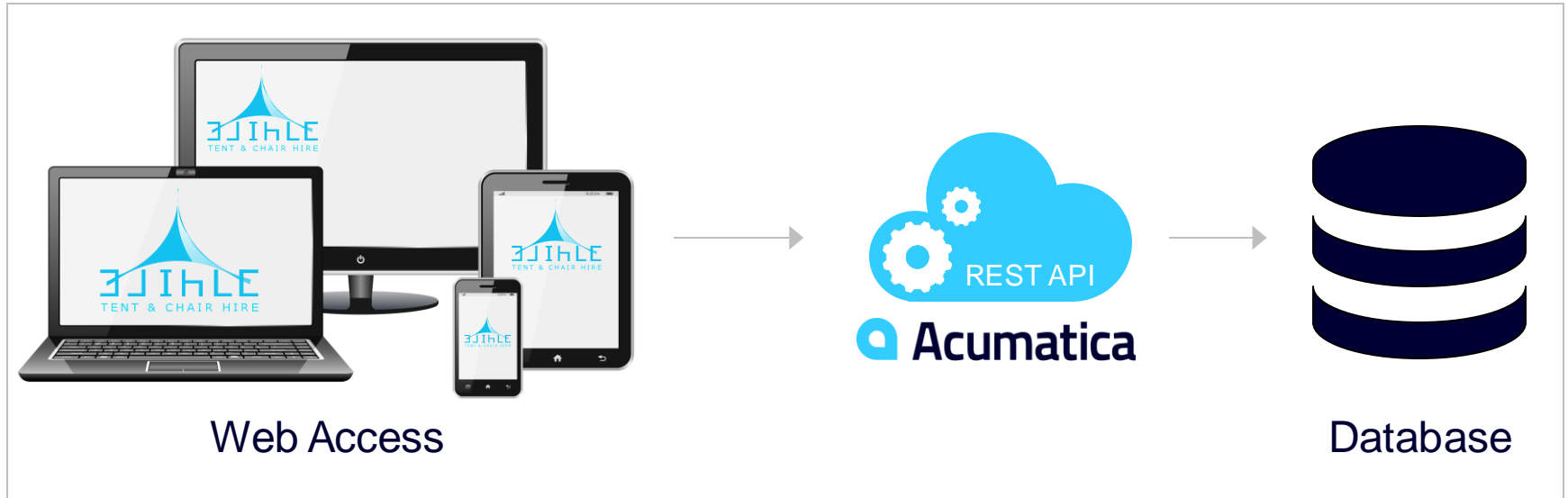


Working with a Custom Screen through the Web API

Rental Orders Example



Creating new Rental Orders via Rest API



Want to learn more?



- Help → Customization Guide
- Help → Acumatica Framework Guide
- T- and I-series courses at Acumatica University
- StackOverflow: Tag [acumatica] & [acumatica-kb]



Acumatica
Summit 2018

Thank you

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