

CUSTOMER VALUE PARTNERS

Be Better.



**MUTUAL
RESPECT**



**INTENSE
CLIENT FOCUS**



Incorporating User Experience into Software Development

FedCASIC 2016

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**UNCOMPROMISING
INTEGRITY**



**INDIVIDUAL
RESPONSIBILITY
AND GROWTH**

User Experience Enhancements

- Reduced number of screens
- Removed “back and forth” movements
- Aligned with the user’s work flow (logical sequence of actions)
- Cosmetics
- Fewer keystrokes
 - ◆ LOVs / Drop Down List Boxes
- Leveraging technological capabilities
 - ◆ Hierarchical tree

Overview of CARMN

- CARMN = Cost and Response Management Network
- Description: a cost and FR performance management system
- Joint effort between Application Development and Services Division
 - Field Systems Development and CVP consultants
- Stakeholders
 - ◆ Regional Office (FS, SSF, SSO, Coordinator, Clerk, Assistant Regional Director, Regional Director)
 - ◆ Field HQ (Survey Liaison, Employee Relations Board, and Office of Survey & Census Analytics)

Reduced # of Screens: Running Summary View

- Before
 - ◆ Report Selection Screen
 - ◆ FR Selection
 - ◆ Summary View
- After
 - ◆ Report Selection Screen
 - ◆ Summary View

Reduced # of Screens: Running Summary View

- Before

Report Selection

Region: BOSTON Rating Year: [dropdown]

Report Mode: Run Report Edit Report

11-39 Report Type: One Or More FRs (One Survey) SFR/Team Leader (One Survey) Individual FR (All Surveys)

SURVEY DATA CURRENTLY LOADED:	NEXT UPDATE:
HIS FY 2009 through QTR 2 2009	QTR 3 2009 approximately 21-OCT-2009
CED FY 2009 through SEP-2009	DEC-2008 approximately 07-FEB-2009
ACS, CEQ, CPS, NCVS, SIPP FY 2009 through SEP-2009	DEC-2008 approximately 14-JAN-2009

Survey: [dropdown]

Time Range: Begin Date [] End Date []

Search Selection

Region: BOSTON Survey: CPS Rating Year: 2008 Start Date: 01-OCT-2007 End Date: 30-SEP-2008

Report Mode: RUN REPORT Report Type: ONE OR MORE FR

Search By: FR Name SFR/Team Leader RO Team All FRs



Reduced # of Screens: Running Summary View

- Before

The screenshot shows a web application window titled "SEARCH SELECTION". The main heading is "Search Selection". The form contains the following fields and options:

- Region: BOSTON
- Survey: CPS
- Rating Year: 2008
- Start Date: 01-OCT-2007
- End Date: 30-SEP-2008
- Report Mode: RUN REPORT
- Report Type: ONE OR MORE FR
- Search By: FR Name (selected), SFR/Team Leader, RO Team, All FRs
- Select Number of FRs: A dropdown menu is open, showing options 1, 2, 3, 4, and 5.

At the bottom of the window, there are four buttons: "Report Main Menu", "Run Report w/ Comments", "Run Report w/o Comments", and "Next".

Reduced # of Screens: Running Summary View

- Before

The screenshot displays the 'SEARCH SELECTION' application window. The main window has a title bar with the text 'SEARCH SELECTION' and standard window controls. The main content area is titled 'Search Selection' and contains several input fields and buttons. The fields are: 'Region' (BOSTON), 'Survey' (CPS), 'Rating Year' (2008), 'Start Date' (01-OCT-2007), and 'End Date' (30-SEP-2008). Below these are 'Report Mode' (RUN REPORT) and 'Report Type' (ONE OR MORE). The 'Search By' section has four radio buttons: 'FR Name' (selected), 'SFR/Team Leader', 'RO Team', and 'All'. There is a 'Select Number of FRs' dropdown menu set to '1' and a text input field containing '[Click here for person 1]'. At the bottom of the main window are four buttons: 'Report Main Menu', 'Run Report w/ Comments', 'Run Report w/o Comments', and 'Next'. A modal dialog titled 'Select FR Name' is open over the main window. It has a 'Find' input field containing 'Z%' and a list box showing a search result for 'Z92 McCool Juan', which is highlighted. The dialog also has 'Find', 'OK', and 'Cancel' buttons.

Reduced # of Screens: Running Summary View

- Before

The screenshot shows a software window titled "SEARCH SELECTION". The main title is "Search Selection". The interface includes several input fields and buttons:

- Region:** BOSTON
- Survey:** CPS
- Rating Year:** 2008
- Start Date:** 01-OCT-2007
- End Date:** 30-SEP-2008
- Report Mode:** EDIT REPORT
- Report Type:** ONE Select FR Name
- Search By:** Radio buttons for FR Name (selected), SFR/Team Leader, and RO Team.
- Find:** Z%
- Select Number of FRs:** 3
- Results List:** A list of FR names starting with Z, including Z01 Conte Suzi, Z02 Suieto Miguel, Z80 Rudai Pedro, Z82 Suieto Pepe, Z83 Hablador Jan, Z84 Persona Ram, Z85 Habitante Maria, and Z92 McCool Juan.
- Buttons:** Report Main Menu, Run Report w/ Comments, Run Report w/o Comments, Find, OK, Cancel, Next.

Reduced # of Screens: Running Summary View

- After

The screenshot shows a web application interface titled "11-39 Report Selection Main Menu". At the top, there is a header bar with the text "11-39 Report Selection Main Menu". Below the header, the main title "11-39 Report Selection Main Menu" is displayed in a large, bold font. The interface is divided into several sections:

- Select:** A section containing a "Rating Year" dropdown menu and a "Region" text input field with the value "NEW YORK".
- 11-39 Report Type:** A section with four radio button options: "FR 11-39", "FS 11-39", "NCVS Monthly Data Quality Feedback", and "FR 11-39 Combined (All Surveys)".
- Survey Updates:** A section with the text "Last ROSCO update: 04/19/2016 07:28:25 AM". Below this, there are three columns: "Response Data Currently Loaded:", "Production Data Currently Loaded:", and "Next Production Update:". Each column has a table with three rows and a vertical scrollbar on the right.
- Select:** A section containing a "Survey" dropdown menu, a "Time Range" dropdown menu, and an "End Date" dropdown menu.

At the bottom of the interface, there are two buttons: "11-39 Main Menu" and "Next".

- Aligned with the user's work flow
 - ◆ Disabling fields until prerequisite info is provided, i.e. Rating Year
- Cosmetics
 - ◆ Frames to group logical info together



Reduced # of Screens: Running Summary View

- After

- Removed “back and forth” movements
 - ♦ No need to return to Report Selection Screen to change report criteria and/or run a different report
- Cosmetics
 - ♦ Frames
- Fewer keystrokes
 - ♦ Checkboxes
 - ♦ LOVs

Summary View

Summary View

Region Survey Rating Year Begin Date End Date Report Type

Mode
 Run Report
 Edit Report

Options
 SSF FS Sort By Refresh

Cluster Response													Stratum/PSU Production										
SSF	FS	All FR	Code	Last, First Name	Resp Wkld	Wkld	Ints	Partl	Credit	Type A	Adttl Chrgs	%Resp Rate	Resp w/LMRs	Rtg	Stra	PSU	Prod Wkld	Miles	Hours	Int Miles/Case	Int Hrs/Case	Prod Rtg	Perf Std Range
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ZZ5	CARMN5, Tester5	2	2	1	0	0	1	0	50.00	3	X	00000	2	0	.00	.00	.00	N/A	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ZZ7	MCCOOL, JOHN	2	2	1	0	0	1	0	50.00	3	C	70900	2	23	3.75	11.50	1.88	4	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Z12	CARMN12, Tester12	6	8	4	0	0	2	2	50.00	3	C	70900	6	19	3.75	3.17	.63	5	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Z45	CARMN45, Tester45	16	20	10	0	4	6	0	70.00	3	C	70900	16	139	27.75	8.69	1.73	4	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ZZ1	CARMN1, Tester1	20	20	10	0	2	8	0	60.00	4	C	70900	20	243	51.25	12.15	2.56	3	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ZZ2	CARMN2, Tester2	2	2	0	0	0	2	0	0.00	1	X	00000	2	0	.00	.00	.00	N/A	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ZZ3	CARMN3, Tester3	4	4	2	0	0	2	0	50.00	3	C	70900	4	54	10.75	13.50	2.69	3	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ZZ4	CARMN4, Tester4	17	17	7	0	0	8	0	52.94	4	C	70900	17	168	36.75	9.88	2.16	3	OCT-SEP	View
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ZZ6	SOE, MARIO	4	4	2	0	0	2	0	50.00	3	C	70900	4	5	1.00	1.25	.25	5	OCT-SEP	View

Previous Screen Display Cover Sheet Print with Comments Run Summary Report Report Queue



Cosmetics: FR Performance Summary Report

- Before

11-39 FR Performance Summary Report											
<i>This report contains information, the release of which is prohibited by Title 13 U.S.C., and is used for Bureau of Census</i>											
Region: Dallas			Survey: SIPP			Report Period:					
Z84 Ram			Persona								
EOD: 10/01/08			EOP: 10/01/08			PSU: 60927			Stratum:		
Response Rates											
Month	Wkid	Ints	Partials	Type As	Type Bs	Type Cs	Type Ds	FR Resp Rate	RO Resp Rate		
OCT-2008	5	13	0	4	1	1	0	76.47%	70.42%		
NOV-2008	5	13	0	4	1	1	0	76.47%	70.37%		
DEC-2008	5	13	0	4	1	1	0	76.47%	70.37%		
JAN-2009	5	13	0	4	1	1	0	76.47%	70.37%		
FEB-2009	5	13	0	4	1	1	0	76.47%	70.37%		
MAR-2009	5	13	0	4	1	1	0	76.47%	70.37%		
APR-2009	5	13	0	4	1	1	0	76.47%	70.37%		
Cum:	35	91	0	28	7	7	0	76.47%	70.38%		



Cosmetics: FR Performance Summary Report

- After

11-39 FR Performance Summary Report

This information is administratively restricted and is used for Bureau of Census official use only



Region: New York
ZZ5 CARMN5 Tester5

Survey: ACS
EOD: 12/17/2014 EOP: 12/17/2014

Report Period: JAN-16 to APR-16
FS FR Code: RO FS: 0000 SSF: 75

Response Rates (RR)														
Month / Cum	Cls	Wkld	Resp Wkld	Ints	Extra Credit	Prtls	Type As	Type Bs	Type Cs	LMR	FR RR w/ LMRs	% in Cluster	RR Score	RO RR w/ LMRs
JAN-2016	1	2	2	1	0	0	1	0	0	0	50.00%	100.00%	3	51.72%
CUM:	1	2	2	1	0	0	1	0	0	0	50.00%	100.00%	3.00	54.84%
Cumulative:	2	2	1	0	0	0	1	0	0	0				

(1) Determine the CUM Performance Level for each Cluster:						(2) Calculate your CUM RR Score: Sum (Cluster Performance Levels times % In Cluster)		(3) Determine your Response Rate Performance Level: Use this chart to convert your CUM RR Score to your CUM Performance Level		CUM RR Score	Performance Level	ACS CUM Response Rate Performance Level
ACS National Performance Standards for Response Rate										1.00 - 1.49	1	3
Level 1 Level 2 Level 3 Level 4 Level 5										1.50 - 2.49	2	
Cluster 1: 0 - 21.99 22 - 41.99 42 - 55.99 56 - 96.99 97 - 100						Cluster 1: 3 * 100% = 3.00				2.50 - 3.49	3	
						Sum: 3.00				3.50 - 4.49	4	
										4.50 - 5.00	5	

The formula for calculating performance response rate is: Credits + Extra Credits / Credits + Extra Credits + Charges
Credits include : Interviews, Partials, LMRs (ACS only) and CATI Completes (CPS only)
Charges include: Type As



Cosmetics: View/Edit Detailed Report

- Before

View/Edit Detailed Report

View/Edit Detailed Report

FR Code Z84 **First Name** Ram **Last Name** Persona **Survey** SIPP **PSU** 60927 **Stratum** MA **Report Period Time Range** 10-01-2008 To 09-30-2009

Performance Standard Time Range 10-01-2008 To 04-30-2009 **Performance Rating** 2 Production **Std for Prod Rating** 3 Response Rate **Std for Prod Rating** Hours/Case

Workload Details Production Rate Details Transmittal Goal Data Entry Other Performance Items

Month	Wkld	Ints	Part's	Type				Base LMR	Type Z	Z Rate	CATI Comp	CATI Recy	%CATI Recy	%FR w/ CATI	%RO w/ CATI	%Nat'l w/ CATI	%FR Resp	%RO Resp	%Nat'l Resp	Edit
				A	B	C	D													
Oct	5	13	0	4	1	1	0									76.47	70.42	73.43	Edit	
Nov	5	13	0	4	1	1	0									76.47	70.37	72.62	Edit	
Dec	5	13	0	4	1	1	0									76.47	70.37	70.37	Edit	
Jan	5	13	0	4	1	1	0									76.47	70.37	70.37	Edit	
Feb	5	13	0	4	1	1	0									76.47	70.37	70.37	Edit	
Mar	5	13	0	4	1	1	0									76.47	70.37	70.37	Edit	
Apr	5	13	0	4	1	1	0									76.47	70.37	70.37	Edit	
																				Edit
																				Edit
																				Edit
																				Edit
CUM	35	91	0	28	7	7	0	0	0	0	0	0				76.47	70.38	71.46		

Previous Screen Run Report w/o Comments Run Report w/ Comments Save



Cosmetics: View/Edit Detailed Report

- After

View/Edit Detailed Report

View/Edit Detailed Report

FR Code: ZZ5 First Name: Tester5 Last Name: CARMN5 Survey: ACS FS: 0000 PSU: 00000 Stratum: X Report Period Time Range: 01-01-2016 To 03-31-2016

Performance Standard Time Range: 10-01-2015 To 09-30-2016 Performance Rating: N/A Production: 3 Response Rate: Std for Prod Rating: Hours/Case Std for Resp Rating: With LMR

Workload Details Production Rate Details Transmittal Goals Other Performance Items

Select Cluster: 1

Month	Wkld	Resp Wkld	Ints	Extra Credit	Part's	Type A	Type B	Type C	LMR	% Sent To CATI	CATI Comp	CATI Recy	%CATI Recy	%FR Resp w/LMRs	% in Cluster	%RO Resp w/LMRs	%Natl Resp w/LMRs	Edit
Jan	2	2	1	0	0	1	0	0	0	0.00	0	0	0.00	50.00	100.00	51.72	51.72	Edit
																		Edit
																		Edit
																		Edit
																		Edit
																		Edit
																		Edit
																		Edit
																		Edit
																		Edit
CUM	2	2	1	0	0	1	0	0	0	0	0	0	0	50.00	100.00	54.84	54.84	

Report Queue Display Cover Sheet Print With Comments Run Report Save

Previous Screen Generic Notes

- Cosmetics
 - ◆ Frames
 - ◆ Text position
- Less keystrokes
 - ◆ Checkboxes
 - ◆ LOVs



Leveraging Technological Capabilities

- Before

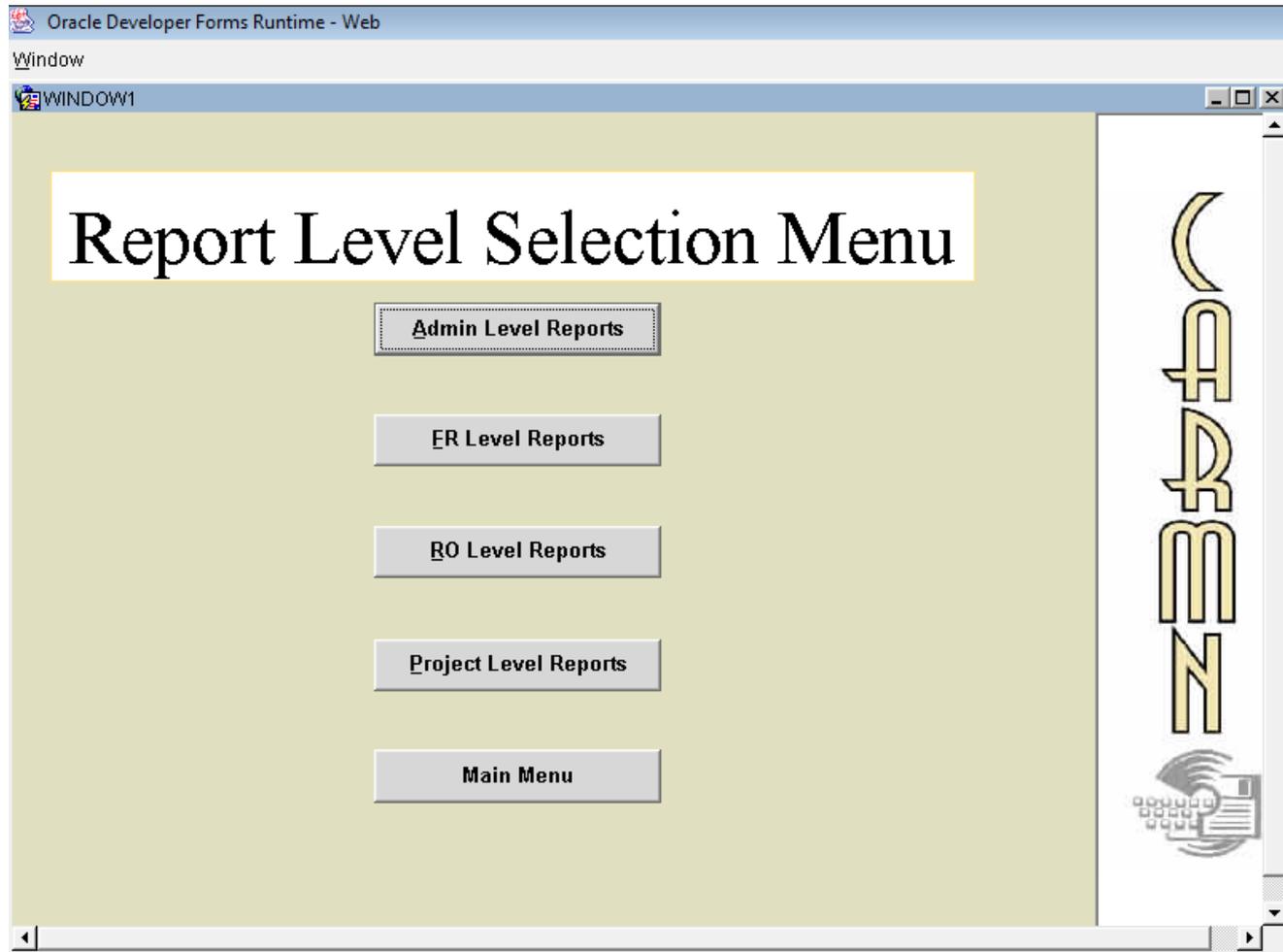
- ◆ Report Level Selection Menu
- ◆ CARMN Admin Level Report Selection
- ◆ CARMN FR Level Report Selection
- ◆ CARMN RO Level Report Selection
- ◆ Project Level Report Selection
- ◆ Administrative Report Specifications
- ◆ Parameter Review

- After

- ◆ CARMN Report Menu (Hierarchical Tree)
- ◆ Performance Summary Report (Search Parameters)

Leveraging Technological Capabilities

- Before



- Each command button populates a different screen

Leveraging Technological Capabilities

- Before

CARMN Admin Level Report Selection

(BC27)Time Attendance and
Report Contains Only WINFRED Information

Last Name: DOE FR Code: Z23 Region:

Transaction Code	Function Code	Project Number	Task Code	07/05	07/06	07/07	07/08
				SUN	MON	TUE	WED
01-REG	00-HRS	0608000-CPS	515	0	0	0	.25
		7478000-AHS-M	521	0	0	.25	0
		7478000-AHS-M	515	1	0	1.25	2
11-NGT DIFF	00-HRS	0608000-CPS	521	0	.25	0	0
		7478000-AHS-M	515	0	.75	0	3.25
			521	0	0	.25	0

Time Selection
 Current
 Historical

Report Selection
 BC27 Report
 WINFRED and CAPI Transmission Report
 Inactive Employee Report
 National No WINFRED Transmitted by Pay Period Report
 No WINFRED Transmitted by Pay Period Report
 No WINFRED Transmitted by Day Report

Previous Screen **Next Screen**

- This screen and the following screens apply to one set of reports, the Admin Level Report set
- Note the Current and Historical options under Time Selection



Leveraging Technological Capabilities

- Before

The screenshot displays a web-based form titled "Administrative Report Specifications" within an Oracle Developer Forms Runtime environment. The form includes several input fields and a dropdown menu:

- Previously Selected Data:** Report Selection: Time Selection:
- Period Year:**
- Pay Period:**
- Region:** A dropdown menu is open, showing a list of cities: BOSTON, CHARLOTTE, CHICAGO, DALLAS, DENVER, DETROIT, KANSAS CITY, and LOS ANGELES.
- Search FR-FS-SSF:**
- Next Screen:** A button labeled "Next Screen".

Leveraging Technological Capabilities

- Before

Oracle Developer Forms Runtime - Web

Window

WINDOW1

Parameter Review

Report Selection: Inactive Employee Report

Time Selection: Current

Region: Philadelphia

View: 3 Pay Periods (42 Days)

Display Coversheet

Run Report

Start Over

Previous Screen

Exit CARMN

Leveraging Technological Capabilities

- Before

CARMN RO Level Report Selection

Time Selection

Current
 Historical

Report Selection

RO Daily Cost And Performance Report
 RO Daily Cost Report
 RO Performance Summary w/ Workload Report
 RO Performance Summary w/o Workload Report
 RO Survey Expenditure Report

RO Daily Cost and Performance

This report contains only FRED Information 07-1

National Workload => [Red Box] Project No: 0906000

Region [Red Box]

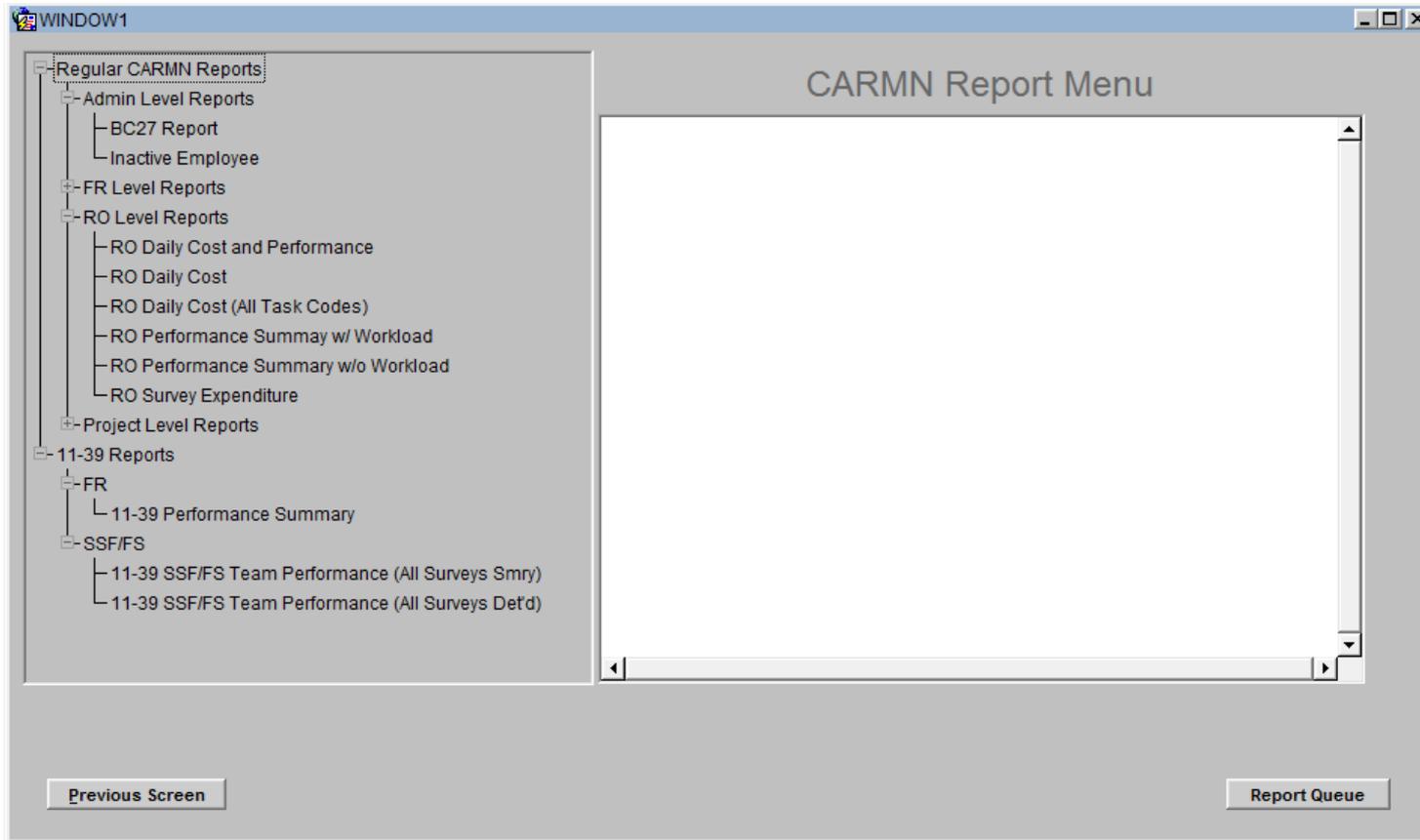
	Amount
521-Reinterview	
Regular Hrs	0.25
ND Hrs	0.75
All Other Costs	0.00
Ttl Task Hrs	1.00
522-Observation	
Regular Hrs	3.50
ND Hrs	0.00
All Other Costs	0.00

Buttons: Previous Screen, Next Screen

- This screen is populated by the second command button on the Report Level Selection Menu

Leveraging Technological Capabilities

- After



- Expand and collapse the report levels desired
- Also incorporated the Performance Management reports into this screen

Leveraging Technological Capabilities

- After

The screenshot shows a software window titled "Report Parameters" with two tabs: "Parameters" and "Report Queue". The main content area is titled "11-39 FR Performance Summary Report". It contains several input fields and dropdown menus for configuring the report. The fields are arranged in a grid-like fashion. At the bottom left is a "Previous Screen" button, and at the bottom right is a "Run Report" button.

Field	Value
Rating Year	[Dropdown]
Region	[Dropdown]
Survey	ALL
Begin Date	[Dropdown]
End Date	[Dropdown]
SSF Code	ALL
FS Code	ALL
FR Code	ALL
Comments	N
Transmittal Goals	N
Sort Order	PICKLIST

Leveraging Technological Capabilities

- Taking advantage of the WebLogic deployment

Report Parameters

Parameters Report Queue

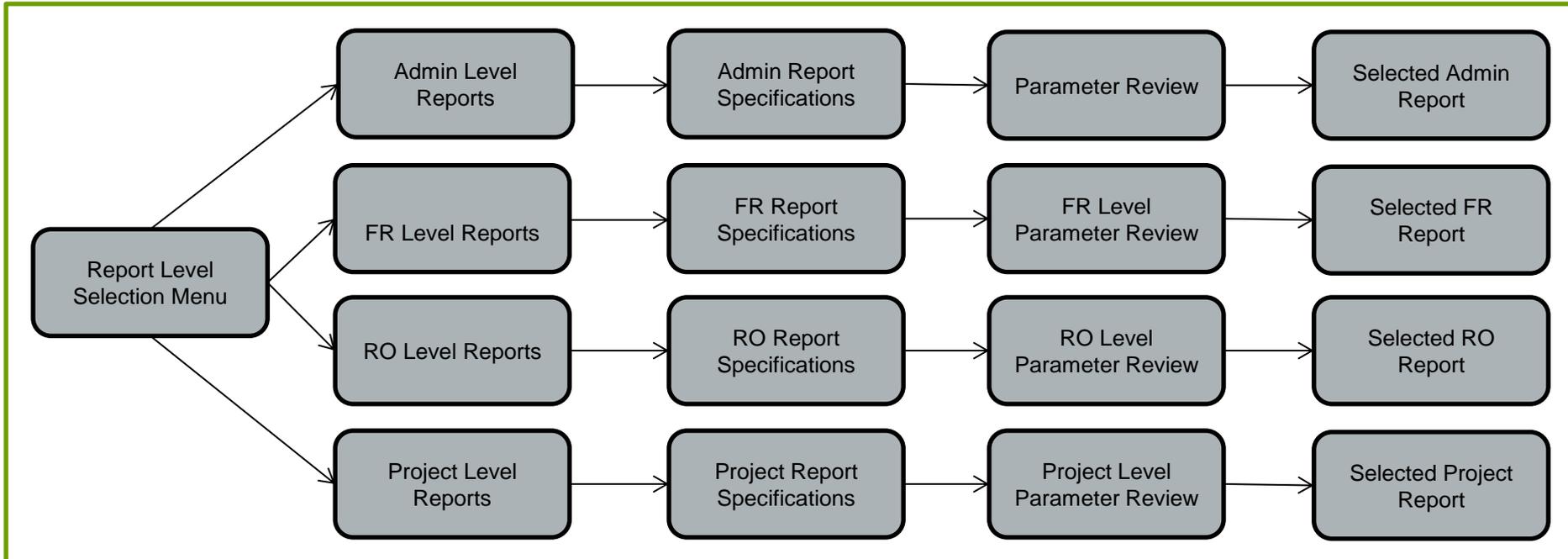
CARMN Report Queue

Report Name	Report Id	Start Date	Status	
11-39 SSF/FS Team Perf (All Surveys Summary) Rpt	1339	02-MAY-2016 04:50:31 PM	ENQUEUED	Open Report
Parameters REGION_CODE=22, REP_TYPE=FR, BEGIN_RP_DATE=01-DEC-2015, END_RP_DATE=30-APR-2016, FS_OF				
FR 11-39 Performance Summary Report	1338	02-MAY-2016 04:47:13 PM	FINISHED	Open Report
REGION_CODE=22, SURVEY_ACK=ALL, BEGIN_RP_DATE=01-JAN-2016, END_RP_DATE=30-APR-2016				
				Open Report

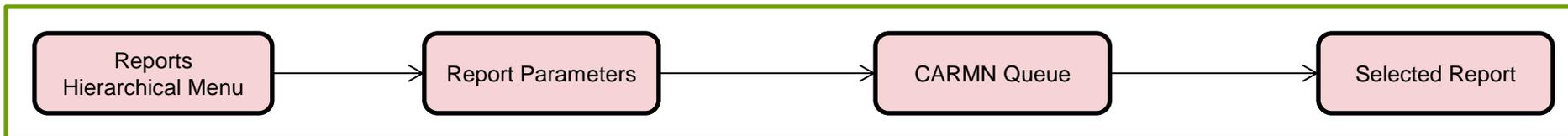
Previous Screen

Reduced # of Screens: System Wide for Reports

Before



After



Benefits

- Significantly enhanced user experience
- Improved efficiency for users
 - ◆ Less time in performing the same task
 - ◆ 7-day history of reports generated
- Improved navigation
- Advanced view of available data
- Reduced turnaround time for new reports

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