Appendix D: CCPOR Architecture Design documentation [REDACTED]



# Administrative Office of the Courts

INTEGRATION SERVICES BACKBONE CALIFORNIA COURTS PROTECTIVE ORDER REGISTRY ARCHITECTURE SPECIFICATION



ADMINISTRATIVE OFFICE OF THE COURTS INTEGRATION SERVICES BACKBONE (ISB) ARCHITECTURE SPECIFICATION Version 0.1 - AOC & Court Release

Prepared By: TIBCO PSG

Judicial Council of California Administrative Office of the Courts Information Services Division 455 Golden Gate Avenue San Francisco, CA 94102-3688

Copyright © 2008 by Judicial Council of California/Administrative Office of the Courts. All rights reserved.

Except as permitted under the Copyright Act of 1976 and as otherwise expressly provided herein, no part of this publication may be reproduced in any form or by any means, electronic or mechanical, including the use of information storage and retrieval systems, without permission in writing from the copyright holder. Permission is hereby granted to nonprofit institutions to reproduce and distribute this publication for educational purposes if the copies credit the copyright holder.

# **Document Version History**

Document Version	Date	Prepared By	Description

# **Reference Documents**

ID	Versio	Date	Document Title	Author	JCC Webex Location
	n				

# Table of Contents

1	EXECUTI	VE SUMMARY	14
1 1 1 1	.1 Abstra .2 Docum .3 Key Te .4 Docum	ACT IENT PURPOSE RMINOLOGY AND DEPENDENCIES IENT OUTLINE	14 14 15 17
2	APPLICA	TION OVERVIEW	18
2 2 2	R.1RESTRAR.2APPLICAR.3SOFTWA	AINING AND PROTECTIVE ORDER LIFE CYCLE	18 18 19
3	LOGICAL	APPLICATION MODEL	21
3 3 3 3 3 3	A.1ORDERB.2IMAGE IB.3PORTAIB.4CARPOB.5WEB SIB.6CUSTOR	DATA REPOSITORY MANAGEMENT SERVICES DS INTEGRATION ERVICES	21 21 22 22 22 22
4	USE CASE	SPECIFICATION	23
4	4.1.1 COMPC 4.1.1 Im 4.1.1.1 4.1.1.2 4.1.1.3 4.1.1.4	NENT VIEW	23 <i>25</i> . 25 . 25 . 26 . 27
4	4.1.1.5 4.1.1.6 4.1.1.7 4.2 Use Ca	Audit Logging Monitoring Implementation Checklist	. 27 . 27 . 27 . 28 . 30
	4.2.1 Ta	rget User-base Requirements.	31
	4.2.1.1 4.2.2 Ac 4.2.2.1 4.2.2.2 4.2.2.3	Id Order Component Interaction Quick Search Component Interaction	. 31 . 34 . 34 . 37
	4.2.2.4 4.2.2.5 4.2.2.6 4.2.2.7	View Order Details Component Interaction Functional Requirements Functional Errors Quick Search Functional Errors	. 45 . 50 . 54 . 55
	4.2.2.8 4.2.2.9 4.2.2.10 4.2.2.11	Attachments Functional Errors View Order Details Functional Errors Non-Functional Errors Quick Search Non-Functional Errors	. 57 . 58 . 60 . 62
	4.2.2.12 4.2.2.13 <b>4.2.3</b> Dr	Attachments Non-Functional Errors View Order Details Non-Functional Errors aft Order	. 63 . 65 . 67
	4.2.3.1 4.2.3.2 4.2.3.3 4.2.3.4	Functional Requirements	. 70 . 75 . 77

4.2.4 Mc	dify Order	. 78
4.2.4.1	Component Interaction	78
4.2.4.2	Functional Requirements	82
4.2.4.3	Functional Errors	86
4.2.4.4	Non-Functional Errors	88
4.2.5 Se	rvice Order	. 90
4.2.5.1	Component Interaction	90
4.2.5.2	Functional Requirements	93
4.2.5.3	Functional Errors	97
4.2.5.4	Non-Functional Errors	99
4.2.6 Ca	ncel Order	101
4.2.6.1	Component Interaction	101
4.2.6.2	Functional Requirements	104
4.2.6.3	Functional Errors	108
4.2.6.4	Non-Functional Errors	109
4.2.7 Pe	nding Order	111
4.2.7.1	Component Interaction	111
4.2.7.2	Functional Requirements	114
4.2.7.3	Functional Errors	117
4.2.7.4	Non-Functional Errors	118
4.2.8 Se	arch Order	120
4.2.8.1	Component Interaction	120
4.2.8.2	Functional Requirements	123
4.2.8.3	Functional Errors	125
4.2.8.4	Non-Functional Errors	127
4.2.9 Re	ports	129
4.2.9.1	Component Interaction	129
4.2.9.2	Functional Requirements	134
4.2.9.3	Functional Errors	136
4.2.9.4	Non-Functional Errors	137
4.2.10 Au	dit Trail	139
4.2.10.1	Component Interaction	139
4.2.10.2	Functional Requirements	142
4.2.10.3	Functional Errors	144
4.2.10.4	Non-Functional Errors	145
4.2.11 Ro	le Delegation	147
4.2.11.1	Component Interaction	147
4.2.11.2	Functional Requirements	153
4.2.11.3	Functional Errors	155
4.2.11.4	Non-Functional Errors	157
4.2.12 De	lete Order	159
4.2.12.1	Component Interaction	159
4.2.12.2	Functional Requirements	162
4.2.12.3	Functional Errors	164
4.2.12.4	Non-Functional Errors	166
4.2.13 Mis	scellaneous Info Configuration	168
4.2.13.1	Component Interaction	168
4.2.13.2	Functional Requirements	173
4.2.13.3	Functional Errors	175
4.2.13.4	Non-Functional Errors	177
4.2.14 Do	cument Link	178
4.2.14.1	Component Interaction	178
4.2.14.2	Functional Requirements	181
4.2.14.3	Functional Errors	183
4.2.14.4	Non-Functional Errors	185
4.2.15 Inte	erim Service	187
4.2.15.1	Component Interaction	187

4.2.15.2	2 Functional Requirements	190
4.2.15.3	3 Functional Errors	191
4.2.15.4	Non-Functional Errors	193
4.2.16 A	synchronous Image Upload	195
4.2.16.1	Component Interaction	195
4.2.16.2	2 Functional Requirements	197
4.2.16.3	3 Functional Errors	197
4.2.16.4	Non-Functional Errors	198
5 PHYSIC	AL ARCHITECTURE	201
5.1 SERVI	CE8	201
511 L	Il San <i>ir</i> as	201
5111	Overview	201
5.1.1.2	Modules	201
512 0	Core Services	204
5.1.2.1	Overview	
5.1.2.2	Modules	204
5.1.3 D	MS Services	207
5.1.3.1	Overview	207
5.1.3.2	Modules	207
5.1.4 D	DB Services	208
5.1.4.1	Overview	208
5.1.4.2	Modules	208
5.1.5 C	ARPOS Services	209
5.1.5.1	Overview	209
5.1.5.2	Modules	209
5.1.6 E	xternal Web Services	209
5.1.6.1	Overview	209
5.1.6.2	Modules	209
5.1.7 E	External FTP Services	210
5.1.7.1	Overview	210
5.1.7.2	Modules	210
5.2 Docui	MENT LINK	211
5.2.1 C	Dverview	211
5.2.2 D	Document Auto-Linking Process	211
5.2.2.1	Overview	211
5.2.2.2	Source of Meta-Data	211
5.2.2.3	Document Meta-data Staging Location (RPO_META)	212
5.2.2.4	Order Associated Documents Location/Attached Documents List (RPO_DOCS)	212
5.2.2.5	Order Master Table (RPO_MAST)	212
5.2.3 D	Document Meta-data	214
5.2.3.1	Overview	214
5.2.3.2	Local DMS Courts: CCPOR Document Auto-Link Web Service	215
5.2.3.3	LCPUR DMS COURTS	217
5.2.3.4	IBM Flienet Capture	217
5.2.3.0 5.2 CCDC		220
5.3 COPC	Dr Da labase	220
5.3.7 0		220
5.3.2 0	CPOR Database Schema	220
5.3.2.1 E 2 2 2	Design	220
ບ. J. ∠. ∠ ຊ່າງງ	Nomenclature	∠∠∠ ววว
5.3.2.3 5 2 7 <i>1</i>	OrderID	···· ∠∠∠ ววว
532.4	Relationships	222
5.326	Indexes	222
5.3.2.7	Tables	222
5.3.2.8	Column Format	223

F 2 2 0	Column Value Doguiroment Dule	222
0.3.2.9 E 0 0 Da		. 223
5.3.3 De		.223
5.4 DATAIN	IIGRATION: EXTRACT, TRANSFORM & LOAD (ETL)	.224
5.4.1 Ov	/erview	.224
5.4.2 ET	L Approach	.224
5.4.2.1	Process Description	. 224
5.4.2.2	Incremental/Phased Data Migration	. 226
5.4.2.3	CCPOR Standard ETL Schema	. 231
5.5 DataM	AXX INTEGRATION	.234
5.5.1 Ov	/erview	.234
5.5.2 Co	onfiguration	.234
5.5.3 Int	egration Design	.234
5.5.3.1	HTTPX Interface	234
5532	Schema Considerations	235
5.6 DMS IN	ITEGRATION	237
561 CC	אח קחסי	227
5.0.7 00	Configuration	.237
5.0.1.1	Lategration Decign	. 237
5.0.1.2	Single Sign Op	. 237 220
5.0.1.5		. 230
5.0.2 LU		.239
5.6.2.1	Configuration	. 239
5.6.2.2	Integration Design	. 239
5.6.2.3	Single Sign-On	. 240
5.7 EXTERN	IAL WEB SERVICES	.241
5.7.1 Ov	/erview	.241
5.7.2 Ex	ternal Web Services	.241
5.7.2.1	Add Order	. 243
5.7.2.2	Modify Order	. 244
5.7.2.3	Service Order	. 244
5.7.2.4	Cancel Order	. 245
5.7.2.5	Search Order	. 246
5.7.3 Ex	ternal Web Service Schema	.246
5.8 FRAME	NORK AND STANDARDS	.248
5.8.1 Da	nta Transport Service (DaTS)	.248
5.8.2 Da	ata Exchange Specification (DES)	.248
5.9 ENVIRO	NMENT AND TECHNICAL DETAILS	249
591 Ca	pracity Planning and Analysis	219
5911	Average Capacity	247
5012	CCPOR Component Sizing	250
502 Vii		250
5021	Logical Architecture	250
5022	Socurity Architecture	250
5022	Environment Table	250
502 DH	visical Environmente	251
5.9.3 FI		.200
5.9.3.1	Development	. 200
5022		. 200
5.7.3.3 5 0 2 1	Staning	. 204 255
5.7.3.4	Draduction	. 200 255
501 CA		. 200 254
0.9.4 Ob	Authontication	.∠00 2E4
0.9.4.1 E 0 4 0	Authorization	. 200 254
0.9.4.Z		. 200
6 REUSABI	LITY	258
7 NON-FUN	ICTIONAL REQUIREMENTS	25 <b>9</b>

7.1	USER IN	TERFACE	259
7.2	FORM VA	LIDATION	260
7.3	CLIENT-S	SIDE	260
7.4	ENVIRON	MENT & INFRASTRUCTURE	260
7.5	CAPACITY	Y & PERFORMANCE	261
7.6	SLA		262
7.7	SECURIT	Υ	263
7.8	Error H	ANDLING	263
7.9	AUDITING	G/LOGGING	264
7.10	Monit	ORING	264
7.11	Systei	M/Network Availability	264
7.12	Repor	TING	265
APPEN	IDIXA.	OPEN ISSUES	266
APPEN	DIXB.	REQUIREMENTS TRACKING MATRIX	267
APPEN	DIXC.	PROJECT GLOSSARY / DEFINITION	279
APPEN	DIXD.	AOC ISB ACRONYMS	280
APPEN	IDIXE.	STANDARD ETL SCHEMA	283
APPEN	IDIXF.	LOCAL DMS WEB SERVICES SCHEMA	284
APPEN	DIXG.	DATABASE TABLES	285
APPEN	DIXH.	DATABASE CREATE SCRIPTS	286
APPEN	DIXI.	CARPOS MESSAGE FORMAT	287

# Table of TABLES

Table 1 ISB Software Component Versions	. 20
Table 2 Non-ISB Components	. 20
Table 3 Implementation Components for CCPOR	. 24
Table 4 Monitoring Events for Portal	. 28
Table 5 Monitoring Events for BW	. 28
Table 6 Implementation Checklist for Portal	. 29
Table 7 Implementation Checklist for BW	. 29
Table 8 Target use-base functional requirements	. 33
Table 9 Add Order Component Interactions	. 37
Table 10 Quick Search Component Interactions	. 41
Table 11 Attachments Component Interactions	. 45
Table 12 View Order Details Component Interactions	. 50
Table 13 Add Order Behavior/Action Requirements	. 52
Table 14 Add Order Form Validation Handling Requirements	. 52
Table 15 Add Order Business Exception Handling Requirements	. 53
Table 16 Add Order Backend Application/System Integration Requirements	. 54
Table 17 Add Use Case Component Interactions	. 55
Table 18 Ouick Search Functional Errors	. 57
Table 19 Attachments Functional Errors.	.58
Table 20 View Order Details Functional Errors	60
Table 21 Add Order Non-Functional Errors	61
Table 22 Ouick Search Non-functional Errors	63
Table 23 Attachments Non-Functional Errors	65
Table 24 View Order Details Non-Eunctional Errors	. 67
Table 25 Draft Order Component Interactions	70
Table 26 Draft Order Behavior/Action Requirements	73
Table 27 Draft Order Form Validation Handling Requirements	. 73
Table 28 Draft Order Business Excention Handling Requirements	. 73
Table 20 Draft Order Backend Annlication/System Integration Requirements	. 74
Table 29 Draft Order Eurotional Errors	. 75
Table 30 Draft Order Lunctional Errors	. 70
Table 32 Modify Order Component Interactions	. 70 
Table 32 Modify Order Debavier (Action Deguirements	. 0Z
Table 34 Modify Order Form Validation Handling Dequirements	. 04 05
Table 34 Modify Order Pusiness Evention Llandling Requirements	. OD
Table 35 Modify Order Dashess Exception Handling Requirements	. 00
Table 36 Modify Order Eurotional Errors	. 80
Table 37 Modify Order Nen Functional Errors	. 88
Table 30 Modily Order Non-Functional Errors	. 90
Table 39 Service Order Component Interactions	. 93
Table 40 Service Order Benavior/Action Requirements	. 95
Table 41 Service Order Form Validation Handling Requirements	. 96
Table 42 Service Order Business Exception Handling Requirements	. 97
Table 43 Service Order Backend Application/System Integration Requirements	. 97
Table 44 Service Order Functional Errors	. 99
Table 45 Service Order Non-Functional Errors	101
Table 46 Cancel Order Component Interactions	104
Table 47 Cancel Order Behavior/Action Requirements	106
Table 48 Cancel Order Form Validation Handling Requirements	107
Table 49 Cancel Order Business Exception Handling Requirements	107
Table 50 Cancel Order Backend Application/System Integration Requirements	108
Table 51 Cancel Order Functional Errors	109

Table 52 Cancel Order Non-Functional Errors	.111
Table 53 Pending Order Component Interactions	.114
Table 54 Pending Order Behavior/Action Requirements	.116
Table 55 Pending Order Validation Handling Requirements	.116
Table 56 Pending Order Backend Application/System Integration Requirements	.117
Table 57 Pending Order Functional Errors	.118
Table 58 Pending Order Non-Functional Errors	.120
Table 59 Search Order Component Interactions	.123
Table 60 Order Search Behavior/Action Requirements	.124
Table 61 Order Search Form Validation Handling Requirements	.124
Table 62 Order Search Business Exception Handling Requirements	.125
Table 63 Order Search Backend Application/System Integration Requirements	.125
Table 64 Search Order Functional Errors	.127
Table 65 Search Order Non-Functional Errors	.129
Table 66 Reports Component Interactions	.134
Table 67 Reports Behavior/Action Requirements	.136
Table 68 Reports Business Exception Handling Requirements	136
Table 69 Reports Functional Friors	137
Table 70 Reports Non-Functional Errors	139
Table 71 Audit Trail Component Interactions	.142
Table 72 Audit Trail Behavior/Action Requirements	.143
Table 73 Audit Trail Form Validation Handling Requirements	143
Table 74 Audit Trail Business Exception Handling Requirements	.144
Table 75 Audit Trail Functional Errors	.145
Table 76 Audit Trail Non-Functional Errors	.147
Table 77 Role Delegation Component Interactions	.153
Table 78 Role Delegation Behavior/Action Requirements	.154
Table 79 Role Delegation Form Validation Handling Requirements	.155
Table 80 Role Delegation Backend Application/System Integration Requirements	.155
Table 81 Role Delegation Functional Errors	.157
Table 82 Role Delegation Non-Functional Errors	.159
Table 83 Delete Order Component Interactions	.162
Table 84 Delete Order Behavior/Action Requirements	.163
Table 85 Delete Order Form Validation Handling Requirements	.164
Table 86 Delete Order Business Exception Handling Requirements	.164
Table 87 Delete Order Functional Errors	.166
Table 88 Delete Order Non-Functional Errors	.168
Table 89 Miscellaneous Info Configuration Component Interactions	.173
Table 90 Miscellaneous Information Configuration Behavior/Action Requirements	.174
Table 91 Miscellaneous Information Configuration Form Validation Handling Requirement	:S 174
Table 02 Miscellancous Information Configuration Backand Application/System Integration	. 174 Sn
Poquiroments	ノロ 17日
Table 02 Miscellancous Info Configuration Eulectional Errors	175
Table 93 Miscellaneous Into Configuration Non Eurotional Errors	170
Table 94 Miscellaneous Into Configuration Non-Functional Errors	101
Table 95 Document Link Component Interactions	101
Table 90 Document Link CCDOP Rusiness Exception Handling Requirements	101
Table 97 Document Link COPOR Dusiness Exception Habitunity Requirements	102
Requirements	182
Table 99 Document Link CCPOR Backend Application/System Integration Requirements	182
Table 100 Document Link Functional Frrors	185
Table 101 Document Link Non-Functional Errors	.187

Table 102 Interim Service Component Interactions	190
Table 103 Interim Process Local DMS Court Business Exception Handling Requirements	190
Table 104 Interim Process CCPOR Business Exception Handling Requirements	191
Table 105 Interim Process Local DMS Court Backend Application/System Integration	
Requirements	191
Table 106 Interim Process CCPOR Backend Application/System Integration Requirements	
	191
Table 107 Interim Service Functional Errors       1	193
Table 108 Interim Service Non-Functional Errors	194
Table 109 Asynchronous Image Upload Component Interactions	197
Table 110 DMS and Database Backend Application/System Integration Requirements	197
Table 111 Asynchronous Image Upload Functional Errors	198
Table 112 Asynchronous Image Upload Non-Functional Errors	200
Table 113 UI Services Implementation Modules	204
Table 114 Core Services Implementation Modules	207
Table 115 DMS Services Implementation Modules	207
Table 116 DB Services Implementation Modules	208
Table 117 CARPOS Services Implementation Modules	209
Table 118 External Web Services Implementation Modules	210
Table 119 External FTP Services Implementation Modules	210
Table 120 Document Meta-data Elements	215
Table 121 DocumentObjectRequest schema for Local DMS	216
Table 122 DocumentObjectResponse schema for Local DMS	216
Table 123 CCPOR R&PO DB Tables	223
Table 124 CCPOR R&PO DB Instances	223
Table 125 Client-side Non-Functional Requirements2	233
Table 126 OFML HDR data fields	235
Table 127 OFML TRN data fields	235
Table 128 OFML RSP data fields	236
Table 129 DocumentObjectRequest Schema         2	239
Table 130 DocumentObjectReponse schema         2	240
Table 131 Add Order External Web Service         2	244
Table 132 Modify Order External Web Service         2	244
Table 133 Service Order External Web Service    2	245
Table 134 Cancel Order External Web Service         2	245
Table 135 Search Order External Web Service	246
Table 136 CCPOR Initial Release Anticipated Volume         2	249
Table 137 ISB CCPOR Portal Page2	251
Table 138 ISB CCPOR SOAP and JDBC Interaction	253
Table 139 Environment Usage Matrix    2	253
Table 140 Appendix C - Requirements Traceability Matrix	278
Table 141 Appendix D - Project Glossary / Definition         2	279
Table 142 Appendix E - AOC ISB Acronyms    2	282

# Table of Figures

Figure 1 Conceptual View	16
Figure 2 Application View	19
Figure 3 Logical Application Model	21
Figure 4 Application View	23
Figure 5 Overall use cases	31
Figure 6 Add Order Component Interaction	34
Figure 7 Quick Search Component Interaction	38
Figure 8 Attachments Component Interaction	42
Figure 9 View Order Details Component Interaction	46
Figure 10 Add Order Functional Errors	54
Figure 11 Quick Search Functional Errors	56
Figure 12 Attachments Functional Errors	58
Figure 13 View Order Details Functional Errors	59
Figure 14 Add Order Non-Functional Errors	60
Figure 15 Quick Search Non-Functional Errors	62
Figure 16 Attachments Non-Functional Errors	64
Figure 17 View Order Details Non-Functional Errors	66
Figure 18 Draft Order Component Interaction	68
Figure 19 Draft Order Functional Errors	76
Figure 20 Draft Order Non-Functional Errors	77
Figure 21 Modify Order Component Interaction	79
Figure 22 Modify Order Functional Errors	87
Figure 23 Modify Order Non-Functional Errors	88
Figure 24 Service Order Component Interaction	90
Figure 25 Service Order Functional Errors	98
Figure 26 Service Order Non-Functional Errors	99
Figure 27 Cancel Order Component Interaction	101
Figure 28 Cancel Order Functional Errors	108
Figure 29 Cancel Order Non-Functional Errors	110
Figure 30 Pending Order Component Interaction	112
Figure 31 Pending Order Functional Errors	117
Figure 32 Pending Order Non-Functional Errors	110
Figure 33 Search Order Component Interaction	121
Figure 34 Search Order Functional Errors	126
Figure 35 Search Order Non-Eurotional Errors	120
Figure 36 Deports Component Interaction	120
Figure 37 Poports Eulectional Errors	126
Figure 29 Deports Non Eurorianal Errors	120
Figure 20 Audit Trail Component Interaction	1.30
Figure 39 Audit Trail Component Interaction	140
Figure 40 Audit Trail Non Eurotional Errors	144
Figure 41 Audit ITali Non-Functional Ends	140
Figure 42 Role Delegation Component Interaction	140
Figure 43 Role Delegation Functional Errors	100
Figure 44 Role Delegation Non-Functional Errors	15/
Figure 45 Delete Order Component Interaction	107
Figure 40 Delete Order Functional Errors	105
Figure 47 Delete Order Non-Functional Errors	16/
Figure 48 Miscellaneous Into Configuration Component Interaction	169
Figure 49 Miscellaneous Into Configuration Functional Errors	1/6
Figure 50 Miscellaneous Into Configuration Non-Functional Errors	177

179
184
185
188
192
193
195
198
201
213
219
221
225
228
231
234
238
242
250
254

# **1** EXECUTIVE SUMMARY

#### 1.1 Abstract

The California Courts Protective Order Registry (CCPOR) is an application that enables data entry support and inquiry support as it relates to searching for and running reports on restraining and protective orders (R&PO) statewide.

The following details can be found in the CCPOR Project brief (reference document [2]):

- Project background
- Project overview including scope
- Project assumptions
- Project dependencies and constraints
- Acceptance criteria for this document

#### 1.2 Document purpose

This document comprises the architectural design specifications for the Integration Services Backbone (ISB) implementation of a web portal allowing participating Court/Agencies to enter and access R&PO from a statewide repository implemented at CCTC. The design specifications should address all the requirements as established in the CCPOR D-21-2 Requirements Specification (reference document [19]).

This implementation represents the CCPOR Portal, a web browser interface for entering and accessing R&PO data via services deployed in the ISB hub at the California Court Technology Center (CCTC). The project will be rolled out in phases. The scope for the current phase specified in this document exposes the portal services to a selected group of Court/Agencies via the California Judicial Branch Wide Area Network. In later phases, the implementation will be extended to incorporate additional Court/agencies and optionally additional use cases.

The project is under the charter of the Administrative Office of the Court (AOC) ISB vision: a real-time integration backbone providing shared Judicial Branch services to Justice Partner Organizations throughout California.

The main objectives of this document are:

- To serve as a reviewed, documented verification that the implementation approach is consistent with the goals of the application, as envisioned by AOC and the participating courts.
- To clearly define design elements that will facilitate the implementation of the Integration Service Backbone (ISB) and non-ISB components enabling the CCPOR application.
- To ensure that the implementation approach adheres to the CCTC policies for IT infrastructure, such as security, monitoring/alerting, shared storage (SAN/NAS), database/OS platforms.
- To serve as a specification containing all solution architecture related details pertaining to the interface, including technical, physical and human details.
- To serve as a guide during implementation by presenting all the use cases identified for the application in the requirements stage. Detail sequence diagrams at component level are included.

## **1.3 Key Terminology and Dependencies**

The courts for this implementation in the document are referred to as 'Local DMS courts' and 'CCPOR DMS courts'. Local DMS courts are those courts that use a Local DMS to store images for their R&PO documents. CCPOR DMS courts are those courts that use the DMS installed at CCTC to store images for their R&PO documents.

The figure below shows the conceptual view (reference document [1]) of the implementation.

The following are a few constraints and dependencies for the success implementation of the application.

- Each Local DMS court should develop and thoroughly test processes to enable the initial historical R&PO data load into CCPOR.
- Each Local DMS court should also develop and thoroughly test services that will enable the interim R&PO data load into CCPOR.
- Each Local DMS court should understand the usage option for DMS integration and build/establish processes to support their usage model.
- All CCPOR DMS courts should thoroughly understand the different usage options for DMS integration and build/establish processes to support their usage model.
- All the Agency user and groups should be created in the CCTC AD.



Figure 1 Conceptual View

## **1.4 Document Outline**

- The document layout is based on the Technical Architecture Specification document template as established by the AOC Enterprise Architecture team.
- Section 2 describes the application overview describing conceptually how the solution delivers and the key components shaping the solution architecture.
- Section 3 describes the logical application model lists a logical view to the CCPOR application.
- Section 4 describes the functional specification of the solution in two subsections, first a component
  overview of the solution. This will help in laying a ground to identify the different components of the
  solution that will be referenced in the subsequent subsection. The second subsection provides details
  of all the use cases, followed by all the use case specifications in details. Each subsection uses the
  corresponding business process activity diagram documented in the Requirement Specification as a
  start, then further breaks down the diagram to illustrate internal components, revealing each internal
  component's design details. NOTE: Component detail design subsections delve into detailed
  technical design and are specifically targeted towards the ISB developers only.
- Section 5 describes the physical architecture for the application which includes detail technical components that need to be implemented for the solution. This chapter also addresses the environments under AOC/CCTC viz. DEV, TEST, STAGING, and PRODUCTION where the solution will be deployed
- Section 6 describes how the design addresses reusability to accommodate on-boarding future courts.
- Section 7 describes the non-functional aspect of the solution. It details all the non-functional requirements mentioned in the requirements and how and where those requirements have been addressed.
- Appendix A contains a table of open items that will effect the content of this document
- Appendix B contains a table of requirements matrix for tracking purposes.
- Appendix C and Appendix D provide tables of definitions and acronyms for reference.
- Appendix E contains the standard ETL schema
- Appendix F contains the Local DMS web services schema
- Appendix G contains the list of CCPOR database tables
- Appendix H contains the database create script
- Appendix I contains the CARPOS message formats for all supported transactions by the application

# 2 **APPLICATION OVERVIEW**

The conceptual n-tier architecture for CCPOR is to be implemented at the CCTC hub. The layered architecture provides the greatest flexibility, scalability, and re-usability by exposing each tier as a set of standard services (re-usable components exposing standards-based interfaces) for other tiers to build on, de-coupling tiers from inter-platforms (hardware/software), transports, or proprietary-API dependencies.

## 2.1 Restraining and Protective Order Life Cycle

The core to the CCPOR application is the restraining and protective order data. The system supports entry and maintenance of orders with different types. But the life cycle of the order entered into the application remains the same. Any order entered into the application can be in a 'draft' state before it can be submitted with an 'active' state into the system. Though the draft order is recorded in the application it is not considered a true order in the system. The true life cycle of the order starts when the order is submitted into the application. The order submitted into the application is considered to be in an 'active' state. An active order will be transmitted to DOJ. Different operations can be performed on an active order. An order can be modified, provide service information, can be cancelled. Every order data change done on an active order is transmitted to DOJ.

The application also allows for attaching images to an order in the system. Each order will have an expiration date associated with it. That date will indicate the order expiration in the application.

#### 2.2 Application View

A single physical Portal gateway infrastructure is being deployed in a scalable architecture to support all necessary logical Portal sites, allowing each logical site to have a different look-and-feel with delegated service administration.

The CCPOR Partner Portal, to be deployed within the described infrastructure, represents the context of the project driving this requirement specification.

The logical site URLs for this project are; where CourtID is the ID assigned for each Court

- Production: [REDACTED]
- Staging: [REDACTED]



Figure 2 Application View

## 2.3 Software Components

There are a set of ISB software components used for the CCPOR implementation. The following is a brief introduction to the software used.

- TIBCO PortalBuilder is the portal platform for rendering the CCPOR portal site, authentication and authorization related to the portal site.
- TIBCO GeneralInterface (GI) is used to build the CCPOR portal forms. The GI application, embedded into the portal, uses AJAX to provide a rich end user experience.
- TIBCO BusinessWorks sits at the heart of the infrastructure and is the primary business process orchestration and implementation platform for developing all exchanges.
- TIBCO Administrator is the hub that runs the TIBCO domain and the controls the ISB services deployment.
- TIBCO Runtime Agent is the underlying transport for all the TIBCO products.
- TIBCO EMS is the messaging layer in the EAI layer. TIBCO EMS implements JMS.

The table listed below summarizes the TIBCO software components used to implement the solution described in this document. The version number listed for all the products are the same as those installed at the CCTC and hence no upgrades are mandatory.

Components	Current Version
TIBCO TRA	5.4.2

Components	Current Version
TIBCO Administrator	5.3.0
TIBCO Business Works	5.3.3
TIBCO Portal Builder	5.1.1
TIBCO General Interface	3.1
TIBCO Hawk	4.6.0
TIBCO EMS	4.4.1

Table 1 ISB Software Component Versions

The table listed below summarizes the non-TIBCO software components used to implement the solution described in this document.

Components	Current Version
Netegrity Siteminder	Authentication
Apache Web Server	Reverse Proxy
IBM FileNet P8	DMS
Oracle 11i	Database
Datamaxx OMNICXX Commserv	CLETS interface

Table 2 Non-ISB Components

# 3 LOGICAL APPLICATION MODEL

The CCPOR logical application model is shown in Figure 3. The solution can be viewed as a browser based application that will cater to each individual court that will on-board to CCPOR. The solution architecture for this project not only aims to be forward looking in addressing not only the immediate project requirements but also as much as possible adhering to enterprise ISB visions and CCTC environment guidelines. The CCPOR application available for each court can be considered a unique representation confirming to the needs of that court. At the bottom layer, there are a common set of services offered within the application. The middle layer represents the customization that can be achieved in the application for each individual court.



Figure 3 Logical Application Model

### 3.1 Order Data Repository

One of the key objectives for the project was to provide all courts a consolidated view of the restraining and protective orders issued and served within the state. The application is designed to contain a repository which holds historical orders as well as the new orders. The order data repository layer constitutes of a repository and a set of associated services that enable handling data from the repository.

### 3.2 Image Management

The CCPOR application extends selective document management capabilities for digital content. An instance of IBM FileNet is setup at CCTC as part of the application that stores all the order images. The application provides controlled access to the image management layer thru the application. The system allows courts with two or three options to upload images. The system also allows users (controlled access) to view the images in the DMS.

The system also extends the image store and retrieve feature from Local court DMS present at Courts.

### 3.3 Portal Services

The CCPOR application essentially is an AJAX application deployed as a portlet in the ISB portal application installed at CCTC. The application allows users a wide range of services thru the portal

services. The services include order data entry, search, view order details. The user will be able to track messages for orders within the application. A wide range of messages are maintained in the application. The services also include capability to upload and retrieve images, maintain the metadata associated with an image. The user is allowed to run reports, maintain customized configuration. The services allow delegated administration to any key people in the organization.

## 3.4 CARPOS Integration

One of the key objectives for the application was also to provide a uniform transmission of restraining and protective order data to CARPOS database present in the CLETS network at DOJ. DataMaxx OMNICXX Commserv – OXCSV, installed and certified for operation on CLETS provides a standard open system methodology to connect to CLETS.

The CCPOR application thru the CARPOS integration layer provides a capability to be able to transform order data entered thru the portal or the web services to the format acceptable for CARPOS. The transformed data is then transmitted to CARPOS via the OXCSV server. The application is also capable to receive confirmations sent from CARPOS.

## 3.5 Web Services

By exposing key features of CCPOR application as external web services, CCPOR allows client applications to access the application independent of technology that is used for CCPOR implementation. The primary use of the CCPOR application is for court users to login into the application and use the portal for order entry and search. In addition, the application allows for storing and viewing images associated with an order. The application provides an interface to expose as external web services a few of the functionality allowed in the portal. During the initial phase of the CCPOR application, the set of external web services will be limited to order entry transactions and order search.

This primarily enables the Local DMS courts to invoke the web services to electronically submit order data into CCPOR without the use of the portal. Similarly, a client application can electronically perform an order search into the CCPOR application.

### 3.6 Customization

The application enables customization to a selected set of features. During the initial phase of the CCPOR application, customization is allowed for the reports and configuration of Miscellaneous data for a given restraining and protective order.

A selected set of reports are provided as part of the initial application deployment for a court. The court can further create additional reports that suite their needs and save them for further use. The Miscellaneous data field requirements are quite complex and varied based on a given order type. A limited set of dynamic form creation will be provided in the application for each court. As a result a court can associate a miscellaneous data field to a newly created custom form.

#### 4 **USE CASE SPECIFICATION**

High level use cases are identified in the CCPOR D-21-2 Requirements Specification [19]. The objective of this section is to ensure that each business process is defined in sufficient amount of detail that a supporting system can be effectively designed without unintentionally altering the business process. This document elaborates on the use cases for CCPOR user interface, integration components, the actors associated with them.

The section is broken into two subsections, Component View and Use Cases. The component view describes all the components that will form the application. The primary usage mode for the application is the user-interface each of which is captured as a use case in the requirements document and will be explained in section B of this chapter. However, there are other integration services that are implemented to enable the system meet all the requirements. These will be explained in section B as well.



#### 4.1 **Component View**

Figure 4 Application View

- The Siteminder component and the TIBCO Administrator read the User and Group information from the CCTC Active Directory. The TIBCO Administrator dynamically (real time) synchronizes the user information with the Active Directory. When synchronizing, not all AD Users within the corporate LDAP will be synced to TIBCO Administrator. TIBCO Administrator will be configured to sync only those Users created to access the CCPOR Web Portal web site.
- The Portal uses the Role membership defined within TIBCO Administrator to assign access permission to different sites for different users. The Roles in the Administrator are based on the groups obtained from the Active Directory.
- The user logs into the CCPOR Web Interface by accessing the CCPOR Portal site. The user is authenticated by Siteminder.

- The Portal, using the Role Membership information, directs the user to the Court's Site.
- The AJAX based GI application, which is embedded into the Portal page, is loaded on the client browser.
- The user based on the access rules set in the GI application will be able to use the authorized forms in the application, which is communicated to the ISB Portal component, securely over HTTPS.
- A SOAP Proxy portlet receives the request from the client browser and passes to the Core services (CS) process in the Application layer. The sole purpose of the Proxy portlet is to act as a go between the GI application on the client browser and the CS process in the Application layer. This ensures that no request is made from the client browser directly to the Application layer. The proxy portlet is designed to receive the incoming data which may consist of user data, communicate it over to the CS process and transmit the result set back to the GI application. The linking of the GI application to the application layer via the proxy portlet is completely transparent to the end user.
- The CS process uses the operation parameters received from the SOAP request to decide and interact with several other services. A few of the services provided within the CCPOR application are external Web services, DMS services, DB services and CARPOS services.
- The CS process sends the resulting records back to the GI application via the proxy portlet.

Each of the services identified b need to be explained in detail to be able to implement the system. The table below maps all the use case scenarios to different sources within the CCPOR application.

ID	Source	Туре	Implementation Scenario	Key ISB Services	Remarks
1	UI Triggered	Synchronous	DB Update	DB Services	
		Synchronous	Add/Modify/Cancel/Service Orders	DB/CARPOS Services	
		Synchronous	DB Request/Response Transaction	DB Services	
		Synchronous	View Images	UI Services/DMS Services/Extern al Web Services	
		Synchronous	Upload Images	DMS Services	
		Synchronous	Request DMS Client	UI Services	
2	Web Services	Synchronous	Add/Modify/Cancel/Service Orders	DB/CARPOS Services	All web services are implemented using DATS framework
		Synchronous	Order Inquiry	DB Services	
		Synchronous	Document Link	DB Services	
3	Time Triggered	Asynchronous	Upload Images	DMS Services	These services are configured to pickup files from EFTP using the DATS framework
		Asynchronous	Upload Images with Metadata	DMS Services	

Table 3 Implementation Components for CCPOR

# 4.1.1 Implementation Guidelines

#### 4.1.1.1 Design Guidelines

- Client Browser: IE 6.x and Firefox 1.5 and above may be used.
- User must be authenticated via SiteMinder (default portal authentication setup).
- Use only PKI Certificates (SSL) for HTTPS with Server-side authentication (client-side not required),
- HTML Editor Portlet is used to launch the General Interface (GI).
- HTML Passthrough Portlet are used to serve as a Proxy service to redirect GI requests destined for the PortalBuilder (PB) machine to the BusinessWorks (BW) machine. Since GI implements a Domain Security restriction where GI Web Service requests can only be made to the same machine the GI Application is deployed on, a Reverse-Proxy service is required when Web Services are hosted on a different machine than the GI. The HTML Passthrough Portlet will be configured to function as the Reverse-Proxy. Note: the implementation of the HTML Passthrough Portlet to direct PB/GI Web Service Request to BW is the approach used for all future GI-to-BW applications deployed to the ISB.
- Design for BW/GI:
  - Reusability Anticipate future courts usage patterns. Use Global variables to enable changes modifications to the process flow, where applicable.
  - Regarding minor database changes Are defined as changes within the abstraction layer which do not change the interface parameters (IE; WHERE Clause parameters, column names changes, number of columns queried, etc) for a given pre-defined SQL Query. For minor database changes, no changes will be required at the BW and no changes will be required at the GI (unless a display label name needs to be modified).
  - Regarding major database changes Upon major data source changes to schemas or tables, a Change Request (CR) process will need to be initiated to determine the level of effort needed to modify the BW, GI and XML Schema. Major Database changes will require modifications to underlying SQL query definitions (configured at the BW) and modifications to the front-end interface (implemented at GI). Also, XML Schema modifications affect both the BW and GI.
- Use AOC Enterprise BW Best Practices guidelines (reference document [17]).
- Use AOC Enterprise Global Exception Handler from ISB Implementation guidelines (reference document [21]) and in TIBCO BW project Template (reference document [18]).
- The BW Engines must be deployed in fault tolerant (FT) mode.

#### 4.1.1.2 Solution Overview

Apart from the consideration listed in the Design Guidelines (previous section) the following items will also govern how the UI and the backend orchestration processes (EAI BW processes) are implemented.

- Images and widgets (for e.g. buttons), to be displayed on the page, will have an alternate text definition.
- The Portal screen design will follow the mock ups as shown in CCPOR D-21-2 Requirements Specification [19].
- Status response from any requests made by the GI application will be displayed in a dialog box on the user screen. Alerts will be displayed in non-modal dialog boxes.

- The BW interface implementation will use the ISB project template and include auxiliary error checks, exception handling.
- Checkpoints will be used for component failure recoveries. Database will be used for checkpoints.
- Error and Exception handling will be tied in to the existing framework deployed within the ISB.
- The maximum number of rows to be returned to the GI application for any query will be a configurable parameter (Global Variable). If the number of rows returned by the database for the query exceeds this number, BW process will send back an exception to the GI screen to indicate to the User that they should take action to add additional search criteria.
  - To prevent the retrieval of excess number records from the database during a wildcard search (% or \*), the maximum number of rows returned from the database will be configured at BW to equal: the maximum number of rows to be returned by the GI application + 1 additional record. With this application design approach, BW can derive whether or not to send an exception back to the GI screen while preventing a system-wide search. An excessive number of records will never be returned by the database.
- Database Access Security will be configured and enforced by the Database Administrator who would create various User accounts for the BW application to use to access the data. There will be 2 User accounts created for the BW application
  - A User restricted to regular operations to all database objects, limiting access to CCPOR order data.
  - A User who has all privileges to the subset of Agency Administration-related database objects, but no access to all other tables.
- All Quick Search, pending order queries performed should be executed using a WHERE clause with the court the user belongs to except on the service order form.
- Order search query execution shouldn't include a WHERE clause with the court the user belongs.
- Search Criteria values will be accepted in upper case. However, the returned data will contain all data records with a matching value irrespective of the case. For example; 'SMITH' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case in-sensitive.
- If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.
- Prompt the users with a confirmation message for all reset, cancel and delete operations in the application. The reset operation should set the fields to default values with which the page/form was initially loaded.
- Highlight any mandatory fields missing for restraining and protective order form.
- Only during viewing order details will the system allow for selecting more than one record. For all other scenarios, a warning is prompted 'only one record' to be selected.
- Highlight all error fields during validation and place the cursor in the first error field.
- Date entry fields should be allowed as a key-able field and a button with a date picker.

#### 4.1.1.3 Exception Handling

- Portal Unreachable Court/Agency staff will escalate to CCTC HelpDesk via Court-ITD HelpDesk.
- Portal Component Failure Hawk rulebases will be used to restart portal components (re-using rulebases built in ISB best practices)

- BW Process Failure Hawk rulebases will be used to monitor and restart BW process components (re-using rulebases built in ISB interface development best practices(reference document [21]))
- Network Link Failure CCTC SiteScope will be used to handle network link failures.
- Database Failure CCTC SiteScope will be used to handle database failures.
- Certificate Expirations Manual intervention is required when certificates expire.
- Exception handling for the Orchestration process Implementation must use the Global BW Project template (reference document [18]), follow BW Best Practices (reference document [17]), have error handling code built into the process flows, and use Global Exception handler (reference document [21]) to log all exceptions.

#### 4.1.1.4 Security

• PKI Infrastructure: Public certificates with128 bit encryption will be used for HTTPS communication between the client browser and the portal.

#### 4.1.1.5 Audit Logging

- No business level logging is required from the portal itself.
- Actual implementation must use the Global BW Project template ([reference document 18]), follow BW Best Practices (reference document [17]) and use Global Exception Handler reference document [21]) to log all exceptions.

#### 4.1.1.6 Monitoring

The table below lists all the aspects, for the Portal component that need to be monitored

Monitored Event Class	Event Type	Monitoring Solution	Handling Logic	Key Personnel	Message Schema
Portal Site Unreachable	Portal URL unreachable Court Network	If due to network failure, SiteScope infrastructure must detect and escalate. If due to portal component failure, TIBCO Hawk rulebase is used.	Court Clerk to escalate. CCTC HelpDesk to review SiteScope and TIBCO Hawk Displays accordingly.	CCTC HelpDesk, CCTC ISB team	Re-use rulebase created in ISB infrastructure. Refer to the ISB Best Practices documentation( reference document [21])
Portal Database Connectivity Failure	Portal DB Connection Fails, DB portlets show errors	If due to network failure, SiteScope infrastructure must detect and escalate. If due to portal		CCTC HelpDesk, CCTC ISB team	

Monitored Event Class	Event Type	Monitoring Solution	Handling Logic	Key Personnel	Message Schema
		component failure, TIBCO Hawk rulebase is used.			
GI Application Portlet Failure	GI Portlet fails to show in portal	N/A	Court Clerk to escalate. CCTC HelpDesk to review TIBCO Hawk displays accordingly.	CCTC HelpDesk, CCTC ISB Team	

Table 4 Monitoring Events for Portal

The table below lists all the aspects, for the BW component that need to be monitored

Monitored Event Class	Event Type	Monitoring Solution	Handling Logic	Key Personnel	Message Schema
Component Failure	BW Engine failure	Hawk		CCTC HelpDesk, CCTC ISB team	Re-use rulebase created in ISB infrastructure. Refer to the ISB Best Practices documentation( reference document [21])
Checkpoint Database Failure	Database Connectivity failure	Sitescope		CCTC HelpDesk, CCTC ISB team	
CCPOR Database Failure	Database Connectivity failure	Sitescope		CCTC HelpDesk, CCTC ISB team	
CCPOR FileNet Failure	FileNet DMS connectivity failure	Sitescope		CCTC HelpDesk, CCTC ISB team	

Table 5 Monitoring Events for BW

#### 4.1.1.7 Implementation Checklist

The table below lists all the pre-requisite activities for the Portal component to be deployed in the ISB environment at CCTC

Implementation Tasks Outline	Pre-requisites	Resources Required/Impact	NOTES

Implementation Tasks Outline	Pre-requisites	Resources Required/Impact	NOTES
Setup all the Agencies and Users in the Active Directory (AD) as AD groups and users		AOC AD Admin	The AD groups will have the same as the Agencies
Design all the screens in GI		TIBCO ISB Team	
Define all the mapping from the screen elements to the WSDL used for SOAP communication with BW engine	All the Web service WSDL need to be defined and approved.	TIBCO ISB Team	
Implement HTML Editor Portlet host the GI application		TIBCO ISB Team	
Unit Test		TIBCO ISB Team	

Table 6 Implementation Checklist for Portal

The table below lists all the pre-requisite activities for the BW component to be deployed in the ISB environment at CCTC

Implementation Tasks Outline	Pre-requisites	Resources Required/Impact	NOTES
Verify Database setup for Checkpoint		SAIC DBA	
Verify Database setup for CCPOR R&PO DB	CCPOR R&PO DB instance should be setup at CCTC and initial load files should be available	SAIC DBA, TIBCO ISB Team and AOC	
Build BW processes following the guidelines established in 4.1.1.1 and 4.1.1.2		TIBCO ISB Team,	
Unit Test the BW processes		TIBCO ISB Team	

Table 7 Implementation Checklist for BW

#### 4.2 Use Cases

Figure 5 shows the core use-case scenarios for the CCPOR application for each established user role. The following methods are available:

- UC1 Add Order
- UC2 Draft Order
- UC3 Modify Order
- UC4 Service Order
- UC5 Cancel Order
- UC6 Pending Order
- UC7 Order Search
- UC8 Reports
- UC9 Audit Trail

The first five methods are similar with regards to their basic course of events; the user will be provided with a feature to perform order entry operations. Based on the method selected, the user will be allowed to perform add, modify, service, cancel order operations into the system.

An order in an active state can have system generated messages to provide notification of different alerts on the order. The pending order method allows users to view all different types of messages generated by the system for an order.

Search order method allows users from a court/agency to view orders across the state based on a search criterion.

Administrators will use the site to perform administrative tasks. There are three different categories of Administrative tasks available to the User:

- A1 Role Delegation
- A2 Delete Order
- A3 Custom configuration



Figure 5 Overall use cases

# 4.2.1 Target User-base Requirements

#### 4.2.1.1 Functional Requirements

Access control is a major functional requirement underlying all scenarios, and is discussed in detail in a separate subsection.

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.F.User.1	The users of CCPOR application can be categorized based on the usage level as ad hoc, regular. Regular can be defined as users who have high usage of the system and ad hoc are users who have minimal usage of the system. All administrators at the court/agency or enterprise level are considered ad hoc.	Incorporated as part of the implementation checklist for creating users in the CCTC LDAP.
	The CCPOR application needs to support a wide range of users ranging from 2-15 regular users per court. The CCPOR application also needs to support the following	

Requirement ID	Requirement Details	Solution Strategy
	number of anticipated concurrent users per month through February 2010:	
	Jul 09 : 16 users Jul 09 : 31 users Aug 09 : 78 users Sep 09 : 90 users Oct 09 : 102 users Nov 09 : 114 user Dec 09 : 118 users Jan 10 : 128 users Feb 10 : 145 users	
ISB.CCPOR.F.User.2	<ul> <li>4 logical classes of user roles per Court/Agency must be supported:</li> <li>High Users – Main users of the CCPOR application who use the site to enter and query R&amp;PO data. This is a logical role representing all users at a court/agency who perform the regular task of inputting R&amp;PO data into the system.</li> <li>Supervisor Users – Only Supervisor users can Modify, Cancel, and Service 'Sealed' cases. Only Supervisor users are allowed to view documents attached to a 'Sealed' case.</li> <li>Court/Agency Administrator – Court/Agency Administrators use the site to edit Court/Agency information, add/edit/delete Court/Agency FAQ information.</li> <li>Enterprise Portal Administrator uses the site to add/edit/delete Enterprise-level FAQ information and static context.</li> </ul>	Incorporated as part of the implementation checklist for creating users in the CCTC LDAP.
	All user authentications must	Incorporated as part of the
100.00F 011.F.0361.3	happen against the corporate CCTC LDAP.	implementation checklist for creating users in the CCTC LDAP.
ISB.CCPOR.F.User.4	The system must support functionality for a designated user	Incorporated as part of the role delegation use case under the

Requirement ID	Requirement Details	Solution Strategy		
	(usually with administrative rights) at the court/agency to be able to set appropriate authorizations for users within the application.	administrative use cases.		
ISB.CCPOR.F.User.5	The system must support synchronization of any new roles added in the corporate CCTC LDAP.	Incorporated as part of the role delegation use case under the administrative use cases.		

Table 8 Target use-base functional requirements

# 4.2.2 Add Order

#### 4.2.2.1 Component Interaction



Figure 6 Add Order Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login [REDACTED ]	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
2	On the Main page the user selects to add a new order	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
3	The GI application renders the add order page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user enters the new order and hits 'Submit' button.	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	GI application will allow the user to enter all the R&PO fields.
5	The GI application sends a SOAP request with the new order details entered by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services	Core Services process	DB Services	SOAP over JMS	N/A	
7	The DB services will validate the data and add the order to CCPOR DB	DB Services	CCPOR DB	JDBC	N/A	
8	The Core Services will forward the request to CARPOS services	Core Services	CARPOS Services	SOAP over JMS	N/A	
Link #	Description	Source	Destination	Protocol	Message	NOTES
---------------	--	--------------------	---------------------------------------	------------------	---------	--
(Figure 5)		Component	Component		Schema	
9	The CARPOS services will transform the data into CARPOS format, wraps it with OFML envelope and invoke the DataMaxx API	CARPOS Services	DataMaxx API	HTTPS	N/A	
10	The DataMaxx API forwards the data to CARPOS	DataMaxx API	CARPOS DB	N/A	N/A	
11	The DataMaxx API receives the response and sends the data back to CARPOS services.	DataMaxx API	CARPOS Services	HTTPS	N/A	BW Process reads and parses the data and sends it back to the GI application in XML format over HTTPS.
12	The CARPOS Services invokes DB Services which would store the confirmation.	CARPOS Services	DB Services	SOAP over JMS	N/A	
13	The CARPOS Services will check if the response time is less than 1 minute.	CARPOS Services	CARPOS Services	N/A	N/A	
14	The confirmation data is sent to the GI application	CARPOS Services	Portal (GI application portlet)	SOAP over JMS	N/A	

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
15	The GI application renders the confirmation page on the client browser.	Portal (GI application portlet)	Court ITD	HTTPS	N/A	The GI application displays the confirmation to the user where optionally the user can choose to print.

#### Table 9 Add Order Component Interactions

#### 4.2.2.2 Quick Search Component Interaction



Figure 7 Quick Search Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login [REDACTED ] and selects one of the order entry screens Add/Modify/S ervice/Cancel	Court ITD	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
2	On the Order Entry page the user selects quick search section	Court ITD	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	
3	The GI application renders the quick search section on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user enters the search criterion and hits 'Search' button.	Court ITD	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	
5	The GI application sends a SOAP request with the search criterion entered by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services which will perform a JDBC query to fetch results from the CCPOR DB	Core Services process	DB Services, CCPOR DB	SOAP over JMS	N/A	
7	The DB services will provide the result set data to Core	DB Services, Core Services	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	Services which will send the response back to the GI application					
8	The GI application renders the result set section on the client browser	Portal (GI portlet application)	Court ITD	HTTPS	N/A	
9	Depending on which order entry form the user is on, he can choose to perform a different operation using an order. If he selects a clone operation.	Court ITD	Portal (Add Page)	HTTPS	N/A	
10	Depending on which order entry form the user is on, he can choose to perform a different operation using an order. If he selects a edit operation.	Court ITD	Portal (Modify Page)	HTTPS	N/A	
11	Depending on which order entry form the user is on, he can choose to perform a different	Court ITD	Portal (Service Page)	HTTPS	N/A	BW Process reads and parses the data and sends it back to the GI application in XML format

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	operation using an order. If he selects a service operation.					over HTTPS.
12	Depending on which order entry form the user is on, he can choose to perform a different operation using an order. If he selects a cancel operation.	Court ITD	Portal (Cancel Page)	HTTPS	N/A	
13	Depending on which order entry form the user is on, he can choose to perform a different operation using an order. If he selects a view order operation.	Court ITD	Portal (Order Details Page)	HTTPS	N/A	

Table 10 Quick Search Component Interactions

#### 4.2.2.3 Attachments Component Interaction



Figure 8 Attachments Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
	Jand selects one of the order entry screens Add/Modify/S ervice/Cancel					

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
2	On the Order Entry page the user selects attachments section	Court ITD	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	
3	The GI application renders the attachments section on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user clicks the browse button and selects a document.	Court ITD	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	
5	The selected document is uploaded and the user hits 'Attach' button.	Court ITD	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	
6	The GI application sends a SOAP request with the document uploaded by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
7	The Core Services will determine if the user's DMS is CCPOR or Local. If the user DMS is CCPOR, it forwards the request to DMS	Core Services process	DMS Services	SOAP over JMS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure		Component	Component		Schema	
3)						
	Services					
8	The DMS services will upload the document to CCPOR DMS, gets back a document ID	DMS Services	CCPOR DMS	SOAP over HTTPS	N/A	
9	The Core Services will determine if the user's DMS is CCPOR or Local. If the user DMS is local, it forwards the request to DATS/DMS Services	Core Services process	DATS/DMS Services	SOAP over JMS	N/A	
10	The DATS services will invoke a web service to the local court to submit the document, gets back a document ID as response	DATS Services	Court ITD	SOAP over HTTPS	N/A	
11	The DMS services will provide the document ID to Core Services which will send the response back to the GI application	DMS, Core Services	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	
12	The DATS services will provide the document ID	DATS, Core Services	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
	to Core Services which will send the response back to the GI application					
13	The GI application renders the refreshed attachments section on the client browser	Portal (GI portlet application)	Court ITD	HTTPS	N/A	

Table 11 Attachments Component Interactions

## 4.2.2.4 View Order Details Component Interaction



Figure 9 View Order Details Component Interaction

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
1	CCPOR Court user Portal Login	Court ITD	Portal (Add/Modify/ Service/Canc	HTTPS	N/A	
	[REDACTED ]and selects one of the order entry screens Add/Modify/S ervice/Cancel		ei Page)			
2	On the Order Entry page	Court ITD	Portal (Add/Modify/	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	the user selects quick search section		Service/Canc el Page)			
3	The GI application renders the quick search result set section on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user selects and order ID and hits 'View Order' button.	Court ITD	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	
5	The GI application sends a SOAP request with the order ID selected by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services which will perform a JDBC query to fetch order details from the CCPOR DB	Core Services process	DB Services, CCPOR DB	SOAP over JMS	N/A	
7	The DB services will provide the order details data to Core Services which will send the	DB Services, Core Services	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	response back to the GI application					
8	The GI application renders the orders detail form on the client browser	Portal (GI portlet application)	Court ITD	HTTPS	N/A	
9	The user clicks the attachments tab and selects a document to view.	Court ITD	Portal (GI portlet application)	HTTPS	N/A	
10	The document is selected and the user hits 'Attachment' icon.	Court ITD	Portal (GI portlet application)	HTTPS	N/A	
11	The GI application sends a SOAP request with the document ID selected by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
12	The Core Services will determine if the user's DMS is CCPOR or Local. If the user DMS is CCPOR, it forwards the request to DMS Services	Core Services process	DMS Services	SOAP over JMS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
13	The DMS services will fetch the document from CCPOR DMS	DMS Services	CCPOR DMS	SOAP over HTTPS	N/A	
14	The Core Services will determine if the user's DMS is CCPOR or Local. If the user DMS is local, it forwards the request to DATS/DMS Services	Core Services process	DATS/DMS Services	SOAP over JMS	N/A	
15	The DATS services will invoke a web service to the local court to submit the document ID, gets back a the document as response	DATS Services	Court ITD	SOAP over HTTPS	N/A	
16	The DMS/DATS services will provide the document to Core Services which will send the response back to the GI application	DMS, DATS, Core Services	Portal (GI portlet application)	HTTPS	N/A	
17	The GI application renders the document on the client browser	Portal (GI portlet application)	Court ITD	HTTPS	N/A	

#### Table 12 View Order Details Component Interactions

#### 4.2.2.5 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC1.Behavior.1	Allow feature to perform a quick search for orders.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.Behavior.2	The User will only be able to search orders for the jurisdiction he/she belongs to including any draft orders present for that jurisdiction.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC1.Behavior.3	Allow adding new order to the system. Data entry must be restricted only to the user's jurisdiction.	The add order UI component defaults the jurisdiction to the one the user belongs to.
ISB.CCPOR.UC1.Behavior.4	All order fields need to be in one single form.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.Behavior.5	All order fields need to be grouped appropriately.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.Behavior.6	Allow attach/link images to an order. The image must be stored in respective DMS (Local or CCPOR) based on the user.	Incorporated as a part of the add order UI Component (Refer to add order mock screen). Refer to Attachments Component Interaction for conditional storing of image.
ISB.CCPOR.UC1.Behavior.7	Allow the option to save an order as a draft. The order can be accessed later from the draft state for completing data entry.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.Behavior.8	Mandatory fields to be marked in bold and marked with an asterisk (*).	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.Behavior.9	Allow feature to clone order.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.Behavior.10	Wild cards will be accepted for certain search criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC1.Behavior.11	Search Criteria values will be accepted in upper case. However, the returned data will contain all data records with a matching value irrespective of the case. For example; 'SMITH' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case in-sensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC1.Behavior.12	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC1.Behavior.13	Allow feature to cancel the order data entered before the record is submitted. The system must prompt a warning message that the user can potentially lose the data entered.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC1.Behavior.14	Allow feature to reset the order entry form. The reset must set to the appropriate default values. The system must prompt a warning message that the fields will be set back to the default field values.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC1.Behavior.15	A message must be displayed with FCN# when successful confirmation is received from DOJ for an order.	Incorporated as a part of the add Order Component Interaction for displaying confirmation received.
ISB.CCPOR.UC1.Behavior.16	Allow feature to print the confirmation from DOJ.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.Behavior.17	Allow feature to sort data returned from quick search based on any column.	Incorporated as a part of the quick search UI Component (Refer to quick search mock screen).
ISB.CCPOR.UC1.Behavior.18	Submit order data into CCPOR R&PO repository.	Incorporated as a part of the add Order Component Interaction for storing order data into CCPOR DB.
ISB.CCPOR.UC1.Behavior.19	Ability for the data entry operator to 'Seal' a case. This functionality will be	Incorporated as a part of the add order UI Component (Refer to

Requirement ID	Requirement Details	Solution Strategy
	provided with checkbox to 'Seal' a case. This will restrict Modify access to the order and View access to attached documents, only to Supervisor Users.	add order mock screen).

Table 13 Add Order Behavior/Action	Requirements
------------------------------------	--------------

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC1.FormValidati on.1	Mandatory Search Criteria must be validated.	Incorporated as a part of the validation rules for fields on the add order UI component.
ISB.CCPOR.UC1.FormValidati on.2	Application must validate minimum data entry for all mandatory fields on order form. Highlight those mandatory fields that are missing.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC1.FormValidati on.3	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the add order UI component.
	User will be prevented from adding a 'space' at the beginning of all fields. Details to be confirmed in design document.	
ISB.CCPOR.UC1.FormValidati on.4	System must validate all fields as per rules indicated for DOJ system.	Incorporated as a part of the validation rules for fields on the add order UI component.
ISB.CCPOR.UC1.FormValidati on.5	The system must have a maximum time out of 1 minute set to wait for DOJ confirmation, after which the confirmation will only be available at the 'Pending' screen.	Incorporated as a part of the add Order Component Interaction.
ISB.CCPOR.UC1.FormValidati on.6	Multiple orders can be selected for view.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).
ISB.CCPOR.UC1.FormValidati on.7	Maximum number of orders selected for edit/clone must only be 1.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Table 14 Add Order Form Validation Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC1.ExceptionHa ndling.1	An error message describing the error in understandable user terms must be displayed for all form validations.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC1.ExceptionHa ndling.2	An error message describing the error in understandable user terms must be displayed for all DOJ field level validations.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC1.ExceptionHa ndling.3	An error message describing the error in understandable user terms must be displayed for timeout of DOJ confirmation. This message must indicate if the timeout is caused by any backend system.	Incorporated as a part of the add Order Non-Functional Errors.
ISB.CCPOR.UC1.ExceptionHa ndling.4	Any error confirmation received from DOJ must be displayed by the system.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC1.ExceptionHa ndling.5	Display error message when the maximum rows selected for view is greater than 5.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC1.ExceptionHa ndling.6	Display error message when the maximum rows selected for edit/clone is greater than 1.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC1.ExceptionHa ndling.7	When the data is submitted and a few fields fail validation, highlight all errors and return the cursor to the first error field.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Table 15 Add Order Business Exception Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC1.Integration.1	All data fields captured must be converted to appropriate DOJ format before transmitting data to DOJ.	Incorporated as a part of the add Order Component Interaction.
ISB.CCPOR.UC1.Integration.2	System must be capable of transmitting newly added order to DOJ.	Incorporated as a part of the add Order Component Interaction.

ISB.CCPOR.UC1.Integration.3	System must be capable of accepting a confirmation from DOJ.	Incorporated as a part of the add Order Component Interaction.
ISB.CCPOR.UC1.Integration.4	DOJ confirmation must be stored in the system as an image to the order.	Incorporated as a part of the add Order Component Interaction.
ISB.CCPOR.UC1.Integration.5	The system should automatically extract and store the FCN in the application.	Incorporated as a part of the add Order Component Interaction.

Table 16 Add Order Backend Application/System Integration Requirements

#### 4.2.2.6 Functional Errors

The Figure below shows the break-down of the Functional errors for the Add Order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 10 Add Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the Add Order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
2	BW Process	Portal/GI Application	BW Process	DB Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
3	Portal/GI Application	Portal/GI Application	Portal/GI Application	CARPOS Validation Error	"CARPOS Response"

Table 17 Add Use Case Component Interactions

#### 4.2.2.7 Quick Search Functional Errors

The Figure below shows the break-down of the Functional errors for the Quick Search use case within all the order entry forms, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 11 Quick Search Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the Quick Search use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Blank Search Criteria entered	"Please enter a search criteria before proceeding"
				Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation	"Inappropriate

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
				Errors	data format used for field <list the<br="">field&gt;"</list>
				More than one entry selected for edit/clone	"Please select only one entry for edit/clone"
				More than 5 entries selected for detail viewing	"Please select 5 or less entries for detail viewing"
2	BW Process	Portal/GI Application	BW Process	Number of Search results received exceeds the max allowed rows	"More than [configured ceiling value] cases found. Note that only the first [configured ceiling value] will be returned. You may want to include additional criteria to narrow your search"

#### Table 18 Quick Search Functional Errors

#### 4.2.2.8 Attachments Functional Errors

The Figure below shows the break-down of the Functional errors for the Attachments use case within any of the order entry forms, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 12 Attachments Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the Attachments use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	No document selected	"Please select a document for upload before proceeding"

Table 19 Attachments Functional Errors

#### 4.2.2.9 View Order Details Functional Errors

The figure below shows the break-down of the Functional errors for the View Order Details use case when selected from any of the order entry forms, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 13 View Order Details Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the View order details use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	No access to viewing order details	"User not authorized to view order details"
				No order selected	"Please select an order viewing before proceeding"

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
2	Portal/GI Application	Portal/GI Application	Portal/GI Application	No access to viewing order details	"User not authorized to view attachments"

#### Table 20 View Order Details Functional Errors

#### 4.2.2.10 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the add order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 14 Add Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the add order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
•,					
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,6	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	DataMaxx API	BW Process	DataMaxx API Instance unreachable	"HTTPX Interface unreachable."
				HTTP Response timeout	" <response description&gt; response timed out. Please check the HTTPX interface availability."</response 
5	DataMaxx API	BW Process	DataMaxx API	HTTP max no. of tries reached	"Check EAI BW services availability."
7	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 21 Add Order Non-Functional Errors

#### 4.2.2.11 Quick Search Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the quick Search use case when performed from any order entry forms, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 15 Quick Search Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the quick Search use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site	Server

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
				unreachable	Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

#### Table 22 Quick Search Non-functional Errors

#### 4.2.2.12 Attachments Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the attachments use case when performing from any order entry forms, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 16 Attachments Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the attachments use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3	BW Process	CCPOR DMS Instance	BW Process	DMS Instance unreachable	"CCPOR DMS <ccpor dms=""> unreachable."</ccpor>
				DMS response timeout due to network failure	" <response description&gt; response timed out. Please check the DMS server availability."</response 
4	BW Process	Local DMS Court Web Service	BW Process	Web Service unreachable	"Local DMS <url> unreachable."</url>
				DMS response timeout due	" <response description&gt; response timed out. Please check the Local DMS web service availability."</response 
5,6	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 23 Attachments	Non-Functional Errors
----------------------	-----------------------

#### 4.2.2.13 View Order Details Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the view order details use case when performed from any of the order entry forms, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 17 View Order Details Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the view order details use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure	Source Component	Destination Component	Handling Component	Error Description	Error Message
5)					
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
6	BW Process	CCPOR DMS Instance	BW Process	DMS Instance unreachable	"CCPOR DMS <ccpor dms=""> unreachable."</ccpor>
				DMS response timeout due to network failure	" <response description&gt; response timed out. Please check the DMS server availability."</response 
7	BW Process	Local DMS Court Web Service	BW Process	Web Service unreachable	"Local DMS <url> unreachable."</url>
				DMS response timeout due	" <response description&gt; response timed out. Please check the Local DMS web service availability."</response 
4,5,8	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 24 View Order Details Non-Functional Errors

# 4.2.3 Draft Order

## 4.2.3.1 Component Interaction



Figure 18 Draft Order Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login <u>https://isb-</u> <u>stg.srv.courts</u> <u>-</u> <u>tc.ca.gov/port</u> <u>al/isb/<courtl< u=""> <u>D</u>&gt;</courtl<></u>	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
2	On the Main page the user	Court ITD	Portal (Court Portal Home	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	selects to draft order option		Page)			
3a	The GI application sends a SOAP request to the Core Services to retrieve the draft order details	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
3b	The Core Services will forward the request to DB Services and get as response a list of all draft orders	Core Services process	DB Services	SOAP over JMS	N/A	
3с	The GI application renders the draft order page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user enters the selects an order and hits 'Edit order' button. This will open up the add order form with that order details	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	GI application will allow the user to enter all the R&PO fields.
5	The user enters the selects an order and hits 'View order' button. This will open up the view	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	GI application will allow the user to enter all the R&PO fields.

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	order form with that order details					
6	The user enters the selects an order and hits 'Delete' button.	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	GI application will allow the user to enter all the R&PO fields.
7	The GI application sends a SOAP request with the draft order details selected by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
8	The Core Services will forward the request to DB Services	Core Services process	DB Services	SOAP over JMS	N/A	
9	The DB services will delete the draft order from CCPOR DB	DB Services	CCPOR DB	JDBC	N/A	

### 4.2.3.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC2.Behavior.1	Display all draft orders in the system for the user's court.	Incorporated as a part of the draft Order Component Interaction for displaying all draft orders.
ISB.CCPOR.UC2.Behavior.2	Draft orders displayed must only be for the jurisdiction that the user belongs.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Requirement ID	Requirement Details	Solution Strategy	
ISB.CCPOR.UC2.Behavior.3	Allow user to access the draft order data, edit existing data and submit it as a new order into the system.	Incorporated as a part of the draft Order Component Interaction for displaying all draft orders.	
ISB.CCPOR.UC2.Behavior.4	Allow user to view draft order details.	Incorporated as a part of the draft Order Component Interaction for displaying all draft orders.	
ISB.CCPOR.UC2.Behavior.5	All order fields need to be in one single form.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).	
ISB.CCPOR.UC2.Behavior.6	All order fields need to be grouped appropriately.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).	
ISB.CCPOR.UC2.Behavior.7	Allow attach/link images to an order. The image must be stored in respective DMS (Local or CCPOR) based on the user.	Incorporated as a part of the add order UI Component (Refer to add order mock screen). Refer to Attachments Component Interaction for conditional storing of image.	
ISB.CCPOR.UC2.Behavior.8	Allow the option to further modify a draft order and save the same as a draft. The order can be accessed later from the draft state for completing data entry.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).	
ISB.CCPOR.UC2.Behavior.9	Mandatory fields to be marked in bold and marked with an asterisk (*).	Incorporated as a part of the add order UI Component (Refer to add order mock screen).	
ISB.CCPOR.UC2.Behavior.10	Allow feature to clone a draft order.	This requirement should be considered for deletion.	
ISB.CCPOR.UC2.Behavior.11	Wild cards will be accepted for certain filter criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	
ISB.CCPOR.UC2.Behavior.12	Filter Criteria values will be accepted in upper case. However, the returned data	Incorporated as a part of the portal Component (GI Application) Solution	
Requirement ID	Requirement Details	Solution Strategy	
---------------------------	--	--	--
	will contain all data records with a matching value irrespective of the case. For example; 'SMITH' will filter records for 'Smith' and 'SMITH'. As such the filter criteria will be case insensitive.	Outline.	
ISB.CCPOR.UC2.Behavior.13	Allow feature to cancel the order data entered before the record is submitted. The system must prompt a warning message that the user could potentially lose the data entered.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	
ISB.CCPOR.UC2.Behavior.14	Allow feature to reset the order entry form. The system must reset to the appropriate default values. The system must prompt a warning message that the user could potentially lose the data entered.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	
ISB.CCPOR.UC2.Behavior.15	A message must be displayed with FCN# when successful confirmation is received from DOJ for an order.	Incorporated as a part of the add Order Component Interaction for displaying confirmation received.	
ISB.CCPOR.UC2.Behavior.16	Allow feature to print the confirmation from DOJ.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).	
ISB.CCPOR.UC2.Behavior.17	Allow feature to sort data on the draft order screen based on any column.	Incorporated as a part of the quick search UI Component (Refer to quick search mock screen).	
ISB.CCPOR.UC2.Behavior.18	Allow user to delete a draft order. The system must prompt a warning message that the draft order will be removed permanently. One message for every order selected.	Incorporated as a part of the draft Order Component Interaction for deleting a draft order.	
ISB.CCPOR.UC2.Behavior.19	Submit draft order data into CCPOR R&PO repository.	Incorporated as a part of the add Order Component Interaction for storing order data into CCPOR DB.	
ISB.CCPOR.UC2.Behavior.20	System should automatically delete all expired draft orders. This is	Incorporated as a part of the removeExpiredOrders	

Requirement ID	Requirement Details	Solution Strategy
	true for all draft orders which carry an expiration date.	module in the DB Services.

Table 26 Draft Order Behavior/Ac	tion Requirements
----------------------------------	-------------------

Requirement ID	Requirement Details	Solution Strategy	
ISB.CCPOR.UC2.FormValidati on.1	Mandatory filter criteria must be validated.	Incorporated as a part of the validation rules for fields on the add order UI component.	
ISB.CCPOR.UC2.FormValidati on.2	Application must validate minimum data entry for all mandatory fields on order form. Highlight those mandatory fields that are missing.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	
ISB.CCPOR.UC2.FormValidati on.3	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the add order UI component.	
ISB.CCPOR.UC2.FormValidati on.4	System must validate all fields as per rules indicated for DOJ system.	Incorporated as a part of the validation rules for fields on the add order UI component.	
ISB.CCPOR.UC2.FormValidati on.5	The system must have a maximum timeout of 1 minute set to wait for DOJ confirmation, after which the confirmation will only be available at the 'Pending' screen.	Incorporated as a part of the add Order Component Interaction.	
ISB.CCPOR.UC2.FormValidati on.6	Multiple orders can be selected for view.	Incorporated as a part of the add order UI Component (Refer to add order mock screen).	
ISB.CCPOR.UC2.FormValidati on.7	The system must allow only one row for editing at a time.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	

Table 27 Draft Order Form Validation Handling Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.UC2.ExceptionHa ndling.1	An error message describing the error in understandable user terms must be displayed for all form validations.	Incorporated as a part of the add Order Functional Errors.

ISB.CCPOR.UC2.ExceptionHa ndling.2	An error message describing the error in understandable user terms must be displayed for all DOJ field level validations.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC2.ExceptionHa ndling.3	An error message describing the error in understandable user terms must be displayed for timeout of DOJ confirmation. This message must indicate if the timeout is caused by any backend system.	Incorporated as a part of the add Order Non- Functional Errors.
ISB.CCPOR.UC2.ExceptionHa ndling.4	Any error confirmation received from DOJ must be displayed by the system.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC2.ExceptionHa ndling.5	An error message must be displayed when the maximum number of rows selected is more than 5 for viewing/deleting.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC2.ExceptionHa ndling.6	An error message must be displayed when the maximum number of rows selected is more than 1 for editing.	Incorporated as a part of the add Order Functional Errors.
ISB.CCPOR.UC2.ExceptionHa ndling.7	When the data is submitted and a few fields fail validation, highlight all errors and return the cursor to the first error field.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

 Table 28 Draft Order Business Exception Handling Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.UC2.Integration.1	All data fields captured must be converted to appropriate DOJ format before transmitting data to DOJ.	Incorporated as a part of the add Order Component Interaction.
ISB.CCPOR.UC2.Integration.2	System must be capable to transmit newly added order to DOJ. System must set the appropriate status on the draft order used to create the new order. The draft order must be removed from the draft order list.	Incorporated as a part of the add Order Component Interaction.
ISB.CCPOR.UC2.Integration.3	System must be capable to	Incorporated as a part of the

	accept a confirmation from DOJ.	add Order Component Interaction.
ISB.CCPOR.UC2.Integration.4	DOJ confirmation must be stored in the system as an image to the order.	Incorporated as a part of the add Order Component Interaction.
ISB.CCPOR.UC2.Integration.5	The order data needs to be transmitted to DOJ.	Requirement redundant. This is included in ISB.CCPOR.UC2.Integration.2
ISB.CCPOR.UC2.Integration.6	The system should automatically extract and store the FCN in the application.	Incorporated as a part of the add Order Component Interaction.

Table 29 Draft Order Backend Application/System Integration Requirements

### 4.2.3.3 Functional Errors

The figure below shows the break-down of the Functional errors for the draft order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 19 Draft Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the draft order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	All add order functional errors apply	"Please enter a search criteria before proceeding"
2	BW Process	Portal/GI Application	BW Process	DB Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>

Table 30 Draft Order Functional Errors

### 4.2.3.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the draft order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 20 Draft Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the draft order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
2,4	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,5	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 

Table 31 Draft Order Non-Functional Errors

# 4.2.4 Modify Order

4.2.4.1 Component Interaction



Figure 21 Modify Order Component Interaction

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
1	CCPOR Court user Portal Login <u>https://isb-</u> stg.srv.courts <u>-</u> tc.ca.gov/port al/isb/ <courtl D&gt;</courtl 	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
2	On the Main page the user	Court ITD	Portal (Court Portal Home	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	selects to modify order		Page)			
3	The GI application renders the modify order page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user modifies the selected order details and hits 'Submit' button.	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	GI application will allow the user to modify all the R&PO fields.
5	The GI application sends a SOAP request with the order details modified by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services	Core Services process	DB Services	SOAP over JMS	N/A	
7	The DB services will validate the data and update the order in CCPOR DB	DB Services	CCPOR DB	JDBC	N/A	
8	The Core Services will forward the request to CARPOS services	Core Services	CARPOS Services	SOAP over JMS	N/A	
9	The	CARPOS	DataMaxx	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	CARPOS services will transform the data into CARPOS format, wraps it with OFML envelope and invoke the DataMaxx API	Services	API			
10	The DataMaxx API forwards the data to CARPOS	DataMaxx API	CARPOS DB	CLETS	N/A	
11	The DataMaxx API receives the response and sends the data back to CARPOS services.	DataMaxx API	CARPOS Services	HTTPS	N/A	BW Process reads and parses the data and sends it back to the GI application in XML format over HTTPS.
12	The CARPOS Services invokes DB Services which would store the confirmation.	CARPOS Services	DB Services	SOAP over JMS	N/A	
13	The CARPOS Services will check if the response time is less than 1 minute.	CARPOS Services	CARPOS Services	N/A	N/A	
14	The confirmation data is sent to the GI application	CARPOS Services	Portal (GI application portlet)	SOAP over JMS	N/A	

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
15	The GI application renders the confirmation page on the client browser.	Portal (GI application portlet)	Court ITD	HTTPS	N/A	The GI application displays the confirmation to the user where optionally the user can choose to print.

Table 32 Modify Order Component Interactions

# 4.2.4.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC3.Behavior.1	Allow feature to perform a quick search for orders.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.Behavior.2	The user will only be able to search orders for the jurisdiction he/she belongs. Draft orders are NOT included in the search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC3.Behavior.3	The modify order form allows user to modify an existing order from the user's jurisdiction.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.Behavior.4	All order fields need to be in one single form.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.Behavior.5	All order fields need to be grouped appropriately.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.Behavior.6	Allow attach/link images to an order. The image must be stored in respective DMS (Local or CCPOR) based on the user.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen). Refer to Attachments Component Interaction for conditional storing of image.

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC3.Behavior.7	Allow detail order view on any of the orders returned from the quick search.	Incorporated as a part of the view order details UI Component (Refer to view order details mock screen).
ISB.CCPOR.UC3.Behavior.8	Mandatory fields to be marked in bold and marked with an asterisk (*).	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.Behavior.9	Wild cards will be accepted for certain search criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC3.Behavior.10	Search Criteria values will be accepted in upper case. However, the returned data will contain all data records with a matching value irrespective of the case. For example; 'SMITH' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case insensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC3.Behavior.11	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC3.Behavior.12	Allow feature to cancel any changes made for an order. The system must prompt a warning message that the user would lose the changes.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC3.Behavior.13	Allow feature to reset the order entry form. All fields need to be blanked out. The system would have to prompt a warning message that the user would potentially lose all the changes.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC3.Behavior.14	A message must be displayed with appropriate	Incorporated as a part of the modify Order

Requirement ID	Requirement Details	Solution Strategy
	text when successful confirmation is received from DOJ for an order.	Component Interaction for displaying confirmation received.
ISB.CCPOR.UC3.Behavior.15	Allow feature to print the confirmation from DOJ.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.Behavior.16	Allow feature to sort data returned on the quick search based on any column.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.Behavior.17	Submit order modification data into CCPOR R&PO repository.	Incorporated as a part of the modify Order Component Interaction for displaying confirmation received.
ISB.CCPOR.UC3.Behavior.18	Only Supervisor users must be able to Modify 'Sealed' orders, and view documents attached to it.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).

# Table 33 Modify Order Behavior/Action Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC3.FormValidati on.1	Mandatory Search Criteria must be validated.	Incorporated as a part of the validation rules for fields on the modify order UI component.
ISB.CCPOR.UC3.FormValidati on.2	Application must validate minimum data entry for all mandatory fields on order form. Highlight those mandatory fields that are missing.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC3.FormValidati on.3	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the modify order UI component.
ISB.CCPOR.UC3.FormValidati on.4	System must validate all fields as per rules indicated for DOJ system.	Incorporated as a part of the validation rules for fields on the modify order UI component.
ISB.CCPOR.UC3.FormValidati on.5	The system must have a maximum time out of 1 minute set to wait for DOJ confirmation, after which the confirmation will only be available at the 'Pending'	Incorporated as a part of the modify Order Component Interaction.

	screen.	
ISB.CCPOR.UC3.FormValidati on.6	Multiple orders can be selected for view.	Incorporated as a part of the modify order UI Component (Refer to modify order mock screen).
ISB.CCPOR.UC3.FormValidati on.7	Maximum number of orders selected for modify must only be 1.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Requirement ID	Requirement Details	Solution Strategy	
ISB.CCPOR.UC3.ExceptionHa ndling.1	An error message describing the error in understandable user terms must be displayed for all form validations.	Incorporated as a part of the modify Order Functional Errors.	
ISB.CCPOR.UC3.ExceptionHa ndling.2	An error message describing the error in understandable user terms must be displayed for all DOJ field level validations.	Incorporated as a part of the modify Order Functional Errors.	
ISB.CCPOR.UC3.ExceptionHa ndling.3	An error message describing the error in understandable user terms must be displayed for timeout of DOJ confirmation. This message must indicate if the timeout is caused by any backend system.	Incorporated as a part of the modify Order Non- Functional Errors.	
ISB.CCPOR.UC3.ExceptionHa ndling.4	Any error confirmation received from DOJ must be displayed by the system.	Incorporated as a part of the modify Order Functional Errors.	
ISB.CCPOR.UC3.ExceptionHa ndling.5	Display error message when the maximum rows selected for view is greater than 5.	Incorporated as a part of the modify Order Functional Errors.	
ISB.CCPOR.UC3.ExceptionHa ndling.6	Display error message when the maximum rows selected for modify is greater than 1.	Incorporated as a part of the modify Order Functional Errors.	
ISB.CCPOR.UC3.ExceptionHa ndling.7	When the data is submitted and a few fields fail validation, highlight all errors and return the cursor to the first error field.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	

Table 34 Modify Order Form Validation Handling Requirements

Table 35 Modify Order Business Exception Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC3.Integration.1	All data fields captured must be converted to appropriate DOJ format before transmitting data to DOJ.	Incorporated as a part of the modify Order Component Interaction.
ISB.CCPOR.UC3.Integration.2	System must be capable to transmit modified order information to DOJ.	Incorporated as a part of the modify Order Component Interaction.
ISB.CCPOR.UC3.Integration.3	System must be capable to accept a confirmation from DOJ.	Incorporated as a part of the modify Order Component Interaction.
ISB.CCPOR.UC3.Integration.4	The modify order data needs to be transmitted to DOJ.	This is a redundant requirement. Consider deletion.
ISB.CCPOR.UC3.Integration.5	DOJ confirmation must be stored in the system as an image to the order.	Incorporated as a part of the modify Order Component Interaction.

Table 36 Modify Order Backend Application/System Integration Requirements

## 4.2.4.3 Functional Errors

The figure below shows the break-down of the Functional errors for the modify order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 22 Modify Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the modify order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
2	BW Process	Portal/GI Application	BW Process	DB Validation Errors	"Inappropriate data format used for field <list td="" the<=""></list>

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					field>"
3	Portal/GI	Portal/GI	Portal/GI	CARPOS	"CARPOS
	Application	Application	Application	Validation Error	Response"

#### Table 37 Modify Order Functional Errors

### 4.2.4.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the modify order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 23 Modify Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the modify order use case for the CCPOR Web Portal.

Link # (Figure	Source Component	Destination Component	Handling Component	Error Description	Error Message
5)					
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,6	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	DataMaxx API	BW Process	DataMaxx API Instance unreachable	"HTTPX Interface unreachable."
				HTTP Response timeout	" <response description&gt; response timed out. Please check the HTTPX interface availability."</response 
5	DataMaxx API	BW Process	DataMaxx API	HTTP max no. of tries reached	"Check EAI BW services availability."
7	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 38 Modify Order Non-Functional Errors

# 4.2.5 Service Order

## 4.2.5.1 Component Interaction



Figure 24 Service Order Component Interaction

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
1	CCPOR Court user Portal Login <u>https://isb-</u> <u>stg.srv.courts</u>	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	<u>-</u> <u>tc.ca.gov/port</u> <u>al/isb</u> / <courti D&gt;</courti 					
2	On the Main page the user selects to service order	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
3	The GI application renders the service order page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user enters service information for the selected order and hits 'Submit' button.	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	GI application will allow the user to enter all the applicable service R&PO fields.
5	The GI application sends a SOAP request with the service information entered by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services	Core Services process	DB Services	SOAP over JMS	N/A	
7	The DB services will validate the data and update the order to	DB Services	CCPOR DB	JDBC	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
-,						
	CCPOR DB					
8	The Core Services will forward the request to CARPOS services	Core Services	CARPOS Services	SOAP over JMS	N/A	
9	The CARPOS services will transform the data into CARPOS format, wraps it with OFML envelope and invoke the DataMaxx API	CARPOS Services	DataMaxx API	HTTPS	N/A	
10	The DataMaxx API forwards the data to CARPOS	DataMaxx API	CARPOS DB	CLETS	N/A	
11	The DataMaxx API receives the response and sends the data back to CARPOS services.	DataMaxx API	CARPOS Services	HTTPS	N/A	BW Process reads and parses the data and sends it back to the GI application in XML format over HTTPS.
12	The CARPOS Services invokes DB Services which would store the confirmation.	CARPOS Services	DB Services	SOAP over JMS	N/A	
13	The CARPOS Services will check if the response time is less	CARPOS Services	CARPOS Services	N/A	N/A	

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
	than 1 minute.					
14	The confirmation data is sent to the GI application	CARPOS Services	Portal (GI application portlet)	SOAP over JMS	N/A	
15	The GI application renders the confirmation page on the client browser.	Portal (GI application portlet)	Court ITD	HTTPS	N/A	The GI application displays the confirmation to the user where optionally the user can choose to print.

# Table 39 Service Order Component Interactions

## 4.2.5.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC4.Behavior.1	Allow feature to perform a quick search for orders.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.2	The user will only be able to search orders on the entire CCPOR R&PO repository. The draft orders for are not included for the search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC4.Behavior.3	The service order form must allow user to add service information to any order in the system.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.4	The service order form must allow user to modify service information on any order in the system.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.5	The service order form must allow user to cancel service information on any order in the system.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC4.Behavior.6	The service order form must NOT include the R&PO order form.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.7	All service order form fields need to be in one single form.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.8	All service order form fields need to be grouped appropriately.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.9	Allow attach/link images to an order. The image must be stored in respective DMS (Local or CCPOR) based on the user.	Incorporated as a part of the service order UI Component (Refer to service order mock screen). Refer to Attachments Component Interaction for conditional storing of image.
ISB.CCPOR.UC4.Behavior.10	Mandatory fields to be marked in bold and marked with an asterisk (*).	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.11	Allow feature to view order(s).	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.12	Wild cards will be accepted for certain search criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC4.Behavior.13	Search Criteria values will be accepted in upper case. However, the returned data will contain all data records with a matching value irrespective of the case. For example; 'SMITH' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case insensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC4.Behavior.14	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC4.Behavior.15	Allow feature to cancel the service information entered before the record is submitted. The system must prompt a warning message that the changes will be lost.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC4.Behavior.16	Allow feature to reset the service order form. All fields need to be reset to the values before the modification. Depending if the service information is new/modify, the default values need to set. The user must be alerted that the changes will be lost.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC4.Behavior.17	A message must be displayed when successful confirmation is received from DOJ for an order.	Incorporated as a part of the service Order Component Interaction for displaying confirmation received.
ISB.CCPOR.UC4.Behavior.18	Allow feature to print the confirmation from DOJ.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.19	Allow feature to sort data returned based on any column.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.Behavior.20	Submit service order data into CCPOR R&PO repository.	Incorporated as a part of the service Order Component interaction.
ISB.CCPOR.UC4.Behavior.21	Only Supervisor users must be able to service 'Sealed' Orders, and view documents attached to it.	Incorporated as a part of authorization access rights set on the order.

#### Table 40 Service Order Behavior/Action Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.UC4.FormValidati on.1	Mandatory Search Criteria must be validated.	Incorporated as a part of the validation rules for fields on the service order UI

		component.
ISB.CCPOR.UC4.FormValidati on.2	Application must validate minimum data entry for all mandatory fields on order form. Highlight those mandatory fields that are missing.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC4.FormValidati on.3	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the service order UI component.
ISB.CCPOR.UC4.FormValidati on.4	System must validate all fields as per rules indicated for DOJ system.	Incorporated as a part of the validation rules for fields on the service order UI component.
ISB.CCPOR.UC4.FormValidati on.5	The system must have a maximum time out of 1 minute set to wait for DOJ confirmation, after which the confirmation will only be available at the 'Pending' screen.	Incorporated as a part of the service Order Component Interaction.
ISB.CCPOR.UC4.FormValidati on.6	Multiple orders can be selected for view.	Incorporated as a part of the service order UI Component (Refer to service order mock screen).
ISB.CCPOR.UC4.FormValidati on.7	The maximum number of orders for which service information can be entered simultaneously must only be 1.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Table 41 Service Order Form Validation Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC4.ExceptionHa ndling.1	An error message describing the error in understandable user terms must be displayed for all form validations.	Incorporated as a part of the service Order Functional Errors.
ISB.CCPOR.UC4.ExceptionHa ndling.2	An error message describing the error in understandable user terms must be displayed for all DOJ field level validations.	Incorporated as a part of the service Order Functional Errors.
ISB.CCPOR.UC4.ExceptionHa ndling.3	An error message describing the error in understandable user terms must be displayed for timeout of DOJ confirmation. This message	Incorporated as a part of the service Order Non- Functional Errors.

	must indicate if the timeout is caused by any backend system.	
ISB.CCPOR.UC4.ExceptionHa ndling.4	System must throw an error message when the maximum number of orders selected for view is greater than 5.	Incorporated as a part of the service Order Functional Errors.
ISB.CCPOR.UC4.ExceptionHa ndling.5	System must throw an error message when the maximum number of orders selected to apply service information is greater than 1.	Incorporated as a part of the service Order Functional Errors.
ISB.CCPOR.UC4.ExceptionHa ndling.6	Any error confirmation received from DOJ must be displayed by the system.	Incorporated as a part of the service Order Functional Errors.
ISB.CCPOR.UC4.ExceptionHa ndling.7	When the data is submitted and a few fields fail validation, highlight all errors and return the cursor to the first error field.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Table 42 Service Order Dusiness Exception Handling Requirement	Table 42 Service	Order Busines	ss Exception H	andling Red	quirements
--	------------------	---------------	----------------	-------------	------------

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC4.Integration.1	All data fields captured must be converted to appropriate DOJ format before transmitting data to DOJ.	Incorporated as a part of the service Order Component Interaction.
ISB.CCPOR.UC4.Integration.2	System must be capable to transmit service information added for an order to DOJ.	Incorporated as a part of the service Order Component Interaction.
ISB.CCPOR.UC4.Integration.3	System must be capable to accept a confirmation from DOJ.	Incorporated as a part of the service Order Component Interaction.
ISB.CCPOR.UC4.Integration.4	DOJ confirmation must be stored in the system as an image to the order.	Incorporated as a part of the service Order Component Interaction.

Table 43 Service Order Backend Application/System Integration Requirements

#### 4.2.5.3 Functional Errors

The figure below shows the break-down of the Functional errors for the service order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 25 Service Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the service order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
2	BW Process	Portal/GI Application	BW Process	DB Validation Errors	"Inappropriate data format used for field <list td="" the<=""></list>

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					field>"
3	Portal/GI	Portal/GI	Portal/GI	CARPOS	"CARPOS
	Application	Application	Application	Validation Error	Response"

#### Table 44 Service Order Functional Errors

### 4.2.5.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the service order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 26 Service Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the service order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,6	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	DataMaxx API	BW Process	DataMaxx API Instance unreachable	"HTTPX Interface unreachable."
				HTTP Response timeout	" <response description&gt; response timed out. Please check the HTTPX interface availability."</response 
5	DataMaxx API	BW Process	DataMaxx API	HTTP max no. of tries reached	"Check EAI BW services availability."
7	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 45 Service Order Non-Functional Errors

# 4.2.6 Cancel Order

## 4.2.6.1 Component Interaction



Figure 27 Cancel Order Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login <u>https://isb-</u> <u>stg.srv.courts</u>	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	<u>-</u> <u>tc.ca.gov/port</u> <u>al/isb/<courtl< u=""> <u>D</u>&gt;</courtl<></u>					
2	On the Main page the user selects to cancel order	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
3	The GI application renders the cancel order page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user enters the cancel order reason and hits 'Submit' button.	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	GI application will allow the user to enter cancellation reason R&PO fields.
5	The GI application sends a SOAP request with the order Id and cancellation reason entered by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services	Core Services process	DB Services	SOAP over JMS	N/A	
7	The DB services will validate the data and update the order as cancelled to	DB Services	CCPOR DB	JDBC	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	CCPOR DB					
8	The Core Services will forward the request to CARPOS services	Core Services	CARPOS Services	SOAP over JMS	N/A	
9	The CARPOS services will transform the data into CARPOS format, wraps it with OFML envelope and invoke the DataMaxx API	CARPOS Services	DataMaxx API	HTTPS	N/A	
10	The DataMaxx API forwards the data to CARPOS	DataMaxx API	CARPOS DB	CLETS	N/A	
11	The DataMaxx API receives the response and sends the data back to CARPOS services.	DataMaxx API	CARPOS Services	HTTPS	N/A	BW Process reads and parses the data and sends it back to the GI application in XML format over HTTPS.
12	The CARPOS Services invokes DB Services which would store the confirmation.	CARPOS Services	DB Services	SOAP over JMS	N/A	
13	The CARPOS Services will check if the response time is less	CARPOS Services	CARPOS Services	N/A	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	than 1 minute.					
14	The confirmation data is sent to the GI application	CARPOS Services	Portal (GI application portlet)	SOAP over JMS	N/A	
15	The GI application renders the confirmation page on the client browser.	Portal (GI application portlet)	Court ITD	HTTPS	N/A	The GI application displays the confirmation to the user where optionally the user can choose to print.

# Table 46 Cancel Order Component Interactions

## 4.2.6.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC5.Behavior.1	Allow feature to perform a quick search for orders.	Incorporated as a part of the cancel order UI Component (Refer to cancel order mock screen).
ISB.CCPOR.UC5.Behavior.2	The user will only be able to search orders for the jurisdiction where he/she belongs. Draft orders are NOT included for the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.Behavior.3	The cancel order form allows user to cancel an order from the user's jurisdiction.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.Behavior.4	Allow attach/link images to an order. The image must be stored in respective DMS (Local or CCPOR) based on the user.	Incorporated as a part of the cancel order UI Component (Refer to cancel order mock screen). Refer to Attachments Component Interaction for conditional storing of image.

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC5.Behavior.5	Allow feature to view orders.	Incorporated as a part of the cancel order UI Component (Refer to cancel order mock screen).
ISB.CCPOR.UC5.Behavior.6	Wild cards will be accepted for certain search criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.Behavior.7	Search Criteria values will be accepted in upper case. However, the returned data will contain all data records with a matching value irrespective of the case. For example; 'SMITH' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case insensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.Behavior.8	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.Behavior.9	Allow feature to abort the order cancellation before the record is submitted. The user must be prompted with a warning message that the data will be lost.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.Behavior.10	Allow feature to reset the order entry form. All fields will be reset. The user must be prompted with a warning message that the data will be lost.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.Behavior.11	A message must be displayed that successful confirmation is received from DOJ after the cancellation information is transmitted.	Incorporated as a part of the cancel Order Component Interaction for displaying confirmation received.
ISB.CCPOR.UC5.Behavior.12	Allow feature to print the confirmation from DOJ.	Incorporated as a part of the cancel order UI

Requirement ID	Requirement Details	Solution Strategy
		Component (Refer to cancel order mock screen).
ISB.CCPOR.UC5.Behavior.13	Allow feature to sort data returned based on any column.	Incorporated as a part of the cancel order UI Component (Refer to cancel order mock screen).
ISB.CCPOR.UC5.Behavior.14	Submit order cancellation data into CCPOR R&PO repository.	Incorporated as a part of the cancel Order Component Interaction.
ISB.CCPOR.UC5.Behavior.15	Only Supervisor users must be able to Cancel 'Sealed' Orders, and view its attached documents.	Incorporated as a part of authorization access rights set on the order.

Table 47	Cancel Order	Behavior/Action	Requirements
	Ouriour Oraci	Denavior// totion	requiremento

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC5.FormValidati on.1	Mandatory Search Criteria must be validated.	Incorporated as a part of the validation rules for fields on the cancel order UI component.
ISB.CCPOR.UC5.FormValidati on.2	Application must validate minimum data entry for all mandatory fields on order form. Highlight those mandatory fields that are missing.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC5.FormValidati on.3	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the cancel order UI component.
ISB.CCPOR.UC5.FormValidati on.4	System must validate all fields as per rules indicated for DOJ system.	Incorporated as a part of the validation rules for fields on the cancel order UI component.
ISB.CCPOR.UC5.FormValidati on.5	The system must have a maximum time out of 1 minute set to wait for DOJ confirmation, after which the confirmation will only be available at the 'Pending' screen.	Incorporated as a part of the cancel Order Component Interaction.
ISB.CCPOR.UC5.FormValidati on.6	Multiple orders can be selected for view.	Incorporated as a part of the cancel order UI Component (Refer to cancel order mock screen).
ISB.CCPOR.UC5.FormValidati on.7	The maximum number of orders that can be	Incorporated as a part of the portal Component (GI

Outline.
----------

Table 48 Cancel Order Form	Validation Handling Requirements
----------------------------	----------------------------------

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC5.ExceptionHa ndling.1	An error message describing the error in understandable user terms must be displayed for all form validations.	Incorporated as a part of the cancel Order Functional Errors.
ISB.CCPOR.UC5.ExceptionHa ndling.2	An error message describing the error in understandable user terms must be displayed for all DOJ field level validations.	Incorporated as a part of the cancel Order Functional Errors.
ISB.CCPOR.UC5.ExceptionHa ndling.3	An error message describing the error in understandable user terms must be displayed for timeout of DOJ confirmation. This message must indicate if the timeout is caused by any backend system.	Incorporated as a part of the cancel Order Non- Functional Errors.
ISB.CCPOR.UC5.ExceptionHa ndling.4	Any error confirmation received from DOJ must be displayed by the system.	Incorporated as a part of the cancel Order Functional Errors.
ISB.CCPOR.UC5.ExceptionHa ndling.5	An error message must be displayed when the number of orders selected for view is greater than 5.	Incorporated as a part of the cancel Order Functional Errors.
ISB.CCPOR.UC5.ExceptionHa ndling.6	An error message must be displayed when the number of orders selected for cancellation is greater than 1.	Incorporated as a part of the cancel Order Functional Errors.
ISB.CCPOR.UC5.ExceptionHa ndling.7	When the data is submitted and a few fields fail validation, highlight all errors and return the cursor to the first error field.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Table 49 Cancel Order Business Exception Handling Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.UC5.Integration.1	All data fields captured must be converted to appropriate DOJ format before transmitting data to DOJ.	Incorporated as a part of the cancel Order Component Interaction.
ISB.CCPOR.UC5.Integration.2	System must be capable of transmitting order cancellation information to DOJ.	Incorporated as a part of the cancel Order Component Interaction.
-----------------------------	---	---
ISB.CCPOR.UC5.Integration.3	System must be capable of accepting a confirmation from DOJ.	Incorporated as a part of the cancel Order Component Interaction.
ISB.CCPOR.UC5.Integration.4	DOJ confirmation must be stored in the system as an image to the order.	Incorporated as a part of the cancel Order Component Interaction.

Table 50 Cancel Order Backend Application/System Integration Requirements

### 4.2.6.3 Functional Errors

The figure below shows the break-down of the Functional errors for the cancel order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 28 Cancel Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the cancel order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
2	BW Process	Portal/GI Application	BW Process	DB Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
3	Portal/GI Application	Portal/GI Application	Portal/GI Application	CARPOS Validation Error	"CARPOS Response"

### Table 51 Cancel Order Functional Errors

### 4.2.6.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the cancel order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 29 Cancel Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the cancel order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,6	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	DataMaxx API	BW Process	DataMaxx API Instance unreachable	"HTTPX Interface unreachable."
				HTTP Response timeout	" <response description&gt; response timed out. Please check the HTTPX interface availability."</response 
5	DataMaxx API	BW Process	DataMaxx API	HTTP max no. of tries reached	"Check EAI BW services availability."
7	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 52 Cancel Order Non-Functional Errors

# 4.2.7 Pending Order

## 4.2.7.1 Component Interaction



Figure 30 Pending Order Component Interaction

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
1	CCPOR Court user Portal Login <u>https://isb-</u> stg.srv.courts <u>-</u> tc.ca.gov/port al/isb/ <courtl D&gt;</courtl 	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
2	On the Main page the user	Court ITD	Portal (Court Portal Home	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	selects to pending order		Page)			
3a	The GI application sends a SOAP request to the Core Services to retrieve the pending order details	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
3b	The Core Services will forward the request to DB Services and get as response a list of all pending orders	Core Services process	DB Services	SOAP over JMS	N/A	
3c	The GI application renders the pending order page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user selects a message and an associated order	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	
5	The user selects a message and selects 'view order'. This will invoke the view order details page	Court ITD	Portal (Court Portal Case Search Page)	HTTPS	N/A	
6	The user selects a	Court ITD	Portal (Court Portal Case	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	message and selects 'view message' option		Search Page)			
7	The GI application sends a SOAP request with the message details selected by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
8	The Core Services will forward the request to DB Services which will fetch the message details	Core Services process	DB Services	SOAP over JMS	N/A	
9	The Core services will forward the message details to the GI application	Core Services	Portal (GI application portlet)	SOAP over JMS	N/A	
15	The GI application renders the message view page on the client browser.	Portal (GI application portlet)	Court ITD	HTTPS	N/A	The GI application displays the message to the user where optionally the user can choose to print.

Table 53 Pending Order Component Interactions

#### 4.2.7.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
----------------	---------------------	-------------------

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC6.Behavior.1	Display all system messages for orders present for that jurisdiction.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC6.Behavior.2	Allow feature to filter messages.	Incorporated as a part of the pending order UI Component (Refer to pending order mock screen).
ISB.CCPOR.UC6.Behavior.3	Orders missing images must be displayed.	Incorporated as a part of the createMessage module within DB Services Component
ISB.CCPOR.UC6.Behavior.4	Orders pending DOJ confirmation must be displayed.	Incorporated as a part of the order entry Component interaction.
ISB.CCPOR.UC6.Behavior.5	Allow users to print successful confirmation received from DOJ. This feature is only available for orders that timed out on the order entry screens.	Incorporated as a part of the pending order UI Component (Refer to pending order mock screen).
ISB.CCPOR.UC6.Behavior.6	DOJ confirmation must be stored as an image on the order.	Incorporated as a part of the order entry Component interaction.
ISB.CCPOR.UC6.Behavior.7	Allow users to view DOJ validation errors.	Incorporated as a part of the pending order UI Component (Refer to pending order mock screen).
ISB.CCPOR.UC6.Behavior.8	Allow users to view any system error on the order during data transmission to DOJ.	Incorporated as a part of the pending order UI Component (Refer to pending order mock screen).
ISB.CCPOR.UC6.Behavior.9	Allow users to view order to fix and resubmit any error that can be addressed.	Incorporated as a part of the pending order UI Component (Refer to pending order mock screen).
ISB.CCPOR.UC6.Behavior.10	Allow users to accept the order and FCN# received on a DOJ error confirmation. This would be in case of an order being double-entered into DOJ.	Incorporated as a part of the pending order UI Component (Refer to pending order mock screen).
ISB.CCPOR.UC6.Behavior.11	Wild cards will be accepted for certain filter criteria indicated by the percent (%	Incorporated as a part of the portal Component (GI Application) Solution

Requirement ID	Requirement Details	Solution Strategy
	or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Outline.
ISB.CCPOR.UC6.Behavior.12	Filter Criteria values will be accepted in upper case. However, the returned data will contain all data records with a matching value irrespective of the case. For example; 'SMITH' will return records for 'Smith' and 'SMITH'. As such the filters will be case insensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC6.Behavior.13	If no records are present to be shown, a 'no records available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC6.Behavior.14	Allow feature to sort data returned based on any column.	Incorporated as a part of the pending order UI Component (Refer to pending order mock screen).
ISB.CCPOR.UC6.Behavior.15	Only Supervisor users must be allowed to Modify, Service or Cancel 'Sealed' Order, and view its attached documents.	Incorporated as a part of authorization access rights set on the order.

Table 54 Pending Order Behavior/Action Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.UC6.FormValidati on.1	The form validations to the pages led to from Pending form would apply.	Incorporated as a part of the order entry Functional errors.
ISB.CCPOR.UC6.FormValidati on.2	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the order entry Functional errors.

### Table 55 Pending Order Validation Handling Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.UC6.Integration.1	System must allow users to configure system notifications for missing	Incorporated as part of build query in the reports

	images.	use case
ISB.CCPOR.UC6.Integration.2	DOJ confirmation must be stored in the system as an image to the order.	Incorporated as a part of the order entry Component interaction.

 Table 56 Pending Order Backend Application/System Integration Requirements

#### 4.2.7.3 Functional Errors

The figure below shows the break-down of the Functional errors for the pending order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 31 Pending Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the pending order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Blank filter Criteria entered	"Please enter a filter criteria before proceeding"
				Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
				More than 5 entries selected for message view	"Please select 5 or less entries for message view"
				More than 5 entries selected for detail viewing	"Please select 5 or less entries for detail viewing"
2	Portal/GI Application	Portal/GI Application	Portal/GI Application	No access to viewing message details	"User not authorized to view message details"

Table 57 Pending Order Functional Errors

#### 4.2.7.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the pending order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 32 Pending Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the pending order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2, 4	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,5	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
6	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 58 Pending Order Non-Functional Errors

## 4.2.8 Search Order

4.2.8.1 Component Interaction



Figure 33 Search Order Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login <u>https://isb-</u> stg.srv.courts <u>-</u> <u>tc.ca.gov/port</u> <u>al/isb/<courti< u=""> <u>D&gt;</u></courti<></u>	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
2	From the Main page	Court ITD	Portal (Order	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	the user selects order search page		Search Page)			
3	The GI application renders the order search page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user enters the search criterion and hits 'Search' button.	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
5	The GI application sends a SOAP request with the search criterion entered by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order fields into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services which will perform a JDBC query to fetch results from the CCPOR DB	Core Services process	DB Services, CCPOR DB	SOAP over JMS	N/A	
7	The DB services will provide the result set data to Core Services which will send the	DB Services, Core Services	Portal (Add/Modify/ Service/Canc el Page)	HTTPS	N/A	

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
	response back to the GI application					
8	The GI application renders the result set section on the client browser	Portal (GI portlet application)	Court ITD	HTTPS	N/A	
9	The user can select a view order operation.	Court ITD	Portal (Order Details Page)	HTTPS	N/A	

Table 59 Search Order Component Interactions

## 4.2.8.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC7.Behavior.1	Allow feature to perform a quick search for orders.	Incorporated as a part of the order search UI Component (Refer to order search mock screen).
ISB.CCPOR.UC7.Behavior.2	Allow feature to view order details for one or more orders returned from the search.	Incorporated as a part of the order search UI Component (Refer to order search mock screen).
ISB.CCPOR.UC7.Behavior.3	Allow search of orders from outside the user's jurisdiction.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC7.Behavior.4	Allow viewing all images attached to a selected order.	Incorporated as a part of the order search UI Component (Refer to order search mock screen).
ISB.CCPOR.UC7.Behavior.5	Wild cards will be accepted for certain search criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Requirement ID	Requirement Details	Solution Strategy
	search.	
ISB.CCPOR.UC7.Behavior.6	Search Criteria will be converted to upper case during query operations. For example; 'Smith' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case insensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC7.Behavior.7	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC7.Behavior.8	Allow feature to reset the order entry form. All fields need to be blanked out.	Inapplicable requirement. Consider deletion.
ISB.CCPOR.UC7.Behavior.9	Allow feature to sort data returned based on any column.	Incorporated as a part of the order search UI Component (Refer to order search mock screen).
ISB.CCPOR.UC7.Behavior.10	Only a Supervisor User from the order's originating court can view attached documents of a 'Sealed' case.	Incorporated as a part of authorization access rights set on the order.

Table 60 Order Search Behavior/Action Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC7.FormValidati on.1	Mandatory Search Criteria must be validated.	Incorporated as a part of the validation rules for fields on the order search UI component.
ISB.CCPOR.UC7.FormValidati on.2	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the order search UI component.
ISB.CCPOR.UC7.FormValidati on.3	An alert displayed if the search criterion returned no data.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

Table 61 Order Search Form Validation Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC7.ExceptionHa ndling.1	An error message describing the error in understandable user terms	Incorporated as a part of the Order search Non-

	must be displayed for timeout during image retrieval.	Functional Errors.
ISB.CCPOR.UC7.ExceptionHa ndling.2	An error message describing the error in understandable user terms must be displayed for timeout during processing a search request.	Incorporated as a part of the Order search Non- Functional Errors.

Table 62 Order Search Business Exception Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC7.Integration.1	System must be able to retrieve an image present on any of the Local Court DMS repositories. This applies to all Local Courts that are on-board on CCPOR with a Local DMS.	Incorporated as a part of the View Order details attachments component interaction.

Table 63 Order Search Backend Application/System Integration Requirements

#### 4.2.8.3 Functional Errors

The figure below shows the break-down of the Functional errors for the order Search use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 34 Search Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the order Search use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Blank Search Criteria entered	"Please enter a search criteria before proceeding"
				Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list td="" the<=""></list>

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					field>"
				More than one entry selected for edit/clone	"Please select only one entry for edit/clone"
				More than 5 entries selected for detail viewing	"Please select 5 or less entries for detail viewing"
2	BW Process	Portal/GI Application	BW Process	Number of Search results received exceeds the max allowed rows	"More than [configured ceiling value] cases found. Note that only the first [configured ceiling value] will be returned. You may want to include additional criteria to narrow your search"

Table 64 Search Order Functional Errors

#### 4.2.8.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the order Search use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 35 Search Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the order Search use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 65 Search Order Non-Functional Errors

## 4.2.9 Reports

4.2.9.1 Component Interaction



Figure 36 Reports Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login <u>https://isb-</u> stg.srv.courts <u>c.ca.gov/port</u> <u>al/isb/<courti< u=""> <u>D&gt;</u></courti<></u>	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
2	On the Main page the user	Court ITD	Portal (Saved Queries	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	selects Saved Queries in the Reports Menu. Reports→Sa		Page)			
	ved Queries					
3a	The GI application sends a SOAP request to the Core Services to retrieve the list of Saved Queries	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the request into a SOAP call to the Core Services. Saved Queries will include a set default queries and any others saved by the user.
3b	The Core Services will forward the request to DB Services and get as response a list of all Saved Queries	Core Services process	DB Services	SOAP over JMS	N/A	
3c	The GI application renders the Saved Queries page and displays the list on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user selects one of the Saved Query	Court ITD	Portal (Saved Queries Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
5	The user selects one of the Saved Queries and clicks 'Modify' to modify it.	Court ITD	Portal (Build Queries Page)	HTTPS	N/A	
6	The user is redirected to the Build Query page to modify the selected Saved Query. The user makes the modifications to the Query on the Build Query Form	Court ITD	Portal (Build Queries Page)	HTTPS	N/A	
7	The user commits the modifications to Query by clicking "Submit". The GI application sends a SOAP request to the Core Services to save the changes to Query	Portal (Build Queries Page)	Core Services	SOAP over JMS	N/A	GI application packages the Query fields into a SOAP call to the Core Services.
8	The Core Services will forward the request to DB Services to save changes and receives confirmation	Core Services	DB Services	SOAP over JMS	N/A	
9	The user selects one of the Saved Queries and clicks 'Delete'	Court ITD	Portal (Saved Queries Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	to Delete it.					
10	The GI application sends a SOAP request to the Core Services to Delete the Saved Query.	Portal (Build Queries Page)	Core Services	SOAP over JMS	N/A	GI application packages the Query fields into a SOAP call to the Core Services.
11	The Core Services will forward the request to DB Services to Delete the Query and receives confirmation.	Core Services	DB Services	SOAP over JMS	N/A	
12	The user selects one of the Saved Queries and clicks 'Execute to Execute it.	Court ITD	Portal (Saved Queries Page)	HTTPS	N/A	
13	The GI application sends a SOAP request to the Core Services to Execute the Saved Query.	Portal (Build Queries Page)	Core Services	SOAP over JMS	N/A	GI application packages the Query parameters into a SOAP call to the Core Services.
14	The Core Services will forward the request to DB Services to Execute the Query and fetches the Report data for the Query	Core Services	DB Services	SOAP over JMS	N/A	
15	The Core services will	Core	Portal (GI application	SOAP	N/A	The GI application

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
	forward the Report data to the GI application, which builds the report to be displayed	Services	portlet)	over JMS		displays the confirmation to the user where optionally the user can choose to print.
16	The GI application renders the Report it receives and displays it in Report dialog on the client browser.	Portal (GI application portlet)	Court ITD	HTTPS	N/A	The Reports dialog will allow functionality to view data as a table or chart. Reports can also be printed and downloaded from the Reports Dialog

Table 66 Reports Component Interactions

#### 4.2.9.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC8.Behavior.1	Allow data comparison reports (number of orders per court, Entry/Issue Date difference in days).	Incorporated as part of Saved Queries UI Component, provided as default predefined Query (Refer Saved Query mock screen)
ISB.CCPOR.UC8.Behavior.2	Allow statistical reports (Number of order type changes).	Incorporated as part of Saved Queries UI Component, provided as default predefined Query (Refer Saved Query mock screen)
ISB.CCPOR.UC8.Behavior.3	Allow productivity reports (Number of orders per region and user).	Incorporated as part of Saved Queries UI Component, provided as default predefined Query (Refer Saved Query mock screen)

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC8.Behavior.4	Allow generation of custom reports.	Incorporated as part of Build Query UI Component (Refer Build Query mock screen)
ISB.CCPOR.UC8.Behavior.5	Allow the user to save a frequently run custom report.	Incorporated as part of Build Query UI Component (Refer Build Query mock screen)
ISB.CCPOR.UC8.Behavior.6	Allow the user to download the data extracted for that report.	Incorporated as part of View Reports Dialog UI Component (Refer View Report mock screen)
ISB.CCPOR.UC8.Behavior.7	Allow the option to print the report.	Incorporated as part of View Reports Dialog UI Component (Refer View Report mock screen)
ISB.CCPOR.UC8.Behavior.8	Allow the option to run the reports for a given date range.	Incorporated as part of Build Query UI Component (Refer Build Query mock screen)
ISB.CCPOR.UC8.Behavior.9	Allow a graphical representation of the report.	Incorporated as part of View Reports Dialog UI Component (Refer View Report mock screen)
ISB.CCPOR.UC8.Behavior.10	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC8.Behavior.11	Allow feature to reset the query being built.	Incorporated as part of Build Query UI Component(Refer View Report mock screen)
ISB.CCPOR.UC8.Behavior.12	Allow deleting a saved query. The system must prompt the user with a warning message that the query is being deleted permanently.	Incorporated as part of Saved Queries UI Component (Refer Saved Query mock screen)
ISB.CCPOR.UC8.Behavior.13	Allow modifying a saved query.	Incorporated as part of Saved Queries UI Component (Refer Saved Query mock screen)
ISB.CCPOR.UC8.Behavior.14	Allow executing a saved query.	Incorporated as part of Saved Queries UI Component (Refer Saved Query mock screen)

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC8.ExceptionHa ndling.1	An error message describing the error in understandable user terms must be displayed for timeout during execution of a report. This message must indicate if the timeout is caused by any backend system.	Incorporated as a part of the Reports Non-Functional Errors

Table 67 Reports Behavior/Action Requirements

Table 68 Reports Business Exception Handling Requirements

#### 4.2.9.3 Functional Errors

The figure below shows the break-down of the Functional errors for the reports use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 37 Reports Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the reports use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	No access to viewing order details	"User not authorized to view attachments"
				Incomplete or Incorrect query data entered	"Incorrect query data. Please use following combination for search <list the<br="">possible search combinations&gt;"</list>
2	Portal/GI Application	Portal/GI Application	Portal/GI Application	No access to viewing order details	"User not authorized to view attachments"

Table 69 Reports Functional Errors

## 4.2.9.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the reports use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 38 Reports Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the reports use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2,4,6,8	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,5,7,9	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
10	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 70 Reports Non-Functional Errors

## 4.2.10 Audit Trail

4.2.10.1 Component Interaction



Figure 39 Audit Trail Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login <u>https://isb-</u> stg.srv.courts <u>-</u> tc.ca.gov/port <u>al/isb/<courtl< u=""> D&gt;</courtl<></u>	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
2	From the Main page	Court ITD	Portal (Audit	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure		Component	Component		Schema	
5)						
	the user selects Audit Trail page in the Reports Menu. Reports→Au dit Trail		Trail)			
3	The GI application renders the Audit Trail page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The user enters the search criterion for audits he/she intends to track and hits 'Search' button.	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
5	The GI application sends a SOAP request with the search criterion entered by the user to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the audit parameters into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services which will perform a JDBC query to fetch audit data from the CCPOR DB	Core Services process	DB Services, CCPOR DB	SOAP over JMS	N/A	
7	The DB services will	DB Services, Core	Portal (Audit	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	provide the result set of audit trails to Core Services which will send the response back to the GI application	Services	Trail Page)			
8	The GI application renders the Audit Trail in the result set section on the client browser	Portal (GI portlet application)	Court ITD	HTTPS	N/A	

### Table 71 Audit Trail Component Interactions

### 4.2.10.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC9.Behavior.1	Provide feature to perform an audit trail based on case#.	Incorporated as a part of the Audit Trail Query UI Component (Refer to Audit Trail mock screen).
ISB.CCPOR.UC9.Behavior.2	The User will only be able to run audit trails on orders for the jurisdiction he/she belongs.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC9.Behavior.3	Provide feature to perform an audit trail based on user.	Incorporated as a part of the Audit Trail Query UI Component (Refer to Audit Trail mock screen).
ISB.CCPOR.UC9.Behavior.4	Provide feature to perform an audit trail within a date range.	Incorporated as a part of the Audit Trail Query UI Component (Refer to Audit Trail mock screen).
ISB.CCPOR.UC9.Behavior.5	Provide feature to perform an audit trail for a given operation type.	Incorporated as a part of the Audit Trail Query UI Component (Refer to Audit Trail mock screen).
ISB.CCPOR.UC9.Behavior.6	Allow filtering result set	Incorporated as a part of

Requirement ID	Requirement Details	Solution Strategy
	data.	the Audit Trail Query UI Component (Refer to Audit Trail mock screen).
ISB.CCPOR.UC9.Behavior.7	Wild cards will be accepted for certain search criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC9.Behavior.8	Search Criteria will be converted to upper case during query operations. For example; 'Smith' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case insensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC9.Behavior.9	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UC9.Behavior.10	Allow feature to reset the search/filter fields.	Incorporated as a part of the Audit Trail Query UI Component (Refer to Audit Trail mock screen).
ISB.CCPOR.UC9.Behavior.11	Allow feature to sort data returned based on any column.	Incorporated as a part of the Audit Trail Result Set UI Component (Refer to Audit Trail mock screen).

Table 72 Audit Trail Behavior/Action F	Requirements
--	--------------

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC9.FormValidati on.1	Mandatory Search Criteria must be validated.	Incorporated as a part of the validation rules for fields on the Audit Trail Query UI component.
ISB.CCPOR.UC9.FormValidati on.2	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the Audit Trail Query UI component.

Table 73 Audit Trail Form Validation Handling Requirements
Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UC9.ExceptionHa ndling.1	An error message describing the error in understandable user terms must be displayed if the report execution has timed out.	Incorporated as a part of the Audit Trail Non- Functional Errors.

 Table 74 Audit Trail Business Exception Handling Requirements

#### 4.2.10.3 Functional Errors

The figure below shows the break-down of the Functional errors for the audit trail use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 40 Audit Trail Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the audit trail use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Blank Search Criteria entered	"Please enter a search criteria before proceeding"
				Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
				More than 5 entries selected for detail viewing	"Please select 5 or less entries for detail viewing"
2	BW Process	Portal/GI Application	BW Process	Number of Search results received exceeds the max allowed rows	"More than [configured ceiling value] cases found. Note that only the first [configured ceiling value] will be returned. You may want to include additional criteria to narrow your search"

#### Table 75 Audit Trail Functional Errors

#### 4.2.10.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the audit trail use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 41 Audit Trail Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the audit trail use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 76 A	Audit Trail	Non-Functional	Errors
10010101	want man	non nanouonai	E11010

# 4.2.11 Role Delegation

4.2.11.1 Component Interaction



Figure 42 Role Delegation Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login <u>https://isb-</u> <u>stg.srv.courts</u> <u>-</u> <u>tc.ca.gov/port</u> <u>al/isb/<courtl< u=""> <u>D&gt;</u></courtl<></u>	Court ITD	Portal (Court Portal Home Page)	HTTPS	N/A	
2	On the Main page the user	Court ITD	Portal (Role Delegation	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	selects Role Delegation in the Management Menu. Management →Role		Page)			
	Delegation					
3a	The GI application sends a SOAP request to the Core Services to retrieve the list of Role Authorization Rules	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the request into a SOAP call to the Core Services.
3b	The Core Services will forward the request to DB Services and get as response a list of all previously authorized role rules	Core Services process	DB Services	SOAP over JMS	N/A	
3c	The GI application renders the Role Delegation page and displays the list previously authorized roles on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The administrator selects one of the previously	Court ITD	Portal (Role Delegation Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	authorized role or chooses to add a new role					
5	The administrator chooses to set up a new Role Authorization Rule, and clicks 'Add' to create it.	Court ITD	Portal (Role Delegation Role)	HTTPS	N/A	
6	The GI application sends a SOAP request to the Core Services to Create the new role authorization rule	Portal (Role Delegation Page)	Core Services	SOAP over JMS	N/A	GI application packages the Role Authorization Rule data into a SOAP call to the Core Services.
7	The Core Services will forward the request to DB Services to create the rule and receives confirmation	Core Services	DB Services	SOAP over JMS	N/A	
8	The administrator chooses to modify an existing Role Authorization Rule, and clicks 'Modify' to update it.	Court ITD	Portal (Role Delegation Page)	HTTPS	N/A	
9	The GI application sends a SOAP	Portal (Role Delegation Page)	Core Services	SOAP over JMS	N/A	GI application packages the Role

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	request to the Core Services to modify the Role Authorization Rule.					Authorization Rule data into a SOAP call to the Core Services.
10	The Core Services will forward the request to DB Services to Modify the Role Authorization Rule and receives confirmation.	Core Services	DB Services	SOAP over JMS	N/A	
11	The administrator chooses to Delete an existing Role Authorization rule, and clicks 'Delete' to Delete it.	Court ITD	Portal (Role Delegation Page)	HTTPS	N/A	
12	The GI application sends a SOAP request to the Core Services to Delete the selected Role Authorization Role.	Portal (Role Delegation Page)	Core Services	SOAP over JMS	N/A	GI application packages the Role Authorization Rule data into a SOAP call to the Core Services.
13	The Core Services will forward the request to DB Services to Delete the Role Authorization Rule and receives	Core Services	DB Services	SOAP over JMS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure		Component	Component		Schema	
5)						
	confirmation.					
14	The	Court ITD	Portal (Role	HTTPS	N/A	
	administrator chooses to update the set of Business Role available and clicks 'Sync' to update the list of Roles with new roles available in the Active Directory		Delegation Page)			
15	The GI application sends a SOAP request to Core Services to synchronize any new roles and receives the list of any new roles.	Portal (Role Delegation Page)	Core Services	SOAP over JMS	N/A	GI application packages the sync request data into a SOAP call to the Core Services.
16	The Core Services invoke a request to the ActiveDirecto ry and retrieve any newly created roles on the ActiveDirecto ry	Core Services	Active Directory	HTTPS	N/A	
17	The GI application will receive the new list of roles and updates the	Portal (GI application portlet)	Court ITD	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	set of available Business Roles					

Table 77 Role Delegation Component Interactions
---

## 4.2.11.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy	
ISB.CCPOR.A1.Behavior.1	Add new role authorization rule. A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the Role Delegation UI Component (Refer to Role Delegation mock screen).	
ISB.CCPOR.A1.Behavior.2	Modify a role authorization rule. A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the Role Delegation UI Component (Refer to Role Delegation mock screen).	
ISB.CCPOR.A1.Behavior.3	Remove a role authorization rule. A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the Role Delegation UI Component (Refer to Role Delegation mock screen).	
ISB.CCPOR.A1.Behavior.4	Assign a default page to a business role.	Incorporated as a part of the Role Delegation UI Component (Refer to Role Delegation mock screen).	
ISB.CCPOR.A1.Behavior.5	A role authorization rule must be able to assign a business role to a group (menu) of pages or specific page with a group (menu). A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the Role Delegation UI Component (Refer to Role Delegation mock screen).	
ISB.CCPOR.A1.Behavior.6	Role authorization rules can be Modified only one at a time. A role authorization	Incorporated as a part of the portal Component (GI Application) Solution	

Requirement ID	Requirement Details	Solution Strategy	
	rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Outline.	
ISB.CCPOR.A1.Behavior.7	One or more role authorization rules can be Removed at a time. A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	
ISB.CCPOR.A1.Behavior.8	User Confirmation message before role authorization rule(s) are removed. A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	
ISB.CCPOR.A1.Behavior.9	Allow users to view and fix any form validation errors.	Incorporated as a part of the portal Component (GI Application) Solution Outline.	
ISB.CCPOR.A1.Behavior.10	Display all assigned role authorization rules. A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the Role Delegation UI Component (Refer to Role Delegation mock screen).	
ISB.CCPOR.A1.Behavior.11	System to allow supervisor role to assign privileges for any user to view/update/add sealed cases.	Incorporated as a part of authorization access rights to the Role Delegation console.	

Table 78 Role Delegation Behavior/Action Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A1.FormValidatio n.1	For Add/Modify role authorization rule, all fields must have a valid value selected from the list of values. A role authorization rule assigns a specific Business role for CCPOR to a specific Application role within CCPOR.	Incorporated as a part of the validation rules for fields on the Role Delegation UI component.
ISB.CCPOR.A1.FormValidatio	Only one role authorization	Incorporated as a part of

n.2	rule can be selected for	the validation rules for fields
	modification at a time. A	on the Role Delegation UI
	role authorization rule	component.
	assigns a specific Business	
	role for CCPOR to a	
	specific Application role	
	within CCPOR.	

Table 79 Role Delegation Form Validation Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A1.Integration.1	Add/Modify/Remove role authorization rule must be immediately committed to the system.	Incorporated as a part of the Add/Modify/Remove Role Delegation Rule component interaction.
ISB.CCPOR.A1.Integration.2	All active business roles must be pulled from the backend enterprise active directory and populated in the list of Business Roles.	Incorporated as a part of the Synchronize Business Roles component interaction.

Table 80 Role Delegation Backend Application/System Integration Requirements

#### 4.2.11.3 Functional Errors

The figure below shows the break-down of the Functional errors for the role delegation use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 43 Role Delegation Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the role delegation use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Nothing changed on the modify	"Please modify minimum values before proceeding"
				Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list td="" the<=""></list>

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					field>"
				No access to modifications	"User not authorized to modify data"

#### Table 81 Role Delegation Functional Errors

#### 4.2.11.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the role delegation use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 44 Role Delegation Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the role delegation use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site	Server Unreachable.
2,4,6,8,1 0	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,5,7,9	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
10	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 
11,12	Portal/GI Application, BW process	ActiveDirectory	Portal/GI Application	LDAP not reachable	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the LDAP server availability."</response 

Table 82 Role Delegation Non-Functional Errors

## 4.2.12 Delete Order

#### 4.2.12.1 Component Interaction



Figure 45 Delete Order Component Interaction

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
1	CCPOR Court user Portal Login <u>https://isb-</u> <u>stg.srv.courts</u>	Court ITD	Portal (GI application portlet)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	<u>-</u> <u>tc.ca.gov/port</u> <u>al/isb/<courti< u=""> <u>D&gt;</u></courti<></u>					
2	From the Main page the administrator selects Delete Orders in the Management Menu. Management → Delete Orders	Court ITD	Portal (Delete Orders Page)	HTTPS	N/A	
3	The GI application renders the Delete Order page on the client browser	Portal (GI application portlet)	Court ITD	HTTPS	N/A	
4	The administrator enters the search criterion and hits 'Search' button.	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
5	The GI application sends a SOAP request with the search criterion entered by the administrator to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the order search parameters into a SOAP call to the Core Services.
6	The Core Services will forward the request to DB Services	Core Services process	DB Services, CCPOR DB	SOAP over JMS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	which will perform a JDBC query to fetch results from the CCPOR DB					
7	The DB services will provide the result set data to Core Services which will send the response back to the GI application	DB Services, Core Services	Portal (Delete Order Page)	HTTPS	N/A	
8	The GI application renders the result set section on the client browser	Portal (GI portlet application)	Court ITD	HTTPS	N/A	
9	The administrator selects one or more order(s) from the result set and hits 'Delete' button to delete them.	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
10	The GI application sends a SOAP request with the OrderIDs of selected orders to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the OrderIDs and the request to delete into a SOAP call to the Core Services.
11	The Core Services will	Core Services	DB Services, CCPOR DB	SOAP over JMS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	forward the request to delete the orders to DB Services which will perform a JDBC query to delete the Orders referred by their OrderIDs in the CCPOR DB	process				
12	The administrator can choose to view Order Details for a selected Order	Court ITD	Portal (Order Details Page)	HTTPS	N/A	

#### Table 83 Delete Order Component Interactions

#### 4.2.12.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A2.Behavior.1	Allow feature to perform a quick search for orders.	Incorporated as a part of the Delete Order Search UI Component (Refer to Delete Order mock screen).
ISB.CCPOR.A2.Behavior.2	The User will only be able to search orders for the jurisdiction to which he/she belongs.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.A2.Behavior.3	Allow user to delete an order from the R&PO repository. The delete can be done only on orders that belong to the user's jurisdiction. The user must be prompted with a warning that the order will be deleted permanently.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.A2.Behavior.4	Allow order details view for	Incorporated as a part of

Requirement ID	Requirement Details	Solution Strategy
	selected orders.	the Delete Order UI Component (Refer to Delete Order mock screen).
ISB.CCPOR.A2.Behavior.5	Wild cards will be accepted for certain search criteria indicated by the percent (% or *) character. Entering 'SM%' or 'SM*' will return 'SMITH'. There will be an upper limit on the number of records that can be returned using the quick search.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.A2.Behavior.6	Search Criteria will be converted to upper case during query operations. For example; 'Smith' will return records for 'Smith' and 'SMITH'. As such the search criteria will be case insensitive.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.A2.Behavior.7	If no records are returned for the submitted search criterion, a 'no orders available' message will be displayed.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.A2.Behavior.8	Allow feature to reset the order search form. The values are set to default values. The user must be prompted with a warning that any changes will be lost.	Incorporated as a part of the Delete Order Search UI Component (Refer to Delete Order mock screen).
ISB.CCPOR.A2.Behavior.9	Allow feature to sort data returned based on any column.	Incorporated as a part of the Delete Order UI Component (Refer to Delete Order mock screen).

#### Table 84 Delete Order Behavior/Action Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A2.FormValidatio n.1	Mandatory Search Criteria must be validated.	Incorporated as a part of the validation rules for fields on the Delete Order Search UI component.
ISB.CCPOR.A2.FormValidatio n.2	Field level validations like date formats, custom alphanumeric formats need to be validated.	Incorporated as a part of the validation rules for fields on the Delete Order Search UI component.

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A2.ExceptionHan dling.1	An error message describing the error in understandable user terms must be displayed for all form validations.	Incorporated as a part of the Delete Order search Non-Functional Errors.
ISB.CCPOR.A2.ExceptionHan dling.2	An error message must be displayed for timeout during delete/view orders. This message must indicate if the timeout is caused by any backend system.	Incorporated as a part of the Delete Order search Non-Functional Errors.

Table 85 Delete Order Form Validation Handling Requirements

Table 86 Delete Order Business Exception Handling Requirements

#### 4.2.12.3 Functional Errors

The figure below shows the break-down of the Functional errors for the delete order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 46 Delete Order Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the delete order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Blank Search Criteria entered	"Please enter a search criteria before proceeding"
				Mandatory Fields missing	"Please enter minimum data for all mandatory fields"
				Validation Errors	"Inappropriate data format used for field <list td="" the<=""></list>

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					field>"
				More than 1 entry selected for delete	"Please select only 1 at a time for delete"
2	BW Process	Portal/GI Application	BW Process	Number of Search results received exceeds the max allowed rows	"More than [configured ceiling value] cases found. Note that only the first [configured ceiling value] will be returned. You may want to include additional criteria to narrow your search"

Table 87 Delete Order Functional Errors

#### 4.2.12.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the delete order use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 47 Delete Order Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the delete order use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2,5	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3,6	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
4	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 

Table 88 Delete Order Non-Functional Errors

# 4.2.13 Miscellaneous Info Configuration

4.2.13.1 Component Interaction



Figure 48 Miscellaneous Info Configuration Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	CCPOR Court user Portal Login <u>https://isb-</u> <u>stg.srv.courts</u> <u>-</u> <u>tc.ca.gov/port</u> <u>al/isb/<courtl< u=""> <u>D&gt;</u></courtl<></u>	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
2	From the Main page	Court ITD	Portal (Configure	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	the administrator selects Miscellaneou s Information Configuration Page in the Custom Configuration Sub-Menu of Management Menu. Management →Custom Config. →		Miscellaneou s Order Information Page)			
20	Misc. Order Info.	Dortol (Cl	Coro	SOAD	NI/A	0
3a	The GI application sends a SOAP request to the Core Services to retrieve any previous miscellaneou s info configuration	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the request into a SOAP call to the Core Services.
3b	The Core Services will forward the request to DB Services and get as response a any previous miscellaneou s information custom configuration s	Core Services process	DB Services	SOAP over JMS	N/A	
3с	The GI application renders the Miscellaneou s Order Information	Portal (GI application portlet)	Court ITD	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
,						
	Configuration page and displays any previous configuration s received from core services on the client browser. If no previous configuration s are present, the administrator selects "Configure" to begin configuration					
4	The administrator can choose any of the miscellaneou s fields to configure. The administrator can choose to configure a miscellaneou s field a text field or a list box	Court ITD	Portal (Configure Miscellaneou s Order Information Page)	HTTPS	N/A	
5	If the administrator chooses to configure a miscellaneou s field as a list box, he/she <b>checks</b> the "List" check box and provides a list of valid values for the field.	Court ITD	Portal (Configure Miscellaneou s Order Information Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
6	The administrator clicks 'Update' button to commit new configuration s	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
7	The GI application sends a SOAP request with the new configuration s to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the configuration s into a SOAP call to the Core Services.
8	The Core Services will forwards the request to DB Services to update the Miscellaneou s Order Information Configuration s in the CCPOR DB through a JDBC query, and receive a confirmation.	Core Services process	DB Services, CCPOR DB	SOAP over JMS	N/A	
9	If the administrator chooses to configure a miscellaneou s field as a textbox, he/she <b>un-</b> <b>checks</b> the "List" check box. The user will no longer be allowed to enter values once "List" is	Court ITD	Portal (Configure Miscellaneou s Order Information Page)	HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	unchecked					
10	The administrator clicks 'Update' button to commit new configuration s	Court ITD	Portal (GI application portlet)	HTTPS	N/A	
11	The GI application sends a SOAP request with the new configuration s to the Core Services	Portal (GI application portlet)	Core Services	SOAP over JMS	N/A	GI application packages the configuration s into a SOAP call to the Core Services.
12	The Core Services will forwards the request to DB Services to update the Miscellaneou s Order Information Configuration s in the CCPOR DB through a JDBC query, and receive a confirmation.	Core Services process	DB Services, CCPOR DB	SOAP over JMS	N/A	

Table 89 Miscellaneous Info Configuration Component Interactions

#### 4.2.13.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A3.Behavior.1	Configure a standard data set of Miscellaneous Fields to be used in place of a single free-form text box for Miscellaneous Order Information.	Incorporated as a part of the Miscellaneous Order Information Custom Configuration UI Component (Refer to Miscellaneous Order Information Custom

Requirement ID	Requirement Details	Solution Strategy
		Configuration mock screen).
ISB.CCPOR.A3.Behavior.2	Configure each Miscellaneous Field as a list of values or as free text field.	Incorporated as a part of the Miscellaneous Order Information Custom Configuration UI Component (Refer to Miscellaneous Order Information Custom Configuration mock screen).
ISB.CCPOR.A3.Behavior.3	Modify the configuration of each Miscellaneous Field by changing a list of values, by changing a list of values to a free text, or a free-text to a list of values.	Incorporated as a part of the Miscellaneous Order Information Custom Configuration UI Component (Refer to Miscellaneous Order Information Custom Configuration mock screen).
ISB.CCPOR.A3.Behavior.4	User Confirmation message on Reset of a Miscellaneous Field configuration before resetting the value.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.A3.Behavior.5	Allow users to view and fix any form validation errors.	Incorporated as a part of the portal Component (GI Application) Solution Outline.

 Table 90 Miscellaneous Information Configuration Behavior/Action Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A3.FormValidatio n.1	One or more Miscellaneous Field(s) must be selected before Updating or Resetting their configuration.	Incorporated as a part of the validation rules for fields on the Miscellaneous Order Information Custom Configuration UI Component.

Table 91 Miscellaneous Information Configuration Form Validation Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.A3.Integration.1	Once the CCPOR	Incorporated as a part of
_	Administrator for the	the Miscellaneous Order
	court/county choose to	Information configuration
	configure Miscellaneous	component interactions.
	Order Information the	CCPOR DB also set up to
	individual Miscellaneous	handle individual
	Order Information Fields	Miscellaneous Order
	have to be maintained	

	separately instead of as single Miscellaneous Order information blobs in the database.	Information.
ISB.CCPOR.A3.Integration.2	Even though the Miscellaneous Fields are captured and stored separately in the CCPOR application, the data fields must be converted to appropriate DOJ format before transmitting data to DOJ.	Incorporated as a part of the CARPOS Service component interaction.
ISB.CCPOR.A3.Integration.3	Any update in the configuration of a Miscellaneous Fields must be immediately committed to the system.	Incorporated as a part of the Miscellaneous Order Information configuration component interaction

Table 92 Miscellaneous Information Configuration Backend Application/System Integration Requirements

#### 4.2.13.3 Functional Errors

The figure below shows the break-down of the Functional errors for the miscellaneous info configuration use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 49 Miscellaneous Info Configuration Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the miscellaneous info configuration use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	Blank list values entered	"Please enter atleast one list value before proceeding"
				Inappropriate format for list values	"Incorrect format for entering list values. Please use <list the<br="">possible list value combinations&gt;"</list>
1	Portal/GI	Portal/GI	Portal/GI	Blank text box	"Please enter a

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
	Application	Application	Application	data entered	valid textbox value before proceeding"

Table 93 Miscellaneous Info Configuration Functional Errors

#### 4.2.13.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the miscellaneous info configuration use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 50 Miscellaneous Info Configuration Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the miscellaneous info configuration use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Portal/GI Application	Portal/GI Application	Portal/GI Application	User account expired	"User account expired. Please contact the CCTC Helpdesk"
				Portal site unreachable	Server Unreachable.
2,4,6	Portal/GI Application	BW Process	Portal/GI Application	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
2	BW Process	Portal/GI Application	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 
3,5,7	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 

Table 94 Miscellaneous Info Configuration Non-Functional Errors

### 4.2.14 Document Link

4.2.14.1 Component Interaction



Figure 51 Document Link Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	Court ITD client process invokes the Document link external web service hosted at CCPOR and receives a response of the status of committing	Court ITD	CCPOR External Web Service (DaTS)	SOAP over HTTPS	N/A	
Link #	Description	Source	Destination	Protocol	Message	NOTES
---------------	---	--	-------------	----------	---------	---------------------------------
(Figure 5)		Component	Component		Schema	
	the data into CCPOR stage DB					
2	The DaTS service passes the document link data to the DB services	CCPOR External Web Service (DaTS)	DB Services	JMS	N/A	
3	The DB Services submits the data into CCPOR stage DB	DB Services	CCPOR DB	JDBC	N/A	
1	CCPOR DMS will submit new document link data into the CCPOR stage DB	CCPOR DMS	CCPOR DB	JDBC	N/A	
1	The syncDocume ntLink method in DB services will be invoked every x minutes	Time Triggered	DB Services	N/A	N/A	Time triggered interface.
2	The DB services will retrieve all the document ID which need to be linked from CCPOR stage DB	DB Services	CCPOR DB	JDBC	N/A	
3	DB services performs a check for if there is a	DB Services	DB Services	N/A	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	correspondin g match with the metadata.					
4	The DB services updates the CCPOR DB database with the doc ID	DB Services	CCPOR DB	JDBC	N/A	
5	The DB services determines the flag to be updated in the CCPOR stage DB for doc ID	DB Services	DB Services	N/A	N/A	
6	The DB services updates appropriately the CCPOR stage DB for doc ID	CARPOS Services	DB Services	SOAP over JMS	N/A	

#### Table 95 Document Link Component Interactions

#### 4.2.14.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy		
ISB.CCPOR.DocLink.Exceptio nHandling.1	An automated message with all errors during auto- link for local DMS images published by CCPOR need to be consumed by the Local DMS court service.	N/A for CCPOR. Local DMS court implementation item.		

Table 96 Document Link Local DMS Court Business Exception Handling Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.DocLink.Exceptio nHandling.2	An automated message with all errors during auto- link for local DMS images for every local DMS court needs to be published at	Incorporated in syncDocumnentLink method in DB services

day.
------

|--|

Requirement ID	Requirement Details	
ISB.CCPOR.DocLink.Integratio n.1	Key metadata needs to be entered for every image scanned into the Local DMS.	N/A for CCPOR. Local DMS court implementation item.
ISB.CCPOR.DocLink.Integratio n.2	A service needs to be developed to push the auto- link information for all images along with their associated metadata.	N/A for CCPOR. Local DMS court implementation item.
ISB.CCPOR.DocLink.Integratio n.3	The service must be configurable to be able to push the auto-link information one ore more times during a business day.	N/A for CCPOR. Local DMS court implementation item.
ISB.CCPOR.DocLink.Integratio n.4	A service needs to be developed to accept results from CCPOR auto-link process for each local DMS image.	N/A for CCPOR. Local DMS court implementation item.

Table 98 Document Link Local DMS Court Backend Application/System Integration Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.DocLink.Integratio n.5	A standardized set of meta- data needs to be defined, that must be entered for every image for use by CCPOR. CCPOR will use this meta-data to link the image to an Order. This standard will be enforced for all images entered into Local DMS or CCPOR DMS.	Incorporated as part of the Document Link metadata standardization.
ISB.CCPOR.DocLink.Integratio n.6	Key metadata needs to be entered for every image scanned into the CCPOR DMS.	Incorporated as part of the document link metadata standardization.
ISB.CCPOR.DocLink.Integratio n.7	A service needs to be developed to accept auto- link information for all images along with their associated metadata.	Incorporated as part of component interaction for document link.
ISB.CCPOR.DocLink.Integratio	A service needs to be	Incorporated as part of

n.8	developed to push the auto- link information for all images along with their associated metadata from CCPOR DMS.	component interaction for document link.
ISB.CCPOR.DocLink.Integratio n.9	A service needs to be developed to publish results of auto-link process for each local DMS court.	Sync response provided or syncDocumentLink method incorporates the functionality
ISB.CCPOR.DocLink.Integratio n.10	Provision for courts to scan images and enter metadata for an image into CCPOR DMS.	Incorporated as part of FTP services and doc upload using attachment CCPOR UI.

Table 99 Document Link CCPOR Backend Application/System Integration Requirements

#### 4.2.14.3 Functional Errors

The figure below shows the break-down of the Functional errors for the document link use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 52 Document Link Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the document link use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Web Service Client	Web Service	Web Service	Validation errors in the data sent	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
2	Web Service	BW Process	BW Process	Validation errors in the data sent	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
1	CCPOR DMS	CCPOR DB	CCPOR DB	Validation errors in the	"Inappropriate data format used

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
				data sent	for field <list field="" the="">"</list>
1	BW Process	CCPOR DB	BW Process	Data not found	"Corresponding record for index data values not found"

#### Table 100 Document Link Functional Errors

#### 4.2.14.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the document link use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 53 Document Link Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the document link use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Web Service Client	Web Service	Web Service Client	Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the Web services availability."</response 
2	Web Service	BW Process	Web Service	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
2	BW Process	Web Service	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 
1	Web Service	Client Web Service	Web Service	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 
3,6	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check</response 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					the DB server availability."
1	CCPOR DMS	CCPOR DB	CCPOR DMS	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 
1,2,3	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 

Table 101 Document Link Non-Functional Errors

### 4.2.15 Interim Service

4.2.15.1 Component Interaction



Figure 54 Interim Service Component Interaction

Link # (Figure 5)	Description	Source Component	Destination Component	Protocol	Message Schema	NOTES
1	Court client process invokes external web service hosted at CCPOR to send R&PO data and receives an appropriate	Court ITD	External web service (DaTS)	SOAP over HTTPS	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
•,						
	response					
2	DaTS process forwards the request data to the Core Service	External web service. DaTS process	Core Services	JMS	N/A	
3	Check if the data received is for order entry or inquiry. If the request is for order entry, prepare the data for entry into CCPOR DB and call the DB services	Core Services	DB services	JMS	N/A	
4	The DB services will validate the data and commit the data into CCPOR DB. A success or error response is sent back to Core Services	DB Services	CCPOR DB	JDBC	N/A	
5	Check if the data received is for order entry or inquiry. If the request is for inquiry, prepare the data for inquiry into CCPOR DB and call the DB services	Core Services	DB services	JMS	N/A	
6	The DB	DB Services	CCPOR DB	JDBC	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	services will validate the data and performs a query from CCPOR DB. A success or error response is sent back to Core Services					
7	Further the data is sent to CARPOS service. Here the data is transmitted to CARPOS and a response is obtained that is sent back in the web service response	Core Services	CARPOS services	JMS	N/A	

#### Table 102 Interim Service Component Interactions

#### 4.2.15.2 Functional Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.Interim.Exception Handling.1	System must be capable of processing an error response returned for validation errors.	N/A for CCPOR. Local DMS court implementation item.
ISB.CCPOR.Interim.Exception Handling.2	System must be capable of processing an error response returned for DOJ validation errors.	N/A for CCPOR. Local DMS court implementation item.

#### Table 103 Interim Process Local DMS Court Business Exception Handling Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.Interim.Exception	The system must be capable of returning an	Incorporated as part of the
	error response for	component interaction for

	validation errors.	interim process web service
ISB.CCPOR.Interim.Exception Handling.4	The system must be capable of returning an error response for DOJ validation errors.	Incorporated as part of the component interaction for interim process web service

Table 104 Interim Process CCPOR Business Exception Handling Requirements

Requirement ID	Requirement Details	
ISB.CCPOR.Interim.Integration .1	Local DMS court must be able to push R&PO data entered using their local UI.	N/A for CCPOR. Local DMS court implementation item.
ISB.CCPOR.Interim.Integration .2	Data to be submitted for all use cases Add/Modify/Service/Cancel.	N/A for CCPOR. Local DMS court implementation item.
ISB.CCPOR.Interim.Integration .3	The system must be capable of initiating a request-response transaction.	N/A for CCPOR. Local DMS court implementation item.

Requirement ID	Requirement Details	
ISB.CCPOR.Interim.Integration .4	The system must host a service to accept R&PO data.	Incorporated as part of the component interaction for interim process web service
ISB.CCPOR.Interim.Integration .5	The service must allow all use cases of Add/Modify/Service/Cancel.	Incorporated as part of the component interaction for interim process web service
ISB.CCPOR.Interim.Integration .6	The system must implement a request- response transaction. The response could be a positive or error confirmation received from DOJ. The response could be for validation errors.	Incorporated as part of the component interaction for interim process web service
ISB.CCPOR.Interim.Integration .7	The system must commit/successfully-save data into CCPOR DB.	Incorporated as part of the component interaction for interim process web service
ISB.CCPOR.Interim.Integration .8	The system must transmit data to DOJ after formatting data as per DOJ.	Incorporated as part of the component interaction for interim process web service

Table 105 Interim Process Local DMS Court Backend Application/System Integration Requirements

Table 106 Interim Process CCPOR Backend Application/System Integration Requirements

#### 4.2.15.3 Functional Errors

The figure below shows the break-down of the Functional errors for the interim service use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 55 Interim Service Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the interim service use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Web Service Client	Web Service	Web Service	Validation errors in the data sent	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
2,3	Web Service	BW Process	BW Process	Validation errors in the data sent	"Inappropriate data format used for field <list the<br="">field&gt;"</list>
4	Portal/GI Application	Portal/GI Application	Portal/GI Application	CARPOS Validation Error	"CARPOS Response"

#### Table 107 Interim Service Functional Errors

#### 4.2.15.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the interim service use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 56 Interim Service Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the interim service use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	Web Service Client	Web Service	Web Service Client	Web service unreachable due to network failure	"The <request description&gt; request could not be carried out,</request 

Link #	Source Component	Destination	Handling	Error	Error Message
(Figure 5)	Component	Component	Component	Description	
					due to network failure. Please try again later."
				SOAP Response timeout	" <response description&gt; response timed out. Please check the Web services availability."</response 
2	Web Service	BW Process	Web Service	EAI Web service unreachable due to network failure	"The <request description&gt; request could not be carried out, due to network failure. Please try again later."</request 
				SOAP Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
2	BW Process	Web Service	BW Process	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 
1	Web Service	Client Web Service	Web Service	SOAP Response timeout due to network failure	" <response description&gt; response timed out. Please check the Portal server availability."</response 
3,4	BW Process	CCPOR DB Instance	BW Process	DB Instance unreachable	"CCPOR DB <ccpor db<br="">SID&gt; unreachable."</ccpor>
				DB response timeout due to network failure	" <response description&gt; response timed out. Please check the DB server availability."</response 

Table 108 Interim Service Non-Functional Errors

# 4.2.16 Asynchronous Image Upload

#### 4.2.16.1 Component Interaction



Figure 57 Asynchronous Image Upload Component Interaction

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
1	The court client process uploads the image to EFTP at CCTC. The ISB DaTS service is	CCTC EFTP server	DaTS external FTP service	SFTP	N/A	

Link #	Description	Source	Destination	Protocol	Message	NOTES
(Figure 5)		Component	Component		Schema	
	configured to get the files					
2	The ISB DaTS service forwards the request to the DMS services	DaTS external FTP service	DMS Services	JMS	N/A	
3	The DMS Services invokes content engine web services on CCPOR DMS to upload the image into CCPOR DMS	DMS Services	CCPOR DMS	SOAP over HTTPS	N/A	
1	The court client process uploads the image packet to EFTP at CCTC. The ISB DaTS service is configured to get the image packet.	CCTC EFTP server	DaTS external FTP service	SFTP	N/A	
2	The ISB DaTS service forwards the request to the DMS services	DaTS external FTP service	DMS Services	JMS	N/A	
3	The DMS Services invokes content engine web services on CCPOR DMS to upload the image along with the metadata into	DMS Services	CCPOR DMS	SOAP over HTTPS	N/A	

Lin	nk #	Description	Source	Destination	Protocol	Message	NOTES
(Fig 5)	gure		Component	Component		Schema	
		CCPOR DMS					

Table 109 Asynchronous Image Upload Component Interactions

#### 4.2.16.2 Functional Requirements

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.DMS.Integration.1	The system must allow a flexible way to allow users to scan into CCPOR DMS.	Incorporated within the CCPOR UI document attachment UI and external FTP services
ISB.CCPOR.DMS.Integration.2	The system must allow an efficient process to enter metadata for images scanned into CCPOR DMS.	Incorporated within the CCPOR UI document attachment UI and external FTP services
ISB.CCPOR.DMS.Integration.3	The system must provide different options to scan images into CCPOR DMS to support courts with variant business process.	Incorporated within the document link section in the physical architecture
ISB.CCPOR.Database.Integration.1	The system must commit data into CCPOR R&PO repository.	Incorporated within Database section in the physical architecture
ISB.CCPOR.Database.Integration.2	The system must provide a standardized way to load historic order data from every Local Court R&PO repository into CCPOR.	Incorporated within ETL section in the physical architecture

Table 110 DMS and Database Backend Application/System Integration Requirements

#### 4.2.16.3 Functional Errors

The figure below shows the break-down of the Functional errors for the asynchronous image upload use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 58 Asynchronous Image Upload Functional Errors

The table below lists all the error messages to be displayed for all the Functional errors captured in the asynchronous image upload use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	BW Process	CCPOR DMS	BW Process	Invalid metadata	"Please try document upload with different metadata values"

Table 111 Asynchronous Image Upload Functional Errors

#### 4.2.16.4 Non-Functional Errors

The figure below shows the break-down of the Non-Functional errors for the asynchronous image upload use case, demonstrating how the various TIBCO components interact and how the error is propagated.



Figure 59 Asynchronous Image Upload Non-Functional Errors

The table below lists all the error messages to be displayed for all the Non Functional errors captured in the asynchronous image upload use case for the CCPOR Web Portal.

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
1	B2B Server	FTP Server	B2B Server	FTP server unreachable	"EFTP server unreachable"
				FTP get request timeout	" <response description&gt; response timed out. Please check the EFTP server availability."</response 
2	B2B Server	BW Process	B2B Server	EAI process unreachable	"The <request description&gt; request could not</request 

Link # (Figure 5)	Source Component	Destination Component	Handling Component	Error Description	Error Message
					be carried out, due to network failure. Please try again later."
				Response timeout	" <response description&gt; response timed out. Please check the EAI BW services availability."</response 
3	BW Process	CCPOR DMS	BW Process	DMS Server unreachable	"CCPOR DMS unreachable."
				DMS response timeout due to network failure	" <response description&gt; response timed out. Please check the DMS server availability."</response 

Table 112 Asynchronous Image Upload Non-Functional Errors

# 5 PHYSICAL ARCHITECTURE

### 5.1 Services

This section gives sufficient details for an ISB developer to take a deeper look at the different ISB components. Section 4.1 introduced the different components, including the ISB components that need to be implemented for the CCPOR application. Section 4.2 further detailed the sequence diagrams explaining the touch points for these ISB components. This section is intended to further provide details on the services.



Figure 60 Detailed ISB Component View

## 5.1.1 UI Services

#### 5.1.1.1 Overview

The UI services represent the different graphical user interfaces (GUI) that need to be developed for the CCPOR application. The GUI for the application is developed using TIBCO GI software.

#### 5.1.1.2 Modules

Modules in this section refer to the different UI components to be developed in the CCPOR application. The requirements document has captured the detail layout for each of the UI module in the application. The table below provides the business flow associated with each of the UI module. The following table captures the execution sequence for each module which is indicated in Figure above. The complete execution sequence is specified in the table below. However, from the stand point of the UI services, forwarding to the Core Services is the boundary for all the modules presented here.

Module ID	Module Name	Execution Sequence	Remarks
UI.1	Add Order	3(a) User entered order data is routed to the Core Services	
		3(b) Core Services forwards the order data to the DB Services	
		3(c) DB Services inputs the order data to the CCPOR R&PO DB	
		3(f) Core Services forwards the order data to the CARPOS service	
		3(g1) CARPOS service transforms and invokes the DataMaxx API	
UI.2	Draft Order	1(a) User entered draft order data is routed to the Core Services	
		1(b) Core Services forwards the draft order data to the DB services	
		1(c) DB Services inputs the draft order data to the CCPOR R&PO DB	
UI.3	Update Order	Similar to UI.1 with the exception of modified order data	
UI.4	Service Order	Similar to UI.1 with the exception of service order data	
UI.5	Cancel Order	Similar to UI.1 with the exception of cancel order data	
UI.6	Pending Order	1(a) User selects message to view. The data is routed to the Core Services	
		1(b) Core Services forwards the request to the DB services	
		1(c) DB Services fetches the message details from the CCPOR R&PO DB and provides that as a response	
UI.7	Quick Search	Similar to UI.6 with the exception of search criterion passed in request to get the result set back in the response	This functionality is provided on all the order entry screens (Add/Modify/Service/Ca ncel)

UI.8	Upload Attachments	The following is the sequence for upload of images into CCPOR FileNet DMS	This functionality is provided on all the order entry screens
		3(a) User uploaded image is routed to the Core Services	(Add/Modify/Service/Ca ncel)
		3(d1) Core Services forwards the order image to the DMS Services	
		7(d) DMS Services uploads the image to the FileNet DMS	
		The following is the sequence for upload of images into Local DMS	
		3(a) User uploaded image is routed to the Core Services	
		4(d) Core Services forwards the order image to the DATS Services	
		4(e) DATS Services invokes web service to upload the image to the Local DMS	
UI.9	View Order Details	Similar to UI.6 with the exception of order ID passed in request to get the order details in the response	
UI.10	View Attachments	The following is the sequence for view images from CCPOR FileNet DMS	
		Option 1:	
		2(a) Image request is routed via the Core Services/Portal proxy	
		2(b) Image is requested directly from the FileNet workplace	
		Option 2:	
		3(a) Image request is routed to the Core Services using a document ID	
		3(d2) Core Services forwards the request to the DMS Services	
		3(e) DMS Services fetches the image from the FileNet DMS	
		The following is the sequence for upload of images into Local DMS	
		Option 1:	
		4(a) Image request is routed via the Core Services/Portal proxy	
		4(c) Image is requested directly from the Local DMS	

		Option 2:	
		4(a) Image request is routed to the Core Services using a document ID	
		4(d) Core Services forwards the request to the DATS Services	
		4(e) DATS Services fetches the image from the Local DMS using web services	
UI.11	Search	Similar to UI.6 with the exception of search criterion passed in request to get the result set back in the response	
UI.12	Audit Trail	Similar to UI.6 with the exception of audit details to be searched passed in request to get the audit records in the response	
UI.13	Delete Order	1(a) User selects order to be deleted. The data is routed to the Core Services	
		1(b) Core Services forwards the request to the DB services	
		1(c) DB Services marks the order as deleted from the CCPOR R&PO DB	
UI.14	Reports	Similar to UI.6 with the exception of report parameters to be passed in request to get the generated report as response	
UI.15	Role Delegation	Similar to UI.13 with the exception of role delegation addition/modified data passed in request.	
UI.16	Miscellaneous Configuration	Similar to UI.13 with the exception of miscellaneous configuration data passed in request.	
UI.17	Enter Metadata	<ul><li>4(a) User selects the link to enter metadata</li><li>4(b) The user is routed to CCPOR FileNet Workplace to allow browse current images and enter metadata to the images</li></ul>	New Requirement to facilitate a user to be able to enter metadata for an image uploaded using the FTP services

Table 113 UI Services Implementation Modules

### 5.1.2 Core Services

#### 5.1.2.1 Overview

The Core services represent the central processor that governs the flow of data in the CCPOR EAI domain for the CCPOR application. These services are developed using TIBCO BW software.

#### 5.1.2.2 Modules

Modules in this section reference to the different process starters to be developed under Core services in the CCPOR application.

Module ID	Module Name	Execution Sequence	Remarks
Core.1	orderEntry	3(a) User entered order data is routed to the Core Services	Add/Modify/Service/Ca ncel/Delete Orders UI
		3(b) Core Services forwards the order data to the DB Services	this module
		3(c) DB Services inputs the order data to the CCPOR R&PO DB	
		3(f) Core Services forwards the order data to the CARPOS service	
		3(g1) CARPOS service transforms and invokes the DataMaxx API	
Core.2	draftOrder	1(a) User entered draft order data is routed to the Core Services	This business process caters to all Draft Order
		1(b) Core Services forwards the draft order data to the DB services	Scenarios like adding a draft order, view draft order, delete draft
		1(c) DB Services inputs the draft order data to the CCPOR R&PO DB	order
Core.3	pendingOrder	1(a) User selects message to view. The data is routed to the Core Services	This business process caters to all Pending
		1(b) Core Services forwards the request to the DB services	Order Scenarios like retrieving pending messages, fetching
		1(c) DB Services fetches the message details from the CCPOR R&PO DB and provides that as a response	message details etc.
Core.4	searchOrder	1(a) User selects order to view. The data is routed to the Core Services	This business process caters to View Order
		1(b) Core Services forwards the request to the DB services	Details, Search and Reports as well
		1(c) DB Services fetches the order details from the CCPOR R&PO DB and provides that as a response	
Core.5	addDocument	The following is the sequence for upload of images into CCPOR FileNet DMS	This functionality is provided on all the order entry screens
		3(a) User uploaded image is routed to the Core Services	(Add/Modify/Service/Ca ncel)
		3(d1) Core Services forwards the order image to the DMS Services	
		7(d) DMS Services uploads the image to the FileNet DMS	
		The following is the sequence for	

		upload of images into Local DMS	
		3(a) User uploaded image is routed to the Core Services	
		4(d) Core Services forwards the order image to the DATS Services	
		4(e) DATS Services invokes web service to upload the image to the Local DMS	
Core.6	getDocument	The following is the sequence for view images from CCPOR FileNet DMS	
		Option 1:	
		2(a) Image request is routed via the Core Services/Portal proxy	
		2(b) Image is requested directly from the FileNet workplace	
		Option 2:	
		3(a) Image request is routed to the Core Services using a document ID	
		3(d2) Core Services forwards the request to the DMS Services	
		3(e) DMS Services fetches the image from the FileNet DMS	
		The following is the sequence for upload of images into Local DMS	
		Option 1:	
		4(a) Image request is routed via the Core Services/Portal proxy	
		4(c) Image is requested directly from the Local DMS	
		Option 2:	
		4(a) Image request is routed to the Core Services using a document ID	
		4(d) Core Services forwards the request to the DATS Services	
		4(e) DATS Services fetches the image from the Local DMS using web services	
Core.7	getAuditTrail	1(a) User inputs audit trail search parameters. The data is routed to the Core Services	
		1(b) Core Services forwards the request to the DB services	
		1(c) DB Services fetches the audit trail details from the CCPOR R&PO DB and	

		provides that as a response		
Core.8	roleDelegation	1(a) User inputs a new role delegation rule. The data is routed to the Core Services		
		1(b) Core Services forwards the data to the DB services		
		1(c) DB Services inputs the rule into the CCPOR R&PO DB		
Core.9	miscConfigurati on	1(a) User changes the miscellaneous configuration. The data is routed to the Core Services		
		1(b) Core Services forwards the data to the DB services		
		1(c) DB Services inputs the miscellaneous configuration data into the CCPOR R&PO DB and provides that as a response		

Table 114 Core Services Implementation Modules

### 5.1.3 DMS Services

#### 5.1.3.1 Overview

The DMS services represent the different business processes that need to be developed for the CCPOR application to communicate with the CCPOR FileNet DMS implemented for CCPOR. These services are developed using the TIBCO BW software.

### 5.1.3.2 Modules

Modules in this section reference to the different process starters to be developed under DMS services in the CCPOR application.

Module ID	Module Name	Execution Sequence	Remarks
DMS.1	addDocumentF ileNet	<ul> <li>3(d1), 6(c), 7(c) Image along with optional metadata is provided as a request routed to DMS Services</li> <li>7(d) The DMS Services uploads the image to the FileNet DMS</li> </ul>	There are different use cases for adding document with or without metadata
DMS.2	viewDocument FileNet	3(d2) Document ID for the image to be fetched is provided as a request routed to DMS Services	
		3(e) The DMS Services fetches the image from the FileNet DMS and provides as a response	

Table 115 DMS Services Implementation Modules

## 5.1.4 DB Services

#### 5.1.4.1 Overview

The DB services represent the different business processes that need to be developed for the CCPOR application to communicate with the CCPOR R&PO database implemented for CCPOR. These services are developed using the TIBCO BW software.

#### 5.1.4.2 Modules

Modules in this section reference to the different process starters to be developed under DB services in the CCPOR application.

Module ID	Module Name	Execution Sequence	Remarks	
DB.1	orderEntry	3(b) Order data is received as a request from Core Services	request	
		3(c) DB Services inputs the order data to the CCPOR R&PO DB		
DB.2	addConfirmatio n	3(h) Order confirmation is received as a request from CARPOS Services		
		3(c) DB Services inputs the order confirmation to the CCPOR R&PO DB		
DB.3	receiveDocume ntLink	8(b) Document Link data is received from Local DMS court	Refer to section 5.2	
		8(c1) DB Services inputs the document link data to the CCPOR R&PO stage DB		
DB.4	syncDocument Link	This interface is configured to be executed based on a polling interval.	This is a time trigger interface. Refer to	
		8(c2) DB Services reads document link from the CCPOR R&PO stage DB and updates the CCPOR R&PO DB. This process is also responsible for the REPORTED, OBSELETE LINKED flag update. This process is also responsible for any error reports to be configured for Document Link process.	section 5.2	
DB.5	removeExpired Order	This interface is configured to be executed based on a polling interval.	This is a time trigger interface.	
		8(c2) DB Services checks orders in the DB with current expiration date and updates the CCPOR R&PO DB		
DB.6	createMessage s	This interface is configured to be executed based on a polling interval.	This is a time trigger interface.	
		8(c2) DB Services checks orders in the DB without an image associated to the order and create a new message in the DB.		

 Table 116 DB Services Implementation Modules

## 5.1.5 CARPOS Services

#### 5.1.5.1 Overview

The CARPOS services represent the different business processes that need to be developed for the CCPOR application to communicate with the DataMaxx API implemented for CCPOR. These services are developed using the TIBCO BW software.

#### 5.1.5.2 Modules

Modules in this section reference to the different process starters to be developed under CARPOS services in the CCPOR application.

Module ID	Module Name	Execution Sequence	Remarks
CARPOS. 1	orderEntry	3(f) Order data entered is forwarded by Core Services	
		3(g1) CARPOS Services transforms to CARPOS format and invokes the DataMaxx API	
CARPOS. 2	receiveConfirm ation	3(g2) CARPOS confirmation message is received	Core Services originally sends the order data
		3(h) Confirmation data is forwarded to the DB Services	via 3(f) as a request and expects a response for the confirmation.
		3(f) Optionally, confirmation data is also forwarded to the Core Services	There is a timeout of 1 min configured for the response.

Table 117 CARPOS Services Implementation Modules

## 5.1.6 External Web Services

#### 5.1.6.1 Overview

The external web services represent the different business processes that need to be developed for the CCPOR application for different data exchanges to communicate with the Local DMS. These services are developed using the TIBCO BW software.

#### 5.1.6.2 Modules

Modules in this section reference to the different process starters to be developed under CARPOS services in the CCPOR application.

Module ID	Module Name	Execution Sequence	Remarks
EWS.1	orderEntry	5(a) Local Court invokes this web service with order data	
		5(b) DATS Services forwards the order data to the Core Services	
EWS.2	orderSearch	5(a) Local Court invokes this web service with order ID	
		5(b) DATS Services forwards the order ID to the Core Services	

EWS.3	receiveDocume ntLink	<ul><li>8(a) Local Court invokes this web service with document link data</li><li>8(b) DATS Services forwards the document link data to the DB Services</li></ul>	Refer to section 5.2 for information on document link.
EWS.4	getDocument	<ul> <li>4(d) Core Services forwards the document ID to DATS Services to be fetched from Local DMS</li> <li>4(e) DATS Services invokes the Local DMS web service with document ID as a request to get the document as response</li> </ul>	This is a client call from CCPOR to a web service that is hosted at Local DMS

Table 118 External Web Services Implementation Modules

### 5.1.7 External FTP Services

#### 5.1.7.1 Overview

The external FTP services represent the different business processes that need to be developed for the CCPOR application to communicate with the DataMaxx API implemented for CCPOR. These services are developed using the TIBCO BW software.

#### 5.1.7.2 Modules

Modules in this section reference to the different process starters to be developed under CARPOS services in the CCPOR application.

Module ID	Module Name	Execution Sequence	Remarks
EFS.1	addDocument	6(a), 7(a) CCPOR DMS courts would FTP document images along with optional metadata to Enterprise FTP	Refer to section 5.2 for information on document link.
		6(b), 7(b) DATS Services picks up new files arrived in the Image Staging area	
		6(c), 7(c) DATS Service forwards the image along with the optional metadata to the DMS Services	

Table 119 External FTP Services Implementation Modules

### 5.2 Document Link

### 5.2.1 Overview

Each court needs to maintain an image/copy of the order in addition to submitting R&PO data into the CARPOS. Since CARPOS does not maintain these documents, courts today maintain these documents either in their paper form or in their electronic format in local Document management systems. One of the central goals of CCPOR, besides being a centralized repository of R&PO data, would be to act as a central repository for such documents and providing state wide access to them.

To facilitate this, courts would be expected to scan these documents into a Document Management System (DMS), along with submitting the R&PO data to CARPOS. As an extension to these activities, each document scanned and submitted to a DMS needs to be associated to its corresponding Order in CCPOR.

This association of a document image to an order could be manually achieved, but with increasingly volumes this task would be highly taxing and time consuming, possibly affecting DOJ mandated SLAs for R&PO data entry. To manage this workload and avoid any such delays, some courts distribute the task of R&PO data entry to CARPOS and supporting document submission into a DMS, among separate group of users.

Document Auto-Linking allows the tasks of R&PO data submission to CARPOS and supporting document submission to a Local DMS to be performed independently, by dynamically associating the document in the DMS to the R&PO data in CCPOR, behind the scenes with no user intervention. Document Auto-Linking is achieved by matching the indexing/meta-data entered with the document in the DMS to the R&PO data in CCPOR.

The Document Auto-Linking process and the meta-data information required to perform a Document Auto-Link are discussed in the following sections.

## 5.2.2 Document Auto-Linking Process

#### 5.2.2.1 Overview

As discussed, a Document Auto-Linking process is required at courts where the document image is submitted to a Local DMS. Courts, where documents will be manually associated to its Order, using the CCPOR Graphical User Interface, will require no such Auto-Link process.

To understand the Document Auto-Linking process better, it is important to examine the components involved in the Document Auto-Linking Process.

- 1. The source of document meta-data
- 2. The document meta-data staging table in CCPOR
- 3. The order associated documents table in CCPOR
- 4. The order master table

#### 5.2.2.2 Source of Meta-Data

CCPOR primarily receives the Document Meta-data, required to associate it with its order, from two sources.

- 1. Document Auto-Link Web Services
- 2. CCPOR DMS(IBM FileNet)

The details on how the Document Meta-data are structured and how this Document Meta-data can be made available to CCPOR will be discussed in the upcoming sections.

Broadly, Document Meta-data will hold:

- 1. Court the document belongs to
- 2. The unique document identifier of document in its DMS
- 3. The name of the document
- 4. A set of attributes that can uniquely identify the Order in CCPOR that the document belongs to

### 5.2.2.3 Document Meta-data Staging Location (RPO\_META)

Once the Document Meta-data is received from the two above said sources, they are stored with in a CCPOR Staging location; this is the RPO\_META table in the CCPOR Database. Each set of Document Meta-Data in this Staging location is associated with a LINKED flag.

LINKED flag indicates the state of the Document Meta-data, as to if this meta-data was successfully used to link the document it represents to an order or not.

LINKED flag can have the following states:

- 1. TRUE: Meta-data was successfully used to associate the document it represents to the Order it belongs to. System will ignore Meta-data in this state during the Document Auto-Link process.
- 2. FALSE: Meta-data hasn't yet been successfully used to associate the document it represents to the Order it belongs to. The system looks for meta-data in this LINKED state during the Document Auto-Link process. All newly arrived Meta-data are in this state.
- 3. REPORTED: All Document Meta-data which haven't been successfully used to associate the document they represent, within the first 24hours of their arrival, are reported back to the courts they belong to, prior to which these Meta-data are flagged as REPORTED. This flag prevents the system from reporting these Meta-data, again, during the next reporting cycle.
- 4. OBSOLETE: If, after a pre-determined time frame, the Meta-data cannot be used to successfully associate the document it represents to the Order it belongs to, the Meta-data is flagged as OBSOLETE. This flag informs the system not to attempt linking the document the Meta-data represents to an Order in CCPOR, improving performance by eliminating redundancy.

The Document Auto-Link process monitors and polls this Staging location in its attempt to associate submitted documents in DMS to their corresponding orders in CCPOR.

#### 5.2.2.4 Order Associated Documents Location/Attached Documents List (RPO\_DOCS)

List of documents successfully associated to an Order within CCPOR are stored in the RPO\_DOCS tables within CCPOR Database. As part of the Document Auto-Link process, a successful match of a Document's Meta-data to an Order in CCPOR will lead to the document being associated/ linked to the Order.

In order to create this association/link between the order and the document, the Document Auto-Link will insert the Document's Document ID and Document Name against the Order's Order ID in the RPO\_DOCS, effectively creating the Document Link to the Order.

Note that the RPO\_DOCS also holds documents submitted to a DMS using the CCPOR Graphical User Interface, and manually associated/linked to an Order without requiring a Document Auto-Link.

#### 5.2.2.5 Order Master Table (RPO\_MAST)

Order Master Table (RPO\_MAST) is the part of the CCPOR database schema to hold the R&PO data, and is the Master table to which the child tables hold referential integrity. As final step in the Document Auto-Link Process, the system updates this master table with the Order's Image association status. The Order's Image Association Status is required to identify and report Orders which do not have supporting documents associated to them, within the first 24hours of their entry.

Document Auto-Link process updates this Image Association flag in the Order Master Table, upon a successful association of a Document in the DMS to its Order in CCPOR.

The diagram below shows the process flow of the Document Auto-Link process and it interactions with the above discussed components.



The Document Meta-Data required to Auto-Link a document in the DMS to an Order in CCPOR is received either through Document Auto-Link Web-Service hosted by CCPOR, or from the CCPOR IBM FileNet DMS. The Meta-Data received will be stored in the RPO\_META table, which acts as a Staging location for all Meta-Data received. CCPOR Document Auto-Link process monitors and polls this staging location regularly, for all unassociated meta-data. An unassociated meta-data can be either in the FALSE or REPORTED, LINKED state. The Document Auto-Link process picks all such unassociated meta-data, and tries to match the specific order information present in the meta-data to an existing order in CCPOR's RPO\_MAST table.

Though, the submission of the document to the DMS and the entry of order in CCPOR can happen independently in different time frames, leading to the existence of a document in the DMS without a corresponding order in CCPOR and vice-versa; CCPOR expects that the entry of a order in CCPOR and reception of the meta-data for the corresponding document, happen with a 24 business hour time frame. Unassociated documents within this 24 business hours time frame are reported, and their LINKED status changed to REPORTED. And Unassociated Orders with no documents within this 24 business hours time frame are reported based on their Image Association Status.

When the a successful match is made between the Document Meta-Data and an Order in CCPOR by the Document Auto-Link process, the process creates a Order-Document Link. An Order-Document Link is reference in the order to a unique document identifier. Once this link is established it can be used to retrieve this document from a DMS using the unique document identifier in the order information.

In CCPOR link will be established between OrderID and DocumentID. OrderID can uniquely identify an order, and DocumentID can uniquely identify an Order based upon DMS the document belongs to. Upon a positive match, this Order-Document link information is inserted in to Order Associated Documents table, RPO\_DOCS. RPO\_DOCS will hold the list of all documents linked to a specific order. Further, the Meta-data staging location, RPO\_META, will be updated with the LINKED status of meta-data to TRUE, indicating a successfully match. Also, if the Order has no documents associated to it, the Image Association Status of Order in the RPO\_MAST is updated accordingly.

After the Document Auto-Link process goes through the entire set of unassociated meta-data in the RPO\_META table, attempting to link them to an order, the process execution ends. Note that, Document Auto-Link is a time driven process, and is executed at regular intervals based upon the volumes and time intervals of new orders entered and meta-data received.

### 5.2.3 Document Meta-data

#### 5.2.3.1 Overview

Document Meta-data is information accompanying a document in a DMS, that can both uniquely identify the document in the DMS and the Order this document relates to. In this respect, document meta-data takes a central role in defining as Document-Order Auto-Link process.

Taking into account, the numerous courts and varying practices of Order data entry and document submission, standardizing the Document Meta-data is crucial to an efficient Document Auto-Link process.

CCPOR will expect the following Meta-data with all documents corresponding to Orders in CCPOR.

Meta data element	Required	Description
DocumentID	Υ	The unique document identifier of the Document in the DMS
DocumentName	Υ	The name of the document
CNT	Υ	Couft the document belongs to

CCN	Υ	The court case number for the order
NAM	Ν	Restrained Person Name for the order
PPN	Ν	Protected Person Name for the order
FCN	Ν	File Control Number for the order

#### Table 120 Document Meta-data Elements

Note that in the above table above NAM, PPN and FCN are only conditionally not required. Courts can choose between a combination of CNT, CCN, NAM &PPN and CNT, CCN & FCN to be specified in the meta-data, to uniquely identify the order in CCPOR. At the very least, either of the two combinations is required to uniquely identify the order. Courts can also choose to provide valid values for all three not-required elements in the meta-data set. Failing to provide adequate meta-data information or providing incorrect meta-data information can cause the Document Auto-link to completely fail or link incorrectly; hence utmost care should be taken to provide accurate and complete meta-data information.

Based upon the courts set up and the courts CCPOR on-boarding option courts can provide meta-data information to CCPOR in the following ways.

- 1. Local DMS courts
  - a. CCPOR Document Auto-Link Web-service
- 2. CCPOR DMS courts
  - a. IBM FileNet Workplace
  - b. Upload meta-data in a file via FTP

#### 5.2.3.2 Local DMS Courts: CCPOR Document Auto-Link Web Service

For courts with existing local DMS repositories CCPOR will host a Web-Service for publishing Meta-data for documents submitted to their local repositories. Courts will be required to publish the meta-data to the CCPOR Document Auto-Link Web-Service for every document submitted to their local DMS, relating to an order in CCPOR. Courts can choose to publish this information instantaneously with every document submission or choose to send them in bulk at regular intervals.

The WSDL for this Web Service can be reviewed in the Appendix F.

The schema specifications for the WSDL



### 5.2.3.2.1 DocumentObjectRequest

Y - Yes N - No C - Conditional.

Element Name	Required	Description
ld	Y	Document Id of the object being retrieved.
--------------------	---	--
MetadataProperties	Ν	MetadataProperties

### Table 121 DocumentObjectRequest schema for Local DMS



# 5.2.3.2.2 DocumentObjectResponse

Y – Yes N – No C – Conditional.			
Element Name	Required	Description	
ld	Y	Document Id of the object being retrieved.	
Value	Y	The value or content of the document object.	
MetadataProperties	С	MetadataProperties	

Table 122 DocumentObjectResponse schema for Local DMS



The above schema for meta-data follows the same rule defined for all meta-data submissions to CCPOR.

The response to the Web Service request sending the meta-data information to CCPOR will contain information on whether the meta-data was successfully loaded into the CCPOR Document Meta-data staging location(RPO\_META), this will typically be structured in form of DocumentID for the document followed by a SUCCESS message or the cause for an error.

#### 5.2.3.3 CCPOR DMS Courts

Courts that will be using the CCPOR DMS as their document repository for R&PO, have three options of submitting documents to the DMS.

- 1. Using the CCPOR Graphical User Interface to upload documents at data entry
- 2. Using the IBM FileNet Capture (installed at Court) to upload documents
- 3. Uploading documents to CCPOR polled FTP location.

Of these, using CCPOR Graphical User Interface does not involve any auto-linking and hence does not require any supporting meta-data with the uploaded document.

Uploading documents to CCPOR DMS using either FileNet Workplace or using an FTP site polled by CCPOR require additional meta-data information to be provided with the documents.

#### 5.2.3.4 IBM FileNet Capture

Courts submitting documents directly using the FileNet Capture, that is installed at the Court. In this case, the FileNet capture is integrated with the CCPOR FileNet at CCTC. The meta-data here follows the same rule described earlier in this section, except, no document information would be required as part of the meta-data. Users using the capture would only be asked to enter the Order specific information (CCN, NAM, PPN, and FCN) as meta-data when they choose to a document to enter meta-data.

#### 5.2.3.5 Upload documents to CCPOR polled FTP location

Courts uploading documents to a CCPOR polled FTP location, have two alternatives to provide the required meta-data.

- 1. Upload only the documents to the FTP site.
- 2. Package each document with a meta-data file and upload the package to the FTP site

CCPOR constantly polls this FTP site for any newly uploaded document, once a document is found, CCPOR forwards this document to its DMS Service which then uploads the document into the DMS. In case the document is packaged with a meta-data file it updates the document's meta-data with the information in the file.

In cases where the courts only upload the document to the FTP site, the court needs to use the FileNet Workplace (via CCPOR UI) to update the document's meta-data information in the DMS. The document name should be unique.

But, in cases where the court might want to do bulk uploads of such documents and employ custom applications, the court can choose to package these documents. CCPOR expects the following format in such scenarios:

- 1. Each document in a separate package
- 2. The package must contain the document (within a unique document name) and a *metadata\_<documentname>.xml.* where *documentname* is the unique document name
- 3. metadata\_<documentname>.xml will contain the metadata information for document in the package
- 4. The meta-data here follows the same rule described earlier in this section

5. The metadata\_<documentname>.xml has a schema similar to the CCPOR Document-Auto Link Web-Service request schema, expect for the absence of DocumentID



Multiple such packages will be placed on the FTP and subsequently processed by CCPOR, in case of Bulk Uploads. Following the retrieval of such package from the FTP site, CCPOR uploads the document from the package into the DMS and obtains a DocumentID for it. This DocumentID along with the metadata information from metadata.xml is updated in the DMS by CCPOR.

After attempting to update the meta-data for all packaged documents from the FTP, CCPOR will place a *meta-response\_<documentname>.xml* on the FTP site for the County's review, as a response to metadata\_<documentname>.xml; this will typically be structured in form of DocumentName of the document followed by a SUCCESS message or the cause for an error.

Following the update of meta-data information for the document in IBM FileNet, the meta-data information is passed on CCPOR and populated in Document Meta-data Staging location (RPO\_META) for the Document Auto-Linking Process.

A pictorial representation of the various meta-data submission processes and their process flow is show in the diagram below.



Figure 62 Meta-data submission process

### 5.3 CCPOR Database

### 5.3.1 Overview

The CCPOR database plays a central role in the CCPOR Application, as the database will be the envisioned centralized repository of all R&PO data across the State of California. This vision is at the center of the CCPOR database design.

The CCPOR database has the following design influences:

- 1. A centralized repository for all R&PO data mandated by the DOJ to be submitted into CARPOS
- 2. Accommodate the diverse R&PO data schemas and R&PO data entry practices at courts
- 3. An efficient database for CCPOR Application

CCPOR database is designed to hold all DOJ mandated R&PO data, as defined in the CLETS manual. The entire database, the individuals tables, relationship between individual tables, individual fields are all influenced by the CARPOS R&PO data requirements. A Gap Analysis between the existing Orange County R&PO system database schema and the CCPOR database's envisioned schema was also conducted, and taken into consideration for the design.

The database is designed with the consideration to the numerous R&PO database schemas that might exist at the local repositories, and the varying R&PO data entry practices at the courts. This design consideration is also vital to allow data migration from local repositories into CCPOR.

Finally, the CCPOR Application is expected to be highly available with huge volumes data intensive queries expected from across the state, in such a scenario an efficient database is crucial. Though, achieving optimal database performance will be an ongoing task with database tuning, database normalization and indexing have been incorporated into the database design.

The following sections will discuss the CCPOR Database schema in detail. It is important to note that the Database design will be an ongoing task and can be expected to grow and undergo some modification during the implementation phase.

### 5.3.2 CCPOR Database Schema

The Entity-Relationship Model below is depicts a graphical representation of the CCPOR Database Schema.

#### 5.3.2.1 Interpreting the ER model

- 1. Each block in the diagram represents a table in the database.
- 2. The name of table is mentioned at the header of the block.
- 3. The rows below the headers mention the columns in the table
- 4. Column names in bold indicate a required (not null) value in the column.
- 5. The first row of the block (below the header) indicates the keys of this table.
- 6. Columns with PK against them indicate them as the primary key(s) of table.
- 7. Columns with FK against them indicate them as the foreign key of the table.
- 8. Arrows indicate a relationship between the tables (referential integrity).
- 9. Tables with arrows going out, indicate that they are related-to (refer to) to table with this arrow going-in, via the Foreign Key of the table.
- 10. Tables with no arrow going-in or going-out are not related to any other table.
- 11. RPO\_MAST is the Master Table.

CCPOR Database:ER Model



Figure 63 CCPOR DB ER diagram

#### 5.3.2.2 Design

The tables are designed based on the functional set of data they hold. Some of the tables have also been designed to provide better normalization of the R&PO data.

#### 5.3.2.3 Nomenclature

The tables are named based on the functional set of data they hold. All table names are prefixed with a "RPO" to indicate the schema they belong to. *Table Name: RPO\_<table-name>* 

All columns with in tables holding R&PO data are named as in CARPOS, followed by the table name they belong to.

Column Name: <CARPOS-Name>\_<table-name>

#### 5.3.2.4 OrderID

In the absence of a widely used unique identifier to identify an Order, CCPOR will use an OrderID to uniquely identify all its orders. OrderID will be system generated identifier, especially for system use and invisible to the user. Every time a new order enters the CCPOR system, it will be assigned a unique OrderID, and referred using this OrderID from then on.

#### 5.3.2.5 Relationships

All tables holding R&PO related data are related to R&PO Master table (RPO\_MAST) via the OrderID Foreign Key. This referential integrity helps in the normalization of the R&PO data.

#### 5.3.2.6 Indexes

Indexes have been created on the following table columns. Indexes have also been placed on table columns which will be queried frequently as part of Order Search to speed up the search.

#### <Open Item>

#### 5.3.2.7 Tables

The table below lists the tables, description of the tables and their usage in the CCPOR Database.

Table Name	Description	Usage
RPO_ACK	Holds all CARPOS acknowledgements	CARPOS Service
RPO_AKA	Holds restrained person aliases	R&PO Data
RPO_APP	Holds additional protected persons	R&PO Data
RPO_DOCS	Holds attachments to order	DMS Service: Auto-link
RPO_DMS	Holds available DMS instances info	DMS Service
RPO_DOJ	Holds log of messages sent to DOJ	CARPOS Service
RPO_META	Holds document indexing info	DMS Service: Auto-link
RPO_MAST	Master table, holds order detail	R&PO Data
RPO_NCIC	Holds NCIC inquiry info	CCPOR App
RPO_RPD	Holds restrained person info	R&PO Data
RPO_SERV	Hold proof of service info	R&PO Data
RPO_VIO	Holds violation info	R&PO Data
RPO_SMT	Holds restrained person's scars, marks, tattoos info	R&PO Data
RPO_CMC	Holds medical conditions of the restrained person	R&PO Data
RPO_MNU	Holds miscellaneous number information	R&PO Data
RPO_OLG	Holds restrained person's operator license group info	R&PO Data
RPO_LIG	Holds restrained person's license group info	R&PO Data

RPO_VEG Holds restrained person's vehicle group info	R&PO Data	Т
--	-----------	---

Table 123 CCPOR R&PO DB Tables

#### 5.3.2.8 Column Format

All table columns holding R&PO data are of same data type and size as mandated by DOJ, and as defined in the CLETS Manual.

#### 5.3.2.9 Column Value Requirement Rule

All table columns holding R&PO data follow the same requirement rules on values as mandated by DOJ, and as defined in the CLETS Manual.

A detailed description of table columns in each of the above mentioned tables, with their description, their format, and their requirement rule can be found in document attached in the Appendix G. Each table is exclusively defined in a separate sheet of the workbook, identified by the table name as the sheet name.

Oracle SQL Create Scripts for the CCPOR Database and its tables can be found in the Appendix H.

### 5.3.3 Databases

The following is the list of various instances of CCPOR Schema that will be used during the development lifecycle of CCPOR Application.

Database Name	Usage
RPO_DEV	Used for CCPOR application development activities
RPO_ETL_DEV	Used for CCPOR ETL activities
RPO_ETL_STG	Used for storing migrated data post Quality Assurance tests
RPO_PRD	CCPOR Production database

Table 124 CCPOR R&PO DB Instances

# 5.4 Data Migration: Extract, Transform & Load (ETL)

### 5.4.1 Overview

As part of the CCPOR Application's effort to form a centralized R&PO repository for the State of California, R&PO data from local repositories will have to be incorporated into CCPOR. This R&PO data will include data submitted into respective local repositories prior to the CCPOR Application going live. This will help make CCPOR a more complete set of R&PO data, allowing users across the State of California access to a wider set of historical and current R&PO data.

Currently, some courts maintain such local repositories to store their R&PO data. These repositories could be built around varying data schemas, dictated by their specific needs. In order to accommodate all such data schemas, CCPOR Application will define a generic & repeatable process to extract R&PO data out of such schemas and load them into CCPOR. This process would be followed for all courts with local repository prior to the court coming on-board CCPOR.

The details of this process are defined in the sections following.

### 5.4.2 ETL Approach

Considering, the various entities and schemas involved in the effort to migrate the data from, and into a centralized repository, defining a

- 1. A standardized repeatable process to perform the extract, transfer and load
- 2. A data migration pattern
- 3. A standard ETL schema to address all the diverse schemas becomes important.

The following sections discuss these two components in details.

#### 5.4.2.1 Process Description

The process to migrating R&PO data from local repositories into CCPOR will be performed in the following sequence of activities:

- 1. Extract R&PO data from local repository
- 2. Transform the R&PO data extracted into the Standard ETL Schema
- 3. Transform the R&PO data from Standard ETL Schema to CCPOR Schema
- 4. Load the transformed R&PO data into the CCPOR ETL Development repository
- 5. Test the loaded R&PO data for integrity, cleanse if required
- 6. Promote the tested R&PO into CCPOR ETL STAGE repository

Note: Steps 1 and 2 above are responsibility of each local repository court that is involved in the ETL migration phase. The approach to provide the data in a standard ETL schema is totally at the local court's discretion.

Once the R&PO data moves from local repository into the CCPOR ETL STAGE, the process would be considered successful complete. This process will be repeated for all data sets provided, until the entire data is successfully moved into CCPOR. Any errors during this process will be reported back to the responsible entities, as will the successful completions.

A pictorial representation of this process is shown in the diagram below.

# CCPOR ETL Process



The process to migrate data from local repository into CCPOR will be initiated on a court chosen time frame (prior to coming on-board CCPOR), providing ample room to successfully migrate all desired R&PO data into CCPOR.

# 5.4.2.1.1 Extract data from local repository

This will be the first task to be executed in the R&PO data migration from local repository to CCPOR, and will initiate the ETL process. All R&PO data chosen to be migrated to CCPOR will be marked for extraction. This task will be performed by entities managing the local repository.

### 5.4.2.1.2 Transform the data into Standard ETL Schema

As the R&PO data is being extracted from local repository they will probably require some form of transformation to be aptly captured in the CCPOR Standard ETL Schema. These transformations might be required for the schema as a whole or at the elements comprising these schemas. It is recommended that some form of analysis be performed between the local repository schema and CCPOR Standard ETL Schema before initiating this process to properly evaluate such transformations, and determine where each individual element from the local repository schema fits in the CCPOR Standard ETL Schema. It is also recommended that some local repository schema SME perform this analysis, and the actual transformations. The CCPOR ETL Schema will be described in the forthcoming sections.

Once the required R&PO data is extracted and transformed into the CCPOR ETL Schema, the extracts are dropped at a pre-defined Enterprise FTP site at CCTC, to be picked up by the CCPOR Application. The involved entities could choose to generate one large extract file to capture the entire transformed data set or split the transformed data set among multiple extract files. This is the point at which the process moves from the individual court realm in to the CCPOR Application's realm (see diagram above).

# 5.4.2.1.3 Transform data from Standard ETL schema to CCPOR schema

The CCPOR Application picks the extracts from the Enterprise FTP site, and begins the process of transforming the R&PO data in CCPOR Standard ETL Schema into CCPOR Schema. Based on the size

of the extract file, the entire data set in the extract file might be read for transformation or the data set might be broken into subsets for optimal transformation. Before the extract files are transformed, the extract files are backed up in case the original extract files are corrupted during the transformation process.

As with the transformation from local repository schema to CCPOR Standard ETL Schema, some form of analysis will be performed between CCPOR Standard ETL Schema and CCPOR Schema to evaluate the required transformations. Since, the transformation from CCPOR Standard ETL Schema to CCPOR Schema will be performed often and the high volumes of data being considered for the migration; the transformation will be automated using an ETL tool like TIBCO DataExchange.

All errors encountered during the transformation are documented and reported back to the entities the extract files are received from. Errors encountered during transformation can be: data validation, incorrect data type, invalid format, and required data missing.

# 5.4.2.1.4 Load transformed data into CCPOR ETL DEV

The R&PO data from the extracted files after transformation into CCPOR schema will first be loaded into the CCPOR ETL development (DEV) database. This task will also be automated by an ETL tool like TIBCO DataExchange. All errors encountered during the loading of the transformed data are documented and reported back. Error encountered during loading data into database can typically be database integrity violations like duplicates and referential integrity violation.

# 5.4.2.1.5 Quality Assurance of data loaded into CCPOR ETL DEV

The data loaded into CCPOR ETL DEV database goes through a Quality Assurance phase, to ensure that the extract, transform and load of R&PO from source to target are accurate. Considering, the various points of hand-off and transformation the R&PO data goes through in the data migration process, it is important to perform a quality assurance to validate the data integrity of migrated data. Anomalies encountered in the data during Quality Assurance are documented and are reported to the source entity. Some of such anomalies may be rectified by a simple Data Cleansing process. This task may be automated.

### 5.4.2.1.6 Promote the tested data into CCPOR ETL STAGE repository

As a final step in the data migration process, the R&PO data after passing a Quality Assurance test in CCPOR ETL DEV is promoted to the CCPOR ETL STAGE. This prevents the corruption of this clean set of data from any future transactions on the CCPOR ETL DEV. Note that all data received during a Phase will be promoted to STAGE in a single set after quality test in DEV. The phased approach to data migration is discussed in the next sections.

Also note that, after the completion of all phases in the data migration, the R&PO data will be finally moved to the CCPOR Production database, which will be the central repository.

#### 5.4.2.2 Incremental/Phased Data Migration

The above mentioned ETL process to migrate data from local repositories into CCPOR can be performed in various data migration patterns. CCPOR will implement an Incremental/Phased approach to data migration. In an Incremental/Phased migration the entire data set needed to be migrated to the new system is moved in sets, at a pre-defined time frame, with each set of migrated data complementing the previously migrated data. This pattern allows the existing system the flexibility to function as usual until the new system is deemed ready; against a big-bang pattern in which the current system is cut-off postmigration. This pattern also allows enough room to revert back to the existing system in case any major concerns are encountered during data migration. But, the biggest factor to influence an Incremental/Phased approach is the size of data involved. A huge data set will increase the time to migrate and the possibility of errors during migration, distributing the migration into phases allows us to mitigate some of these effects, and provides enough response-time to address any fatal concerns encountered.

In case of CCPOR, the courts with local repositories will begin the first phase of migration at a predetermined time, before the court is on-board CCPOR. And, follow up with similar data migration efforts for newly arrived data in their local repositories, up till the point the court begins to use the CCPOR Application interfaces. This will ensure that the court's required R&PO data exists in CCPOR before they start using the CCPOR Application, and avoids any last minute delays due to data migration.

The various phases of R&PO data migration in CCPOR are discussed in next sections. The diagram below gives a graphical representation of these phases. The various are represented using colored boundaries.



CCPOR: California Courts Protective Order Registry	INITIAL CUT-OFF DATE: Pre-selected date up-to which, courts
CCTC: California Courts Technology Center	will extract all R & PO data from their local repositories into CSVs
ISB : Integration Services Backbone	for Phase I
AOC : Administrative Office of Courts	<b>INTERMEDIARY CUT-OFF DATE</b> : Date approximately 2 weeks
CSV : Comma Seperated Values	before the CCPOR Application Go-Live or County On-Board Date
FTP : File Transfer Protocol	date up-to which, courts will extract R & PO data submitted since
R&PO : Restraining & Protective Orders	
ETL : Extract, Transform & Load	FINAL CUT-OFF DATE: CCPOR Application Go-Live Date or
QA : Quality Assurance	County On-Board Date

Figure 65 CCPOR ETL Phases

# 5.4.2.2.1 Phase I

Courts with local repositories before coming on-board CCPOR will choose a date to begin the R&PO data migration into CCPOR. This chosen date to initiate the data migration effort will be the INITIAL CUT-OFF DATE. As part of the data migration effort for Phase I, all R&PO data submitted in the local repository up to the INITIAL CUT-OFF DATE will need to extracted, transformed and loaded into CCPOR Standard ETL Schema extract files. As will be discussed in the upcoming sections, the CCPOR Standard ETL Schema extract files will be Comma Separated Value files. These extract files are then handed over to CCPOR Application to be transformed and loaded into CCPOR. The extract of R&PO data from local repository, transform and load into CCPOR will follow the previously discussed process. Note from the above diagram that, the CCPOR ETL Development database to store data before Quality Assurance will be referred to as RPO ETL DEV and the staging database after Quality Assurance will be referred to as RPO ETL STG. Also note a separate RPO DEV database which will be used for other CCPOR Application development activities to avoid any interference with ETL activities or corruption of ETL data. The RPO ETL Process will be the automated process in TIBCO DataExchange to transform the received extract files (CSVs) in the CCPOR Standard ETL Schema into CCPOR Schema and load it into RPO ETL DEV database. Once, all the data for this phase is successfully loaded into RPO ETL DEV and passes a Quality Assurance test, the entire data for THIS phase in moved from RPO\_ETL\_DEV to RPO ETL STG.

Phase I will be the largest data migration effort among all the phases involved, considering the size of the data set to be migrated. It becomes imperative that this phase be initiated with enough lead time before the court is on-board CCPOR, to tackle any data migration issues and avoid last minutes delays.

# 5.4.2.2.2 Phase II

Phase II of the data migration effort will be initiated approximately 2 weeks before the court is on-board CCPOR. The court will choose an INTERMEDIARY CUT-OFF DATE for this phase, which will typically be the date the court decides to begin the R&PO data extraction for this phase. All data submitted on or before this INTERMEDIARY CUT-OFF DATE, but after the INITIAL CUT-OFF DATE, will be extracted in this phase. This might be new order data submitted during this time-frame or modifications (modify/service/cancel) to previously submitted order data. Based on how far apart Phase I and Phase II are and the volumes of R&PO data submitted, the effort on this phase might vary. If the court deems the data set for this phase too small, it might choose to merge this phase with Phase III.

This implies that the entities handling the ETL process at the courts need to implement a mechanism to track the various phases in the data migration, this is essential to identify which data set (and which orders in specific) were migrated as part of the pervious phase. This is important since the CCPOR ETL Process (RPO\_ETL) will simply overwrite the newly received data for the order, over the previous order for that data, to avoid occurrence of duplicates in the system.

The delta of data received between INITIAL CUT-OFF DATE and INTERMEDIARY CUT-OFF DATE is applied to the RPO\_ETL\_DEV database and subject to a Quality Assurance (QA) process. At this point, the RPO\_ETL\_DEV is a replica of the local R&PO repository as of the INTERMEDIARY CUT-OFF DATE. The entire updated R&PO data set from RPO\_ETL\_DEV is moved to RPO\_ETL\_STG after QA.

# 5.4.2.2.3 Phase III

Phase III will be initiated on the day the court is on-board CCPOR, and submits R&PO data through CCPOR. For some courts this date will be CCPOR Go-Live date. This date will be referred to as FINAL CUT-OFF DATE. All data submitted before this FINAL CUT-OFF DATE, but after the INTERMEDIARY CUT-OFF DATE, will be migrated in this phase. This might be new order data submitted during this time-frame or modifications (modify/service/cancel) to previously submitted order data. It is recommended that the court, first, execute this phase to completion before performing any other CCPOR related activity, when it comes on-board CCPOR.

Again, based on the size of the data set to be migrated, considering it will only be two weeks of R&PO data, the counties have two options to get this R&PO data into CCPOR.

### 5.4.2.2.3.1 Option 1 ETL Process

The courts can choose to utilize the previously established ETL process, and provide extracts of the R&PO data submitted between the FINAL and INTERMEDIARY CUT-OFF DATE. The R&PO data migrated using this option will go through the RPO\_ETL\_DEV and RPO\_ETL\_STG (after transformation and QA), before it reaches the RPO\_PRD, the final CCPOR Application Repository. This would mean that the new updates to R&PO data between FINAL and INTEREDIARY CUT-OFF DATE will take noticeable time to show up on the CCPOR Application Interface.

### 5.4.2.2.3.2 Option 1 CCPOR Application Interface

The courts may choose to use either the CCPOR Application Graphical User Interface or the CCPOR Application Web Service Interface.

Using the CCPOR Application Graphical User Interface would mean re-entering the newly submitted orders and modifying the previously submitted orders. The courts could also choose to use the CCPOR Application Web Service Interface to get the R&PO data updates received between FINAL & INTERMEDIARY CUT-OFF into CCPOR. The CCPOR Application Web Service Interface will be provided to the courts coming on-board CCPOR on an interim basis to help them in the transition process.

Updates to R&PO data using this option would be instantaneously reflected on the CCPOR Application Interface, since these updates will be made directly on the RPO\_PRD, the final CCPOR Application Repository. Since, these updates will be made directly on the final repository, extra care must be taken to make sure that the new updates to R&PO data are applied carefully.

The diagram below provides a graphical representation of the Phase III Option 2.

# CCPOR: ETL Process Phase III-Option 2



Figure 66 CCPOR ETL Process Phase III-Option 2

### 5.4.2.2.4 Phase IV

Phase IV is initiated as part of the court's CCPOR on-boarding process, preferably as close to the court's actual on-boarding date as possible. This phase simply involves moving court's all available R&PO data in RPO\_ETL\_STG, received as part of the data migration process, to the final CCPOR Application Repository (RPO\_PROD). This phase also guarantees that the court users have access to the latest R&PO data when they are on-board CCPOR.

### 5.4.2.3 CCPOR Standard ETL Schema

With a diverse set of data schema that could be used to capture R&PO data at local repositories, a Standard ETL Schema is required to abstract all such schemas and define a repeatable process around this schema. As mentioned before defining such a repeatable process helps avoid redefining the schema and process, when a new local repository with a different data schema is encountered.

CCPOR Standard ETL Schema is defined in Comma Separate Value (CSV) format. CSVs are a light weight mechanism to capture data, as they are void of format tags, as in XML. This allows CSV to capture more data compared to XML in files of similar sizes. Also, CSVs can be parsed with much ease using simple tools capable of parsing strings. XML on the other hand, require the aid of complex XML Parsers to extract data out of them. CSVs for these reasons have been a standard in huge ETL undertakings, like the one required for CCPOR.

The CCPOR Standard ETL Schema mimics the actual CCPOR Database Schema very closely, this reduces the number of transformations (if any) required to load the data into CCPOR ETL DEV Database. The CCPOR Standard ETL Schema is attached in the Appendix E

The CCPOR Standard ETL Schema is defined to capture the entire order data, along with the relations various sets of order data might have with each other. In order to capture these relations within the order data aptly, the complete order data schema is spread across multiple CSVs with a unique set of specialized order data in a separate CSV and uniquely related to a main CSV. These distributed CSVs put together will capture the entire data related to an order.

### 5.4.2.3.1 Interpreting CCPOR standard ETL schema

Below are the key points to consider while interpreting the CCPOR Standard ETL Schema as defined in the *CCPOR\_Standard\_ETL\_Schema.xls.* This will be useful during the analysis phase before the ETL process is initiated. These can also be found on the workbook at the ETL\_ReadMe tab.

- a. R & PO data will be extracted from the local repositories into a set a extract files(CSV)
- b. The set of extract files put together are built to hold the entire order data
- c. The set of extract files together are built to maintain the relations with in an order data
- d. To maintain the integrity of an Order, all data required for an Order by CARPOS should be appropriately extracted into the corresponding extract file.
- e. The workbook explains the expected format of the extract files(CSVs)
- f. Each sheet in the workbook corresponds to a extract file (CSV)
- g. The sheets are named with the expected names for the extract files
- h. **OrderDetails.csv** holds the master data for an Order, other extract files hold data related to this master data
- i. Each line in the extract file(CSV) holds a RECORD
- j. Each RECORD holds fields/columns values separated by comma(,)
- k. Each RECORD ends at a new line character
- I. The sheets in the workbook describe the various extract files and the expected *Fields/Columns* in them
- m. The *Fields/Columns* are *labeled* as in CARPOS, and the sheets provide *description* to each one of them
- n. The sheets in the workbook describe the various extract files and the expected *format* of the *Fields/Columns* in them
- o. The sheets in the workbook describe the various extract files and the expected **ordering** of the *Fields/Columns* in them
- p. The sheets in the workbook describe the various extract files and define if a *Field/Column* value is *required/optional*
- q. If the value for a *Field/Column* contains a *special character* (, \* / \ etc) the value should be enclosed within a *quotation marks* (" ")
- r. All Field/Column which are required should have valid values in them

- s. If optional Field/Column don't have a value available, a empty string (,<empty string>,) should be entered in the extract file to maintain the Field Sequence in the Record
- t. Rules specific to an extract file are specified in individual sheets for the extract file

Below is a table with the list of CSVs in the CCPOR Standard ETL Schema and their description.

CSV Name	CSV Description
AlsoKnownAs.csv	Holds Alias information of the Restrained Person
AdditionalProtectedPerson.csv	Holds Additional Protected Persons Details
Attachment.csv	Holds list of attachments to the Order
OrderDetails.csv	Master table, holds Order Details
RestrainedPerson.csv	Holds Restrained Person specific data
Service.csv	Holds Proof Of Service Information
ScarsMarksTattoos.csv	Holds info on any Scars, Marks, Tattoos on Restrained Person
CautionMedicalConditions.csv	Holds info on any Medical Conditions of the Restrained Person
MiscellaneousNumbers.csv	Holds any Miscellaneous Numbers related to the Order
OperatorLicenseGroup.csv	Holds an Operator License information of Restrained Person
LicenseGroup.csv	Holds Restrained Person's license information
VehicleGroup.csv	Holds Restrained Person's vehicle information

Table 125 Client-side Non-Functional Requirements

# 5.4.2.3.2 Order ID

In the absence of a widely used unique identifier to identify an Order, CCPOR will use an OrderID to uniquely identify all its orders. OrderID will also be used during the ETL process to uniquely identify all the incoming orders and relate the data sets in separate CSV to the master CSV, in the CCPOR Standard ETL Schema.

During the ETL process the CCPOR Application will expect this unique identifier. Entities involved in extracting data out of the local repository and transforming them into the Standard ETL Schema will have the onus of specifying this unique identifier. This unique identifier can be the unique identifier currently used in the local R&PO system, as long as it can uniquely identify an Order. For example, if Court Case Number can uniquely identify every order in the local R&PO system, it can be used as OrderID.

Note that, whatever OrderID is specified, it should be traceable, and some form of reference to this OrderID be maintained, throughout the ETL process. This is important because any future modifications (after ETL Phase I) to the Order referenced by OrderID, has to be done through the same OrderID. If this reference to OrderID is lost, and a new OrderID is sent for a previously migrated Order, it will treated as a new Order causing duplicates in the system.

## 5.5 DataMaxx Integration

### 5.5.1 Overview

All courts are mandated to enter restraining and protective order data into the CARPOS database at DOJ. The California Law Enforcement Telecommunications (CLETS) network is integrated to allow access to the CARPOS database. The CLETS itself doesn't provide standard open systems methodology.

DataMaxx's OMNICXX CommServ – "OXCSV" server has been installed at CCTC and certified for operation on CLETS. Further, DataMaxx has developed a HTTPX interface to provide a HTTP/HTTPS external interface to access the OXCSV server.

# 5.5.2 Configuration

The installation and configuration of the DataMaxx's HTTPX interface is within the scope of CCPOR implementation. The details of installation and configuration of HTTPX interface are considered out of scope for this document. Reference documentation (reference document [13]) is available for the same.

For the CCPOR implementation, HTTPX interface will be configured to communicate using HTTPS protocol. CCPOR related custom configuration within the HTTPX interface can be included in this document by AOC administrator.

### 5.5.3 Integration Design





Figure 67 CCPOR DataMaxx Integration

The following summarizes key notes for the integration between CCPOR and HTTPX interface

- The end-to-end request/response transactions between CCPOR and CARPOS are two independent asynchronous transactions.
- However, CCPOR to HTTPX communication is a synchronous transaction, where the acknowledgement is a technical acknowledgement.

### 5.5.3.2 Schema Considerations

### 5.5.3.2.1 OFML specification

The DataMaxx's OXCSV server can interpret requests that conform to the OFML specification. The responses are sent using the same specification as well. All client applications, including CCPOR application need to construct requests using the specification and be able to consume responses coming with the similar specification.

#### Request Schema

The OFML specification for request has a root element <OFML> under which there are two complex elements HDR and TRN. The data elements under the HDR complex element are described below.

[REDAC TED]	[REDACTE D]	[REDACTED]	[REDACTED]	[REDACTE D]
[REDAC TED]	[REDACTE D]	[REDACTED]	[REDACTED]	[REDACTE D]
[REDAC TED]	[REDACTE D]	[REDACTED]	[REDACTED]	[REDACTE D]
[REDAC TED]	[REDACTE D]	[REDACTED]	[REDACTED]	[REDACTE D]
[REDAC TED]	[REDACTE D]	[REDACTED]	[REDACTED]	[REDACTE D]
[REDAC TED]	[REDACTE D]	[REDACTED]	[REDACTED]	[REDACTE D]
[REDAC TED]	[REDACTE D]	[REDACTED]	[REDACTED]	[REDACTE D]

Table 126 OFML HDR data fields

Sample HDR complex element [REDACTED]

The data elements under the [REDACTED] complex element are described below.

OFML element	Description	General Notes	Mapping Notes	Sample
[REDACTED ]	[REDACTED ]	[REDACTED]	[REDACT ED]	[REDACTED]
		Table 407 OFMI TON date	Calala	

Table 127 OFML TRN data fields

### [REDACTED]

#### **Response Schema**

The OFML specification for response has a root element <OFML> under which there are two complex elements HDR and RSP. The data elements under the HDR complex element are similar to the HDR complex element specified in the request schema.

The data elements under the RSP complex element are described below.

OFML element	Description	General Notes	Mapping Notes	Sample
[REDACTED ]	[REDACTED ]	[REDACTED]	[REDACT ED]	[REDACTED]

#### Table 128 OFML RSP data fields

**[REDACTED]** The content for the **[REDACTED]** field from the request and response schemas above is a message sent to CARPOS, referred in this context as CARPOS data stream. This is explained in the section 5.5.3.2.2. Every message sent will conform to a format based on the type of order entry transaction being performed.

# 5.5.3.2.2 CARPOS Message format

CARPOS data stream should conform to the message format as specified by the CARPOS Terminal Operator's Guide (One of Reference Document [13]). The data stream is a **[REDACTED]** A sample message format for restraining and protective order entry is provided below.

# Example of order entry message format: [REDACTED]

Example of record entry: [REDACTED]

All CARPOS message formats applicable for the CCPOR implementation are referenced in Appendix I.

### 5.6 DMS Integration

### 5.6.1 CCPOR DMS

5.6.1.1 Configuration

<To be included by FileNet administrator>

#### 5.6.1.2 Integration Design

### 5.6.1.2.1 Workplace

#### Web-based thin client integration with Workplace

The TIBCO GI/Portal component integrates, with Workplace using the Application Engine UI Service (AE UI Service), formerly known as the Integration Servlet, to leverage reusable Workplace JSP pages with a minimum amount of coding.

The Show Properties Workplace Application Engine UI Service Commands will be utilized, to view or edit the meta data properties of Document objects stored in the Content Engine.

#### Show Properties

Displays the properties for a specified object.

#### Command ID 3010

#### Input Parameters

- objectStoreName [encode] The object store where the object resides.
- id The ID (GUID) of the object.
- vsld The version series ID (GUID) of the object. If you specify this parameter without the id parameter, then the properties of the highest major version are displayed. If there are only minor versions, then the properties of the highest minor version are displayed.
- objectType The type of object: "document", "customObject", "folder", "storedsearch", or "searchtemplate".

#### Response Parameters

• No command-specific parameters. If the command is canceled, the status parameters returned.

The documentation is located in the FileNet P8 Documentation installation directory at FileNet P8 Documentation > Developer Help > Workplace Development > Application Engine UI Service Guide.

#### Accessing Workplace objects via URLs

Workplace includes a feature called URL addressability. This gives users direct access to objects without having to navigate throughout the Workplace user interface. An ID-based URL uses GUIDs to specify an object's location in an object store. The document's location is specified by the GUID of the object store in which the document resides, as well as by the GUID of the document. For example, to retrieve a document, a user enters a URL similar to the following:

http://ccpor2.cjn.courts.ca.gov:8080/Workplace/getContent?objectStoreName={F342DB55-E68B-4DFE-AC04-E129E7196AAB}&id={A1DBC21B-3979-4815-B210-0D5CD91CA54B}&objectType=document

# 5.6.1.2.2 Content Engine Web Service API (CEWS)

CEWS provides general-purpose SOAP operations (methods) and elements that expose all of the Content Engine objects and most of their properties and methods.

Using the FNCEWS35SOAP.wsdl the TIBCO BusinessWorks component will invoke the FileNet Web Servivces. CEWS uses the Web Services Description Language (WSDL) format XML files:

- Common file: FNCEWS35.wsdl
- Content transfer interface-specific files:
  - SOAP with inline, base64 encoding: FNCEWS35SOAP.wsdl

### 5.6.1.3 Single Sign-On

### 5.6.1.3.1 Workplace

Reference the following documentation in FileNet P8 for further details. FileNet P8 Administration>Enterprise-wide Administration>FileNet P8 Security>Authentication>Single sign-on integration via JAAS



TIBCO Portal in the ISB Presentation and Application layer will integrate with the SSO solution of File Net P8/Site Minder. Once the client is authenticated, all further requests will carry a SiteMinder SMSession token as an HTTP cookie. A SiteMinder Application Server Agent(part of FileNet Solution) on the web server extracts the SMSession token and performs a JAAS login on the client's behalf. The JAAS Subject is propagated with each call. The diagram above illustrates the steps that occur in this scenario.

The TIBCO Portal server may then make calls to Workplace and there is no need of user to login in to FileNet Workplace, if user already is logged into TIBCO CCPOR Portal.

### 5.6.1.3.2 Content Engine Web Service API (CEWS)

N/A

# 5.6.2 Local DMS

5.6.2.1 Configuration

N/A

### 5.6.2.2 Integration Design

### 5.6.2.2.1 Web Services

Local Court (ex., Orange County) hosts the DMS Web Services. The ISB DaTS web services transport using both Inbound and Outbound Application-Specific WSDL adapter will be leveraged and CCPOR application specific WSDL adapters will be developed by the TIBCO CCPOR project team. These web services retrieve document content and meta data attributes, of local DMS system where the content/images of the R&P Order are stored.

The web services need to support the following operation

• GetObjects

#### Schema Specifications

Note: Schemas are a draft for understanding purpose. More complete and workable schemas will be provided during the implementation phase of the project.



#### DocumentObjectRequest

• Y – Yes, N – No, C – Conditional.

Element Name	Required	Description
ld	Y	Document Id of the object being retrieved.
MetadataProperties	Ν	MetadataProperties

Table 129 DocumentObjectRequest Schema



#### DocumentObjectResponse

Y – Yes, N – No, C – Conditional.

Element Name	Required	Description
ld	Y	Document Id of the object being retrieved.
Value	Y	The value or content of the document object.
MetadataProperties	С	MetadataProperties

Table 130 DocumentObjectReponse schema

#### **WSDL Specifications**

Note: Schemas are a draft for understanding purpose. More complete and workable schemas will be provided during the implementation phase of the project.

Refer to Appendix F for WSDL details.

### 5.6.2.2.2 Web Based Integration

To be included upon discussion with each court. < Open Item>

#### 5.6.2.3 Single Sign-On

To be included upon discussion with each court. < Open Item>

# 5.7 External Web Services

### 5.7.1 Overview

CCPOR, apart from providing a web based Graphical User Interface (GUI) to handle court's R&PO data, will also expose its R&PO services as External Web Services. The exposed web services will allow courts to employ CCPOR to perform all mandatory R&PO functions like add, modify, service, and cancel an order without having to use the CCPOR Web based Graphical User Interface.

The external web services interface are primarily intended for use by courts with existing R&PO systems for an interim period, after they come on-board CCPOR. The external web services interface would allow courts to utilize CCPOR Services with their existing interfaces, allowing their users room to familiarize themselves with the CCPOR GUI and aid in a smoother transition. Providing users a smooth transition is important in ensuring an efficient and accurate utilization of CCPOR Services via the CCPOR Graphical User Interface.

It is assumed that once the court is on-board CCOR and starts using the CCPOR Web Service Interface, all R&PO data submissions to CARPOS, for all functional purposes (add/modify/service/cancel), will be through CCPOR.

The following sections will talk about the External Web Service process and the External Web Services Schema (WSDL) required for invoking these Web Services

### 5.7.2 External Web Services

The diagram below explains the various components involved in the CCPOR Web Services Interface process. The diagram allows illustrates the flow of a successful service request upon a Web Service invocation.



Figure 69 CCPOR External Web Service

As illustrated by the diagram, the External Web Service requests are handled similar to the standard requests received by the CCPOR Graphical User Interface. In essence, the External Web Service is just another interface to the CCPOR Application, and differs from the standard Graphical User Interface in only how it facilitates making requests and provides responses. Being a Web Service Interface these requests and responses will be in form a XML based schema. The structure of this schema will be discussed in the upcoming sections.

The process flow during an External Web Service invocation is marked by sequence numbers in the diagram above. A successful External Web Service invocation will follow the sequence illustrated in the diagram.

Description of the sequences in the process flow:

- Following the entry of the R&PO data on the court's current User Interface, the court may choose to store this data in their local repository. Note that the court's choice of storing the data in the local repository at this point in the process is an assumption. The court may choose not to store this data in local repository at a different point in the process flow or not store it at all. This step is out of the CCPOR's realm at subject to Court's design. Also note that the court doesn't submit R&PO data directly to CARPOS, and uses CCPOR to do so, instead.
- 2. The Court R&PO system interface invokes the CCPOR External Web Service, by populating the Web Service Interface Schema with the R&PO data and specifying the requested operation.

- The External Web Service is exposed through the ISB Data Transport Service (DaTS). Upon receiving the Web Service request from the court's interface, DaTS forwards the request to CCPOR application's Core Service.
- 4. The Core Service parses and validates the received request before forwarding the R&PO Data received to DB Service.
- 5. The DB Service commits the R&PO data from the request into the CCPOR Database
- 6. After a successful database operation, the DB Service returns the process control back to core service. Any database validation and integrity errors are reported back.
- 7. Core service after a successful execution of the DB Service forwards the request to the CARPOS service, which transforms the R&PO data received into a CARPOS message, as mandated by DOJ. Refer to Section 5.5 for further details on the message schema.
- 8. CARPOS Service forwards this message to the DataMaxx Omnixx CommServ.
- 9. The DataMaxx Omnixx CommServ takes up the responsibility of communication with the CARPOS (at DOJ) via the CLETS network.
- 10. The R&PO data is received in the CARPOS repository.
- 11. The acknowledgement sent from CARPOS is received by the Omnixx CommServer.
- 12 16 The DVROS acknowledgement flows back through the various components and is presented back as a Web Service Response to the initial Web Service Request.

Any errors encountered during this process flow at any component involved will cause the process flow to halt, and traverse back the process flow path. Any such error will also be handed back up the process flow and up to the Web Service interface, where, it will be presented in the Web Service Response.

Since, the CCPOR Services behind the External Web Services are the same as for the Graphical User Interface, the expected error scenarios for External Web Services remain largely same. But, since the data validations and form validations performed by the CCPOR Graphical User Interface are absent in the External Web Service, the probability of such error scenarios increases. To prevent, capture and handle such errors the CCPOR External Web Services Schema and the CCPOR database are designed with strict data validation and data integrity rules. Any such errors will be reported back in the Web Service Response.

It is also recommended that utmost care be taken in mapping the R&PO data from the court's interface to the External Web Service Schema to prevent such occurrences. A mapping document defining the data type, format, size, requirement rules of each External Web Service Schema element and their mappings to the CARPOS data elements will be provided to aid this effort.

The CCPOR External Web Service Interface will allow users to utilize the CCPOR Services and perform the following R&PO functions:

- 1. Add a new Order to CARPOS
- 2. Modify an existing Order in CARPOS
- 3. Service an existing Order in CARPOS
- 4. Cancel an existing Order in CARPOS
- 5. Search Orders in CCPOR.

The CCPOR External Web Service will only allow one operation (R&PO Function) per Web Service call. The data requirements for making the Web Service Request and expected data set on the Web Service Response, for all of the above Web Service functionalities are the same as that for the CCPOR Web Based Graphical User Interface.

#### 5.7.2.1 Add Order

A Web Service call requesting *Add Order* operation will:

- 1. Create a new order with the R&PO data provided in CCPOR
- 2. Request CARPOS to create a new order with the R&PO data provided

Operation	Add. Value "Add" should be specified for the <b>Operation</b> element in the Web
Request	R&PO data requirement same as CCPOR GUI. Data should be mapped to the corresponding elements within the <i>ProtectionOrder</i> node in the Web Service Request Schema.
Expected Response	DVROS Acknowledgement (Success/Failure). The DVROS acknowledgement on a successful operation will be captured as a string in the <i>CARPOSResponse</i> element in the Web Service Response Schema.
Errors	All errors will be captured and presented by the ISBCommonErrorMessage schema in the Web Service Response.
SLA	Expected to be the same as that for CCPOR GUI. Note that, as with CCPOR GUI, in case of a delay in the response from CARPOS, and the response time exceeding the SLA, the user of the External Web Service Interface will have to check for the CARPOS response in the <b>Pending Orders</b> section of the CCPOR GUI. The user of the External Web Service Interface will be informed of this in the Web Service Response, as well.

Table 131 Add Order External Web Service

### 5.7.2.2 Modify Order

A Web Service call requesting *Modify Order* operation will:

- 1. Modify an existing order in CCPOR, with the R&PO data provided.
- 2. Request modification of an order existing in CARPOS, with the R&PO data provided

	Modify.
Operation	Value "Modify" should be specified for the <b>Operation</b> element in the
	Web Service Schema
	R&PO data requirement same as CCPOR GUI. Data should be
Request	mapped to the corresponding elements within the <i>ProtectionOrder</i>
	node in the Web Service Request Schema.
	DVROS Acknowledgement (Success/Failure).
Exported Beenence	The DVROS acknowledgement on a successful operation will be
Expected Response	captured as a string in the CARPOSResponse element in the Web
	Service Response Schema.
Erroro	All errors will be captured and presented by the
Errors	ISBCommonErrorMessage schema in the Web Service Response.
	Expected to be the same as that for CCPOR GUI.
	Note that, as with CCPOR GUI, in case of a delay in the response from
	CARPOS, and the response time exceeding the SLA, the user of the
SLA	External Web Service Interface will have to check for the CARPOS
	response in the <i>Pending Orders</i> section of the CCPOR GUI. The user
	of the External Web Service Interface will be informed of this in the Web
	Service Response as well.

Table 132 Modify Order External Web Service

#### 5.7.2.3 Service Order

A Web Service call requesting Service Order operation will:

1. Update Service information for an existing order in CCPOR, with the R&PO data provided.

2. Request a Service information update, for an order existing in CARPOS, with the R&PO data provided

	Service.
Operation	Value "Service" should be specified for the <b>Operation</b> element in the
	Web Service Schema
	R&PO data requirement same as CCPOR GUI. Data should be
Request	mapped to the corresponding elements within the ProtectionOrder
-	node in the Web Service Request Schema.
	DVROS Acknowledgement (Success/Failure).
Exported Personee	The DVROS acknowledgement on a successful operation will be
Expected Response	captured as a string in the CARPOSResponse element in the Web
	Service Response Schema.
Erroro	All errors will be captured and presented by the
Enors	ISBCommonErrorMessage schema in the Web Service Response.
	Expected to be the same as that for CCPOR GUI.
	Note that, as with CCPOR GUI, in case of a delay in the response from
SLA	CARPOS, and the response time exceeding the SLA, the user of the
	External Web Service Interface will have to check for the CARPOS
	response in the <i>Pending Orders</i> section of the CCPOR GUI. The user
	of the External Web Service Interface will be informed of this in the Web
	Service Response as well.
	Table 122 Service Order External Web Service

Table 133 Service Order External Web Service

### 5.7.2.4 Cancel Order

A Web Service call requesting *Modify Order* operation will:

- 1. Cancel an order in CCPOR, and update with Reason provided.
- 2. Request cancellation of an order in CARPOS and provide reason.

Operation	Cancel. Value "Cancel" should be specified for the <b>Operation</b> element in the Web Service Schema
Request	R&PO data requirement same as CCPOR GUI. Data should be mapped to the corresponding elements within the <i>ProtectionOrder</i> node in the Web Service Request Schema.
Expected Response	DVROS Acknowledgement (Success/Failure). The DVROS acknowledgement on a successful operation will be captured as a string in the <i>CARPOSResponse</i> element in the Web Service Response Schema.
Errors	All errors will be captured and presented by the ISBCommonErrorMessage schema in the Web Service Response.
SLA	Expected to be the same as that for CCPOR GUI. Note that, as with CCPOR GUI, in case of a delay in the response from CARPOS, and the response time exceeding the SLA, the user of the External Web Service Interface will have to check for the CARPOS response in the <b>Pending Orders</b> section of the CCPOR GUI. The user of the External Web Service Interface will be informed of this in the Web Service Response as well.

Table 134 Cancel Order External Web Service

#### 5.7.2.5 Search Order

A Web Service call requesting Search Order operation will:

1. Search for an order in CCPOR with the search parameters provided.

	Search.
Operation	Value "Search" should be specified for the <i>Operation</i> element in the
	Web Service Schema
	Search parameters and their data requirements same as CCPOR GUI.
Request	Data should be mapped to the corresponding elements within the
	ProtectionOrder node in the Web Service Request Schema.
	Successful Search Result Set same as CCPOR GUI.
	Successful Search Result Set captured and presented in the
Expected Response	ProtectionOrder node in the Web Service Response Schema. No
	result set in the <i>ProtectionOrder</i> node indicates that no order matches
	the specified search criteria.
Freeze	All errors will be captured and presented by the
Errors	ISBCommonErrorMessage schema in the Web Service Response.
SLA	Expected to be the same as that for CCPOR GUI.

Table 135 Search Order External Web Service

# 5.7.3 External Web Service Schema

The External Web Service Schema will be used to invoke the CCPOR External Web Services and access CCPOR Application Services like Add, Modify, Service, Cancel and Search Orders. The schema is generically designed to capture the required data for all the exposed services on a request and present the expected data on the response. In order to compensate for the form and data validations present on the CCPOR GUI, the schema is built with strict validation rules to filter out such errors. As per the ISB standards the schema will be DES compliant. The schema will also be wrapped in ISB Data Transport Service (DaTS) Schema, as the Web Service will be hosted through DaTS.

The diagram below shows the CCPOR External Web Interface Schema:

Note: Schemas are a draft for understanding purpose. More complete and workable schemas will be provided during the implementation phase of the project.



The schema will be used both in Web Service Request and Web Service Response. The **DocumentRequest** node and the **DocumentResponse** node will need to be populated with valid values during a Web Service Request and a Web Service Response, respectively. Note, that there is place holder for only one **Operation** in the **DocumentRequest**, enforcing one R&PO function per Web Service call. CCPOR will look for information within **DocumentRequest** to process the Web Service request from the client, and populate the **DocumentReponse** with the service output, in the Web Service Response to the client.

While invoking the Web Service to perform any of the services exposed by CCPOR, a valid value in the **Operation** element of the **DocumentRequest** is mandatory. **Operation** takes "Add", "Modify", "Service", "Cancel" and "Search" as one of its valid values. **Operation** in the Web Service Request tells CCPOR which of the services among Add, Modify, Service, Cancel and Search, the Web Service client wants to perform. Note, that **Operation** is a mandatory field in the schema.

**ProtectedOrder** element will hold the R&PO data elements during both Web Service Request and Response. Elements within **ProtectedOrder** mimic the R&PO data set mandated by DOJ, and defined in the CLETS manual. The data requirements on these elements will also follow DOJ mandates defined in the CLETS manual. Further, a mapping document will also be provided to assist in the mapping R&PO data sets to the elements within **ProtectedOrder**. **ProtectedOrder** will hold R&PO data during Web Service requests for Add, Modify, Service and Cancel services. For Search Service, **ProtectedOrder** will be used to hold Search parameters during Web Service Request and Search Result Set during Web Service Response.

**CARPOSResponse** will be explicitly used to capture and present the CARPOS Acknowledgements received from CARPOS as a response to Add, Modify, Service and Cancel Web Service Requests. Note that, **CARPOSResponse** is optional in the schema as there will be no interactions with CARPOS and hence no CARPOS Acknowledgements during Search Web Service Request.

All errors encountered within the CCPOR Application during the Web Service request processing, will be captured and presented by the DaTS wrapper schemas. The *ISBCommonErrorMessage* schema in the image below will capture such errors, and present them with appropriate Exception Codes and Messages.



### 5.8 Framework and Standards

# 5.8.1 Data Transport Service (DaTS)

The DaTS is an ISB service that performs the common business task of transporting data from one application system to another set of application systems. Details of the DaTS framework are outside the scope of this document.

Refer DaTS Service Specification Documentation (reference document [12]) for the different features provided by the DaTS service. The integration use cases for CCPOR that can be implemented by the DaTS service are similar to Inbound and Outbound Application-specific WSDL use cases.

Upon analysis, all external web services (Refer Section 5.7) and external FTP services (Refer Section 5.1.7) should be implemented using the DaTS service.

# 5.8.2 Data Exchange Specification (DES)

The DES initiative is an effort undertaken by AOC to focus on developing data exchange standards based on national standards. Refer Draft Data Exchange Specifications (reference document[16]) for details of draft DES standards currently available as part of the ongoing initiative. Applications developed at AOC should evaluate the usage of the DES standards for all data exchanges within the application. The CCPOR application is no exception. Though the key expectation of the initiative is for applications to use the DES standards for all external data exchanges, all data exchanges internal within CCTC should be considered as well.

CCPOR application design considers using the standard for all types of data exchange between Courts and CCPOR application. All schemas provided for the external web services (Refer Section 5.7) should be developed using the DES standard. The standard also provides a way for creation of subset constrained schema during instances where the standard schema is not sufficient.

# 5.9 Environment and Technical Details

# 5.9.1 Capacity Planning and Analysis

The initial release of the application should accommodate 20 courts by early 2010. The system should be scalable to accommodate a five year build out scenario to include 58 courts and up to 3000 unique users statewide.

### 5.9.1.1 Average Capacity

The average capacity specified in this section is for volumes and sizing for the initial deployment of 20 courts by early 2010.

- Average query volume per day: 8,456
- Average queries per hour: 352
- Queries per peak hour: 1,184
- Queries per peak minute: 20

Category	Minimum Requirement					
# of users	Month of Activation	Users Added	Running Total Users by Month	Concurrent Users by Month		
	Jun-09	164	164	16		
	Jul-09	142	306	31		
	Aug-09	474	780	78		
	Sep-09	118	898	90		
	Oct-09	125	1,023	102		
	Nov-09	114	1,137	114		
	Dec-09	41	1,178	118		
	Jan-10	104	1,282	128		
	Feb-10	167	1,449	145		
# of searches per day	7,500 - 10,000	)				
Peak # of searches per hour	49					
# of new and modified orders per day*	Up to 1,000 orders					

#### Table 136 CCPOR Initial Release Anticipated Volume

The load on the system is expected to scatter based on 10 (Morning Hours)-80 (Business Hours) -10 (Evening Hours) percentage.

Court	Avg Volume per Month	Avg Volume per Day	Avg Volume per Hour	0.1600			Average of Average of Average Queries	lueries per queries pe per peak f	day: 8,456 r hour: 352 nour: 1,184 minuto: 20	
Alameda	13,255	442	18	0.0200			Querie	Queries per peak minute: 20		
Contra Costa	5,957	199	8	0.0000	3 4 5 6 7 8 9 10 11 12 1	3 14 15 16 17 18 19 20 21 22 23 24	]			
El Dorado	1,385	46	2			Starting Hour	Vol % Diet	Dor Hour	Por Minuto	
Inyo	288	10	0			12:00 AM	0.0025	21		
Kern	7,068	236	10	e		1:00 AM	0.0020	25	0.4	
Marin	2,466	82	3	cip	4.00/	2:00 AM	0.0055	47	0.8	
Merced	1,832	61	3	Ŀ.	10% Morning	3:00 AM	0.0070	59	1.0	
Monterey	3,202	107	4	6	Hours	4:00 AM	0.0110	93	1.6	
Los Angeles	80,772	2692	112	rato	nours	5:00 AM	0.0150	127	2.1	
Orange County	26,251	875	36	Pe		6:00 AM	0.0225	190	3.2	
Riverside	14.553	485	20	50		7:00 AM	0.0350	296	4.9	
Sacramento	12 159	405	17	80/		8:00 AM	0.0500	423	7.0	
San Bernardino	14,943	498	21	5	80% Business Hours	10:00 AM	0.1000	846	14.1	
San Diego	25 472	849	35	d d		11:00 AM	0.1100	930	15.5	
San Francisco	8 120	271	11	ed		12:00 PM	0.1400	1,184	19.7	
Santa Clara	12 722	424	18	Das		1:00 PM	0.1100	930	15.5	
Santa Ciara	2 102	72	10	le 1		2:00 PM	0.1000	846	14.1	
Salana	2,132	101	5	L L		3:00 PM	0.0700	592	9.9	
Solario	3,020	121	5	<u></u> 2		4:00 PM	0.0500	423	7.0	
Sununia	3,144	105	4	Be		5:00 PM	0.0350	296	4.9	
Stanislaus	3,346	112	5	ed	District of the second	7:00 PM	0.0225	190	3.2 2.1	
Tulare	3,765	125	5	off		8:00 PM	0.0110		1.6	
Ventura	5,539	185	8			9:00 PM	0.0070	59	1.0	
Yolo	1,615	54	2	Dis		10:00 PM	0.0055	47	0.8	
	253,666	8456	352			11:00 PM	0.0025	21	0.4	
							1.0000	352	5.9	

Figure 70 CCPOR Volume Estimation Extraplation

#### 5.9.1.2 CCPOR Component Sizing

Each component used for the CCPOR implementation should be sized appropriately to accommodate the volumes as specified in the above section. The sizing for FileNet, Database components are specified in the CCTC application hosting requirements for CCPOR.

Given there are a few ISB implementations using the same ISB infrastructure as that of CCPOR, the sizing for ISB components should be considered and evaluated at an enterprise level. The volumes for CCPOR will be further analyzed at enterprise ISB level before recommendations will be made. The expectation is that the current ISB infrastructure should support the Jun-Jul'09 deployment of the CCPOR application.

### 5.9.2 Views

#### 5.9.2.1 Logical Architecture

The following diagram shows the components of the logical architecture for the CCPOR Web Portal.

• The names of the all machines will be confirmed by CCTC and specified in the Security App.

#### <Marked as Open Item>

#### 5.9.2.2 Security Architecture

These diagrams show how the component architecture will look from a security standpoint.

• The names of the all machines will be confirmed by CCTC and specified in the Security App.

#### <Marked as Open Item>

#### 5.9.2.3 Environment Table

This section lists the CCPOR Portal Environment table that contains information regarding the Source IP, Destination IP, Ports and Protocols for all the interaction that an ISB component has with an external entity outside the layer (per LSA) which it resides.

#### ISB CCPOR Portal Page

Environment	Source IP/Host	Destination IP/Host	Port	Protocol	Description	Owner – who provides this and from where?
STAGING (CCTC)	Court/Agency	Ingress Intranet Proxy	[RE DAC TED ]	SOAP over HTTPS (tcp)	Court must be specified when known. Firewall filters requests by IP.	
STAGING (CCTC)	Ingress Intranet Proxy	Portal Presentation Servers	[RE DAC TED ]	HTTPS (tcp)		TIBCO – Master site guide
PRODUCTIO N (CCTC)	Court/Agency	Ingress Intranet Proxy	[RE DAC TED ]	SOAP over HTTPS (tcp)	Court must be specified when known. Firewall filters requests by IP.	
PRODUCTIO N (CCTC)	Ingress Intranet Proxy	Portal Presentation Servers	[RE DAC TED 1	HTTPS (tcp)		CCTC

Table 137 ISB CCPOR Portal Page

#### **ISB CCPOR SOAP and JDBC Interaction**

Environment	Source IP/Host	Destination IP/Host	Port	Protocol	Description	Owner – who provides this and from where?
STAGING (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP		
STAGING (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	JDBC		
-----------------------	------------	------------	------------------------	---------------	--	
STAGING (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP		
STAGING (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	HTTP		
STAGING (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP		
	[REDACTED]	[REDACTED]	[RE DAC TED ]			
TEST (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP		
TEST (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	JDBC		
TEST (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED 1	SOAP/H TTP		
TEST (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	HTTP		
TEST (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP		
	[REDACTED]	[REDACTED]	[RE DAC TED ]			
PRODUCTIO N (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP		
PRODUCTIO N (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	JDBC		

PRODUCTIO N (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP	
PRODUCTIO N (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	HTTP	
PRODUCTIO N (CCTC)	[REDACTED]	[REDACTED]	[RE DAC TED ]	SOAP/H TTP	

Table 138 ISB CCPOR SOAP and JDBC Interaction

#### 5.9.3 Physical Environments

#### 5.9.3.1 Usage Matrix

All ISB components for the CCPOR application will use the current ISB framework at CCTC. Any addition/exceptions will be specified in this section.

Environment	Intended Usage	Connectivity Requirements
DEV	Development and Unit Testing	None required.
TEST	Application Testing	TEST ISB and TEST Court/Agency components need to be connected. This will need to be repeated with each Court/Agency that is on-boarding onto CCPOR.
STG	Application Testing Performance (Stress) Testing	STG ISB and STG Court/Agency components need to be connected. This will need to be repeated with each Court/Agency that is on-boarding onto CCPOR.
PROD	CCPOR Web Portal made available for Court/Agency Administrators	

Table 139 Environment Usage Matrix

#### 5.9.3.2 Development

- Used only for development and unit testing.
- None of the components are configured for High Availability.



Figure 71 CCPOR Development Environment

#### 5.9.3.3 Test

- Used to test application and deployment
- The TIBCO Administrator and TIBCO EMS products are configured for high availability.
- EMS and XML Canon data is backed up on SAN.
- The TEST environment diagram has been specified just for reference and it will not be used for any testing.
- The name/location of FTP server below will be provided by CCTC and specified in the Security App.
- The names of the all machines will be confirmed by CCTC and specified in the Security App.



Figure 72 CCPOR Test Environment

#### 5.9.3.4 Staging

- Used for stress and performance testing.
- TIBCO products are configured for high availability.
- EMS, Portal DB, TIBCO BusinessConnect (BC) DB and BW DB are backed up on SAN.
- Refer to Section 5.9.2.1 and 5.9.2.2 for Logical and Security Architecture diagrams.

#### 5.9.3.5 Production

- TIBCO products are configured for high availability (HA).
- Shares the same XML Canon instance with TEST.
- EMS, Portal DB, TIBCO BusinessConnect (BC) DB and BW DB is backed up on SAN.
- The STAGING environment mirrors PRODUCTION.

### 5.9.4 Security

#### 5.9.4.1 Authentication

Authentication in a system is the verification facet. It is concerned not with the data but with the user or entity that is attempting to interact with the data. Authentication is the first thing that happens when a user attempts to access the CCPOR application. There are two major classes under which the verification falls: a single source enterprise security service and a trusted federation of identity source.

The Enterprise security service at CCTC is a single source of authentication information stored in ActiveDirectory LDAP. All CCPOR users need to be setup in the CCTC LDAP.

On the other side, Federation or SSO is the conceptual single point for individuals to authenticate themselves and then have security token recognized across applications and in some cases even locations where the same security is in place and the token is recognized. The SSO for CCPOR will be achieved by allowing a user sufficient access to be able to access the CCPOR portal and CCPOR FileNet DMS.

#### 5.9.4.2 Authorization

Once the entity is authenticated successfully, Authorization is the process of taking that identity and determining if that specific identify has authorization to take a specific action at a certain time. In other words, authorization determines a set of access rights (permissions) that are granted to the authenticated identity in respect of a particular object. Each access right granted confers authorization to perform a particular action or type of action on the object in question.

In the CCPOR application, every key component is identified as an object. From the list provided below, Application, Order, Attachments, Reports and Other are objects identified for the CCPOR application. For each object, there are a set of access rights defined as listed below. Every role created within the scope of the application will be assigned appropriate access rights. A user (who belongs to a role) will then be able to access that object and perform the action as allowed by the access right.

For the CCPOR application, the object and access rights information is stored within the application and the authorization is performed within the application.

- Application
  - Connect to CCPOR
- Order
  - o Create orders
  - o Draft orders
  - o Modify orders
  - Cancel orders
  - o Delete orders
  - Service orders
  - Order Messages
  - o Search orders
  - Inter-County Search orders
- Attachments
  - o View attachment
  - Inter-County view attachment

- Reports
  - o Run reports
  - o Save reports
  - o Audit trail
- Other
  - o Role Delegation
  - o Custom Configuration

### 6 REUSABILITY

As an initial implementation, and due to the fact that the implementation will be rolled out in phases with more Courts in subsequent phases, the solution architecture is expected to provide multiple levels of reusability for easy on-boarding of all future courts and beyond, including:

- Project Life-Cycle Process Re-usability:
  - o Document templates for all phases
  - o End-to-end logistics and coordination processes among multiple collaborating teams
  - o Requirement Facilitation and Analysis Phase:
    - CCPOR DB schema is built after analyzing the Orange County schema which has been a restraining and protective order repository supporting all data needs for the CARPOS system for a considerable period of time.
    - All CCPOR exchange schemas potentially re-usable by other courts
  - o Architecture Phase:
    - All external data exchange has been facilitated using standard schemas. The schemas are broken down in to smaller components to enhance the reusability and reduce the re-work required if any of the schema changes.
    - Re-usable Enterprise Patterns: The transaction is decoupled using service based communication
  - Implementation Phase:
    - Use of standard development template and Naming conventions combined with Service oriented architecture, based on standards renders the code reusable for on boarding new courts.
    - Use of Enterprise Exception Handler Code and Schema.
    - The front end application is embedded into the portal site for each court. The site content can be duplicated for any new courts coming on-board, as long as the UI fields contain all the relevant data for the new court.
  - Deployment Phase:
    - Web Services defined for the CCPOR Web interface is re-usable for all future courts
    - Portal site for CCPOR Web interface is 100% re-usable
- Code Re-usability
  - BusinessWorks Process flows should have maximal re-use as other query exchanges follow exactly the same integration dynamics.
  - Hawk monitoring rulebases should be 100% re-usable for future exchange process components.

### 7 NON-FUNCTIONAL REQUIREMENTS

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.UI.1	All fields on any order entry screen should be on one single screen.	Incorporated as part of the order entry forms (refer to add/modify/service/cancel forms mock screens from the requirements document)
ISB.CCPOR.UI.2	Required Fields must have Field Names highlighted and suffixed with an asterisk "*"	Incorporated as part of the order entry forms (refer to add/modify/service/cancel forms mock screens from the requirements document)
ISB.CCPOR.UI.3	For any group of selectable items/hyperlinks (IE; menu items, tabs, etc), the currently selected item must be displayed in a different background color to intuitively indicate the selected item/hyperlink.	Incorporated as part of the order entry forms (refer to add/modify/service/cancel forms mock screens from the requirements document)
ISB.CCPOR.UI.4	For any content displayed in a table, all table columns must be sort-able unless otherwise indicated in the Use Case functional requirements. If a table is involved with pagination functionality, the sort is scoped only to the current paginated page. An arrow illustrating sort direction must be displayed.	Incorporated as part of the order entry forms (refer to add/modify/service/cancel forms mock screens from the requirements document)
ISB.CCPOR.UI.5	On search pages where the date value can be submitted, the User must be able to enter the date in input text field where the input value will be validated against MM-dd- YYYY format. Beside the input text field, a button can be selected to display a Date Picker calendar which can be used to select a date value. Both methods of date entry for date values must be supported. Users will be familiar to data-entry via manual text entry and the Date Picker form field has limitations from an ease-of-user perspective. For example; in the scenarios where a user will enter a birth date, the user can only scroll year-by- year or month-by-month.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UI.6	On search result pages, pagination functionality must be supported to display large result sets.	Incorporated as part of the order entry forms (refer to add/modify/service/cancel forms

#### 7.1 User Interface

		mock screens from the requirements document)
ISB.CCPOR.UI.7	Date values from queried data must be displayed as MM-dd-YYYY format	
ISB.CCPOR.UI.8	For any content displayed in a table, if no content exists, a warning message 'No Records Found' must be displayed in place of the table.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UI.9	For any input field, white spaces will be trimmed from the beginning and end of the entered string.	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.UI.10	UI Standards and Guidelines setup for AOC V4 project should be adhered.	Consider for deletion. Look and Feel in the requirements discusses the user interface requirements.
ISB.CCPOR.UI.11	Where applicable, the underlying schemas for the system should adhere to data exchange standards (Ex. DES etc.) which are adopted by AOC	Incorporated as part of the Framework and Standards section. Refer to section 5.8

## 7.2 Form Validation

Requirement ID	Requirement Details	Solution Strategy
ISB.CCPOR.Genrer al.FormValidation.1	Validation errors displayed in Alert Boxes.	Incorporated as part of the error handling (refer to error handling mock screens from the requirements document)

### 7.3 Client-side

ID	Requirement	Solution Strategy
ISB.CCPOR.N.Client .1	Browser supports for both IE 6.x and Firefox 1.5 or above	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.N.Client .2	Single sign-on. Once logged into desktop/ laptop, only 1 login required to access CCPOR.	Incorporated as a part of DMS Integration SSO sections.

### 7.4 Environment & Infrastructure

ID	Requirement	Solution Strategy
ISB.CCPOR.N.Env.1	The solution must be deployed on the existing ISB hub infrastructure at the CCTC.	Incorporated as part of the environments 5.9.3.1
ISB.CCPOR.N.Env.2	A minimum of two physical environments must be setup for each court on-boarding onto CCPOR. For example, at Orange Court: TEST/STAGE and PRODUCTION. TEST/STAGE environments will be used for integration and stress test.	Incorporated as part of the environments 5.9.3.1

	A similar set of physical environments must be setup at CCTC. TEST/STAGE is where end-to-end integration test and stress test will first be conducted to create a benchmark. Need to setup a DEV environment at AOC for use during implementation phase.	
ISB.CCPOR.N.Env.3	Two physical environments must be setup at CCTC for DataMaxx comm server: TEST/STAGE and PRODUCTION. TEST/STAGE is where end-to-end integration test and stress test will first be conducted.	Incorporated as part of the environments 5.9.3.1
	requirement to have a DEV environment at AOC for the DataMaxx comm server.	
ISB.CCPOR.N.Env.4	Two physical environments must be setup at CCTC for IBM FileNet DMS: TEST/STAGE and PRODUCTION. TEST/STAGE is where end-to- end integration test and stress test will first be conducted.	Incorporated as part of the environments 5.9.3.1
	Need to setup a DEV environment at AOC with IBM FileNet DMS. This will be used during the implementation phase.	
ISB.CCPOR.N.Conn.1	Internal Connectivity – Connectivity between all components part of the application should be verified	Connectivity tests will be carried out between all components on the CCPOR application in CCTC TEST/STAGE and PRODUCTION environments
ISB.CCPOR.N.Conn.2	External Connectivity – Connectivity between Local DMS and CCPOR should be verified	Connectivity tests will be carried out between CCPOR and Local DMS courts in both TEST/STAGE and PRODUCTION environments

## 7.5 Capacity & Performance

ID	Requirement	Solution Strategy
----	-------------	-------------------

ISB.CCPOR.N.Capacity.1	The system needs to support the following volumes Average Order Entry per month – 21742 Average Order Search per day – 8456 CCPOR DMS Orders per month - 3235	Incorporated as part of the capacity planning and analysis section 5.9.1.
ISB.CCPOR.N.Perform.1	Any order entry transactions should receive response in 1 min. The 1 min spans order data sent from ISB to CARPOS and response received from CARPOS. Image view - 1 min Image upload – 1 min For all other CCPOR transactions the response timings should be 30 sec.	The performance requirements will be tested in STAGE and fine tune appropriately before the system is made ready in PRODUCTION

#### 7.6 SLA

ID	Requirement	Solution Strategy
ISB.CCPOR.N.SLA.1	The system should be considered for reliability. Each component in the application should be considered for fault tolerance.	ISB components for the application will use the current ISB infrastructure which is configured in FT mode. FileNet Configuration, Database Configuration, DataMaxx Configuration sections incorporate the FT mode for the respective components.
ISB.CCPOR.N.SLA.2	The system should be considered for high availability (99.7%). This measure excludes the planned downtime of the system.	Considerations for high availability will be looked into before deciding on the next steps. The adding more components to the overall system design will undermine efforts for high availability (because it is difficult to build and maintain a complex system).
ISB.CCPOR.N.SLA.3	The system should be scalable to accommodate more courts over a specified short period of time. Load balancing and adding hardware resources to be considered. Each component in the application should be considered during scalability.	ISB components for the application will use the current ISB infrastructure which is configured in LB mode. FileNet Configuration, Database Configuration, DataMaxx Configuration sections incorporate the FT mode for the respective components.

ISB.CCPOR.N.SLA.4	System	and	component	Will be incorporated as part of
	downtime	for	maintenance	future documentation on the
	needs to be published ahead of			project.
	time for the	users		

### 7.7 Security

ID	Requirement	Solution Strategy
ISB.CCPOR.N.Security.1	Authentication: All Portal Users must be authenticated against the CCTC ActiveDirectory using the existing SiteMinder infrastructure. User and Password management are outside the scope of this application and are maintained at the CCTC	Incorporated as part of the authentication section part of security in the physical architecture
ISB.CCPOR.N.Security.2	Encryption: All accesses to the Portal will be via HTTP over SSL (HTTP/S).	Incorporated as a part of the portal Component (GI Application) Solution Outline.
ISB.CCPOR.N.Security.3	Communications for all services between CCPOR and Local DMS courts need to enforce message, transport and user level security for web services.	WS Security will be used for all web services between CCPOR and Local DMS courts
ISB.CCPOR.N.Security.4	Role based authorization should be implemented in the system. Every user accessing the system should be set with appropriate access.	Incorporated as part of the authorization section part of security in the physical architecture
ISB.CCPOR.N.Security.5	Communications for all services between ISB and CCPOR DMS and DataMaxx API should be secured.	CEWS will use WS Security for communication between ISB and CCPOR DMS Data will be transported over an encrypted channel to DataMaxx server.

## 7.8 Error Handling

ID	Requirement	Solution Strategy
ISB.CCPOR.N.ErrorHandling.1	System should provide feature to report errors on UI. Subsequently, the system should provide a way to address the error.	Incorporated as part of functional errors in use case specifications.
ISB.CCPOR.N.ErrorHandling.2	System should provide feature to report errors that fail data validations when committing data into the database. Subsequently, the system should provide a way to address the error.	Incorporated as part of functional errors in use case specifications.
ISB.CCPOR.N.ErrorHandling.3	System should provide feature to report errors that fail DVROS validations. Subsequently, the	Incorporated as part of functional errors in use case specifications.

	system should provide a way to address the error.	
ISB.CCPOR.N.ErrorHandling.4	System should provide feature to report errors that fail data validations/connectivity when committing data into the CCPOR DMS. Subsequently, the system should provide a way to address the error.	Incorporated as part of functional/non-functional errors in use case specifications.
ISB.CCPOR.N.ErrorHandling.5	System should provide feature to report errors that fail data validations/connectivity when committing data into the Local DMS. Subsequently, the system should provide a way to address the error.	Incorporated as part of functional/non-functional errors in use case specifications.

## 7.9 Auditing/Logging

ID	Requirement	Solution Strategy
ISB.CCPOR.N.AuditLog.1	Track per user all changes in the database.	Incorporated as part of the audit trail reporting use case component interaction
ISB.CCPOR.N.AuditLog.2	Capture per user all transaction logs.	Incorporated as part of the audit trail reporting use case component interaction

### 7.10 Monitoring

ID	Requirement	Solution Strategy
ISB.CCPOR.N.Monitoring.1	ISB deployment will be monitored using existing ISB monitoring and exception handling framework. ISB component failures must be automatically detected and escalated to supporting staff. Components part of the application (CCPOR DMS/DataMaxx/Apache Web server/DB Severs) should be configured for monitoring. All failures must be automatically detected and escalated to supporting staff.	ISB components for the application will use the current ISB infrastructure which is configured in LB mode. FileNet Configuration, Database Configuration, DataMaxx Configuration sections incorporate the FT mode for the respective components.

## 7.11 System/Network Availability

must ICD components for the
fault- application will use the current ISB infrastructure which is configured in FT/LB mode.
te N

	Database Configuration,
Components part of the	DataMaxx Configuration
application (CCPOR	sections incorporate the FT/LB
DMS/DataMaxx/DB Servers)	mode for the respective
should be considered for fault-	components.
tolerance and high availability	-

## 7.12 Reporting

ID	Requirement	Solution Strategy
ISB.CCPOR.N.Reporting.1	Produce tracking information reports based on user.	Incorporated as part of the reporting use case component interaction
ISB.CCPOR.N.Reporting.2	Produce transaction logs based on user.	Incorporated as part of the reporting use case component interaction

## Appendix A.

## **OPEN ISSUES**

AOC, IS Division, Data Integration Program CCPOR D-22-2 Architecture Specification v0.1 Redacted

# Appendix B. REQUIREMENTS TRACKING MATRIX

The requirements summary table is provided for use in tracing from Requirements through Design, Build and Test project lifecycle tasks.

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.F.User.1	4.2.1.1	Functional	Initial	N/A
ISB.CCPOR.F.User.2	4.2.1.1	Functional	Initial	N/A
ISB.CCPOR.F.User.3	4.2.1.1	Functional	Initial	N/A
ISB.CCPOR.F.User.4	4.2.1.1	Functional	Initial	N/A
ISB.CCPOR.F.User.5	4.2.1.1	Functional	Initial	N/A
ISB.CCPOR.Static.Behavior.1	4.2.1.1	Functional	Initial	N/A
ISB.CCPOR.Static.Behavior.2	4.2.1.1	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.1	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.2	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.3	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.4	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.5	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.6	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.7	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.8	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.9	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.10	4.2.2.5	Functional	12/19/06	N/A
ISB.CCPOR.UC1.Behavior.11	4.2.2.5	Functional	12/19/06	N/A
ISB.CCPOR.UC1.Behavior.12	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.13	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.14	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.15	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.16	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.17	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.18	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Behavior.19	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.FormValidation.1	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.FormValidation.2	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.FormValidation.3	4.2.2.5	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.UC1.FormValidation.4	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.FormValidation.5	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.FormValidation.6	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.FormValidation.7	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.ExceptionHandling.1	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.ExceptionHandling.2	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.ExceptionHandling.3	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.ExceptionHandling.4	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.ExceptionHandling.5	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.ExceptionHandling.6	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Integration.1	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Integration.2	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Integration.3	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC1.Integration.4	4.2.2.5	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.1	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.2	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.3	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.4	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.5	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.6	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.7	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.8	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.9	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.10	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.11	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.12	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.13	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.14	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.15	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.16	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.17	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.18	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Behavior.19	4.2.3.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.UC2.FormValidation.1	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.FormValidation.2	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.FormValidation.3	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.FormValidation.4	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.FormValidation.5	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.FormValidation.6	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.FormValidation.7	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.ExceptionHandling.1	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.ExceptionHandling.2	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.ExceptionHandling.3	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.ExceptionHandling.4	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.ExceptionHandling.5	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.ExceptionHandling.6	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Integration.1	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Integration.2	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Integration.3	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Integration.4	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC2.Integration.5	4.2.3.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.1	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.2	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.3	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.4	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.5	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.6	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.7	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.8	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.9	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.10	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.11	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.12	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.13	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.14	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.15	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.16	4.2.4.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.UC3.Behavior.17	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Behavior.18	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.FormValidation.1	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.FormValidation.2	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.FormValidation.3	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.FormValidation.4	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.FormValidation.5	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.FormValidation.6	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.FormValidation.7	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.ExceptionHandling.1	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.ExceptionHandling.2	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.ExceptionHandling.3	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.ExceptionHandling.4	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.ExceptionHandling.5	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.ExceptionHandling.6	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Integration.1	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Integration.2	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Integration.3	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Integration.4	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC3.Integration.5	4.2.4.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.1	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.2	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.3	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.4	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.5	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.6	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.7	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.8	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.9	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.10	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.11	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.12	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.13	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.14	4.2.5.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.UC4.Behavior.15	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.16	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.17	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.18	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.19	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.20	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Behavior.21	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.FormValidation.1	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.FormValidation.2	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.FormValidation.3	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.FormValidation.4	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.FormValidation.5	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.FormValidation.6	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.FormValidation.7	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.ExceptionHandling.1	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.ExceptionHandling.2	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.ExceptionHandling.3	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.ExceptionHandling.4	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.ExceptionHandling.5	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.ExceptionHandling.6	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Integration.1	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Integration.2	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Integration.3	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC4.Integration.4	4.2.5.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.1	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.2	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.3	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.4	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.5	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.6	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.7	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.8	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.9	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.10	4.2.6.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.UC5.Behavior.11	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.12	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.13	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.14	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Behavior.15	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.FormValidation.1	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.FormValidation.2	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.FormValidation.3	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.FormValidation.4	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.FormValidation.5	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.FormValidation.6	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.FormValidation.7	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.ExceptionHandling.1	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.ExceptionHandling.2	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.ExceptionHandling.3	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.ExceptionHandling.4	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.ExceptionHandling.5	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.ExceptionHandling.6	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Integration.1	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Integration.2	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Integration.3	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC5.Integration.4	4.2.6.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.1	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.2	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.3	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.4	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.5	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.6	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.7	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.8	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.9	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.10	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.11	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.12	4.2.7.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.UC6.Behavior.13	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.14	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Behavior.15	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.FormValidation.1	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.FormValidation.2	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Integration.1	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC6.Integration.2	4.2.7.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.1	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.2	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.3	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.4	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.5	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.6	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.7	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.8	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.9	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Behavior.10	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.FormValidation.1	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.FormValidation.2	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.FormValidation.3	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.ExceptionHandling.1	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.ExceptionHandling.2	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC7.Integration.1	4.2.8.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.1	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.2	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.3	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.4	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.5	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.6	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.7	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.8	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.9	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.10	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.11	4.2.9.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.UC8.Behavior.12	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.13	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.Behavior.14	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC8.ExceptionHandling.1	4.2.9.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.1	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.2	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.3	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.4	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.5	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.6	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.7	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.8	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.9	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.10	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.Behavior.11	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.FormValidation.1	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.FormValidation.2	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.UC9.ExceptionHandling.1	4.2.10.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.1	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.2	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.3	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.4	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.5	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.6	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.7	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.8	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.9	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Behavior.10	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.FormValidation.1	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.FormValidation.2	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Integration.1	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A1.Integration.2	4.2.11.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.1	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.2	4.2.12.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.A2.Behavior.3	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.4	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.5	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.6	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.7	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.8	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.Behavior.9	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.FormValidation.1	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.FormValidation.2	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.ExceptionHandling.1	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A2.ExceptionHandling.2	4.2.12.2	Functional	Initial	N/A
ISB.CCPOR.A3.Behavior.1	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.Behavior.2	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.Behavior.3	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.Behavior.4	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.Behavior.5	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.FormValidation.1	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.Integration.1	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.Integration.2	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.A3.Integration.3	4.2.13.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.ExceptionHandling.1	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.1	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.2	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.3	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.4	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.ExceptionHandling.2	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.5	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.6	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.7	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.8	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.9	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.DocLink.Integration.10	4.2.14.2	Functional	Initial	N/A
ISB.CCPOR.Interim.ExceptionHandling.1	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.ExceptionHandling.2	4.2.15.2	Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.Interim.Integration.1	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.Integration.2	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.Integration.3	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.ExceptionHandling.3	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.ExceptionHandling.4	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.Integration.4	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.Integration.5	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.Integration.6	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.Integration.7	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.Interim.Integration.8	4.2.15.2	Functional	Initial	N/A
ISB.CCPOR.DMS.Integration.1	4.2.16.2	Functional	Initial	N/A
ISB.CCPOR.DMS.Integration.2	4.2.16.2	Functional	Initial	N/A
ISB.CCPOR.DMS.Integration.3	4.2.16.2	Functional	Initial	N/A
ISB.CCPOR.Database.Integration.1	4.2.16.2	Functional	Initial	N/A
ISB.CCPOR.Database.Integration.2	4.2.16.2	Functional	Initial	N/A
ISB.CCPOR.UI.1	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.2	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.3	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.4	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.5	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.6	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.7	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.8	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.9	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.10	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.UI.11	7.1	Non- Functional	Initial	N/A
ISB.CCPOR.Genreral.FormValidation.1	7.2	Non- Functional	Initial	N/A
ISB.CCPOR.N.Client.1	7.3	Non- Functional	Initial	N/A
ISB.CCPOR.N.Client.2	7.3	Non-	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
		Functional		
ISB.CCPOR.N.Env.1	7.4	Non- Functional	Initial	N/A
ISB.CCPOR.N.Env.2	7.4	Non- Functional	Initial	N/A
ISB.CCPOR.N.Env.3	7.4	Non- Functional	Initial	N/A
ISB.CCPOR.N.Env.4	7.4	Non- Functional	Initial	N/A
ISB.CCPOR.N.Conn.1	7.4	Non- Functional	Initial	N/A
ISB.CCPOR.N.Conn.2	7.4	Non- Functional	Initial	N/A
ISB.CCPOR.N.Capacity.2	7.5	Non- Functional	Initial	N/A
ISB.CCPOR.N.Perform.2	7.5	Non- Functional	Initial	N/A
ISB.CCPOR.N.SLA.1	7.6	Non- Functional	Initial	N/A
ISB.CCPOR.N.SLA.2	7.6	Non- Functional	Initial	N/A
ISB.CCPOR.N.SLA.3	7.6	Non- Functional	Initial	N/A
ISB.CCPOR.N.SLA.4	7.6	Non- Functional	Initial	N/A
ISB.CCPOR.N.Security.1	7.7	Non- Functional	Initial	N/A
ISB.CCPOR.N.Security.2	7.7	Non- Functional	Initial	N/A
ISB.CCPOR.N.Security.3	7.7	Non- Functional	Initial	N/A
ISB.CCPOR.N.Security.4	7.7	Non- Functional	Initial	N/A
ISB.CCPOR.N.Security.5	7.7	Non- Functional	Initial	N/A
ISB.CCPOR.N.ErrorHandling.1	7.8	Non- Functional	Initial	N/A
ISB.CCPOR.N.ErrorHandling.2	7.8	Non- Functional	Initial	N/A
ISB.CCPOR.N.ErrorHandling.3	7.8	Non- Functional	Initial	N/A

ID	Document Section Description	Functional/ Non- Functional	Change (Initial/ New/ Modification)	Change Date
ISB.CCPOR.N.ErrorHandling.4	7.8	Non- Functional	Initial	N/A
ISB.CCPOR.N.ErrorHandling.5	7.8	Non- Functional	Initial	N/A
ISB.CCPOR.N.AuditLog.1	7.9	Non- Functional	Initial	N/A
ISB.CCPOR.N.AuditLog.2	7.9	Non- Functional	Initial	N/A
ISB.CCPOR.N.Monitoring.1	7.10	Non- Functional	Initial	N/A
ISB.CCPOR.N.FT.1	7.11	Non- Functional	Initial	N/A
ISB.CCPOR.N.Reporting.1	7.12	Non- Functional	Initial	N/A
ISB.CCPOR.N.Reporting.2	7.12	Non- Functional	Initial	N/A

Table 140 Appendix C - Requirements Traceability Matrix

# Appendix C. PROJECT GLOSSARY / DEFINITION

Project Specif	Project Specific Terms		
Term	Definition		
DMS	Document Management System		
Document	Physical copy of a restraining and protective order		
Image	An electronic copy of the physical document		
CCPOR	California Courts Protective Order Registry		
R&PO	Restraining and Protective Order		
CCPOR DMS	FileNet P8 installed at CCTC		
Local DMS	DMS installed at Local Court		
DVROS	System of record for DOJ		
DOJ	Department of Justice		
Enterprise Wi	de Terms		
Term	Definition		
CCTC	California Court Technology Center		
SAIC	Science Applications International Corporation		
AOC	Administrative Office Of The Courts		

Table 141 Appendix D - Project Glossary / Definition

# Appendix D. AOC ISB ACRONYMS

TIBCO Acronyms			
Acronym	Name	General Definition	
BW	TIBCO BusinessWorks Product		
Portal	ISB Portal Gateway		
Gateway			
COE	Center of Excellence	Also known as Competency Center	
E2E	End-to-End	Refers to a system between and including	
		end systems as well as the infrastructure or	
		backbone system that connects them	
Education	TIBCO Education Group	TIBCO Education Group provides formal	
		Licensed Software training: this is referred	
		to throughout the SOW as Education or	
	Enternaise Interretion Disputing	Formal Training.	
	Integration Services Reakbane	TIBCO PSG service offering	
130	Integration Services Backbone	of TIBCO technology that will be utilized to	
		establish the Judicial Branch ISB The ISB	
		contains the relevant TIBCO Licensed	
		Software and a set of integration services	
		ready for use by applications seeking to	
		incorporate those services for shared use	
		and reuse of data, services and message	
		traffic transported and transformed across	
		the infrastructure.	
JBDD	Judicial Branch Data Dictionary	The JBDD contains branch shared data	
		elements and their association with data	
		elements in branch applications. In	
		addition, it contains metadata (e.g., element	
		elements in branch applications	
IBSSR	Judicial Branch Schema	The IRSSR is a set of standard schemas	
00001	Specification Repository	(XMI Schema Definitions) and their	
	opeonedicin repeatery	associated rules and documentations	
		(PDFs, word docs, excel sheets) that	
		together establish the design of Common	
		Data Models (schemas) used by all	
		integration exchanges in the ISB	
PKI	Public Key Infrastructure		
PSG	TIBCO Professional Services	Consulting services organization within	
	Group	TIBCO Software Inc.	
RAM	Resource Assignments Matrix	Chart or table that defines participation as	
		Responsible for, Approver, Concur or	
		Participation for a given task or Deliverable.	
SLA	Service Level Agreement	Agreement to the acceptable criteria for	
		performance of Licensed Software of	
SOW	Statement of Work	The AOC contract contains the SOM from	
3010		which task and acceptance criteria	
		expectations are initially described	
	AOC Acror	ivms	

Acronym	Name
2GEFS	Second Generation Electronic Filing Specification
3DES	Triple Data Encryption Standard
AOC	Administrative Office of the Courts
API	Application Program Interface
APPC	Advanced Program-to-Program Communication
ASCII	American Standard Code for Information Interchange
ATM	Asynchronous Transfer Mode
AWS	Automated Warrant System
BPR	Business Process Reengineering
CCMS	California Case Management System
CHP	California Highway Patrol
CLETS	California Law Enforcement Technology System
CMS	Case Management System
COTS	Commercial Off-The-Shelf
DES	Data Exchange Standards
DBMS	Database Management System
ISB	Integration Services Backbone
DI	Data Integration
DMV	Department of Motor Vehicles
DMZ	Demilitarized Zone
DOJ	Department of Justice
DS3	Digital Signal 3
EBCDIC	Extended Binary Coded Decimal Interchange Code
EDI	Electronic Data Interchange
FTP	File Transfer Protocol
GIF	Graphics Interchange Format
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol over Secure Socket Layer
ITD	Information Technology Division
IEEE	Institute of Electrical and Electronics Engineers
IPSec	Internet Protocol Security
IVR	Interactive Voice Response
JBDD	Judicial Branch Data Dictionary
JBSIS	Judicial Branch Statistical Information System
JIEM	Justice Information Exchange Model
JPEG	Joint Photographic Experts Group
JXDD	JusticeXML Data Dictionary
LDAP	Lightweight Directory Access Protocol
LE	Law Enforcement
LU	Logical Unit
MOU	Memorandums of Understanding
OS	Operating System
RMON	Remote Network Monitoring
ROA	Register of Actions
SMS	Short Message Service
SMTP	Simple Mail Transfer Protocol
SNA	Systems Network Architecture
SNMP	Simple Network Management Protocol
SOAP	Simple Object Access Protocol
SQL	Structured Query Language
SSL	Secure Socket Layer
TCP/IP	Transmission Control Protocol / Internet Protocol

TLS	Transport Layer Security
TPS	Transaction Processing Systems
UDDI	Universal Description, Discovery, and Integration
VLAN	Virtual Local Area Network
VPN	Virtual Private Network
VSAM	Virtual Storage Access Method
WAN	Wide Area Network
WAP	Wireless Application Protocol
WSDL	Web Services Description Language
XML	Extensible Mark-up Language
XSLT	Extensible Style sheet Language Transformations

Table 142 Appendix E - AOC ISB Acronyms

# Appendix E.

# STANDARD ETL SCHEMA

AOC, IS Division, Data Integration Program CCPOR D-22-2 Architecture Specification v0.1 Redacted

# Appendix F.

## LOCAL DMS WEB SERVICES SCHEMA

# Appendix G.

## **DATABASE TABLES**

# Appendix H.

## **DATABASE CREATE SCRIPTS**

# Appendix I.

## CARPOS MESSAGE FORMAT

Add Format

#### [REDACTED]

Add acknowledgment

### [REDACTED]

Modify Format

#### [REDACTED] Modify Acknowledgment Format

[REDACTED] Proof of Service Acknowledgment

#### [REDACTED] Cancel Format [REDACTED] Cancel Acknowledgment Format [REDACTED]
TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_ACK	VARCHAR2(20)	N/A	Unique Order ID	Y	PK, FK
SEQ_ACK	NUMBER(2)	N/A	sequence number for multiple acknowlegements per order	Y	PK
DVR_ACK	CLOB	N/A	DVROS Acknowledgements		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_AKA	VARCHAR2(20)	N/A	Unique Order ID	Y	PK,FK
SEQ_AKA	NUMBER(1)	N/A	Sequence Number for multiple AKAs	Y	PK
NAM_AKA	VARCHAR2(30)	AKA	Also Known As	Y	

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_APP	VARCHAR2(20)	N/A	Unique Order ID	Y	PK,FK
SEQ_APP	NUMBER(1)	N/A	sequence number for multiple APP	Y	PK
APN_APP	VARCHAR2(30)	APN	Additional Protected Person Group	Y	
APS_APP	VARCHAR2(1)	APS	Additional Protected Person Group	Y	
APR_APP	VARCHAR2(1)	APR	Additional Protected Person Group		
APD_APP	DATE	APD	Additional Protected Person Group		

# RPO\_DOCS

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_DOCS	VARCHAR2(20)	N/A	Unique Order ID	Y	PK,FK
DOC_ID_DOCS	VARCHAR2(20)	N/A	Document ID	Y	PK
ID_DOCS	VARCHAR2(20)	N/A	DMS ID	Y	
NAME_DOCS	VARCHAR2(50)	N/A	Document Name		

### RPO\_DMS

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes		
ID_DMS	VARCHAR2(20)	N/A	DMS ID	Y	PK		
SERVER_DMS	VARCHAR2(20)	N/A	DMS Server name	Y			
PORT_DMS	NUMBER(5)	N/A	DMS Port Number				
URL_DMS	VARCHAR2(50)	N/A	DMS URL				
							)

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_DOJ	VARCHAR2(20)	N/A	Unique Order ID	Y	PK,FK
MSG_ID_DOJ	VARCHAR2(10)	N/A	DataMax index number	Y	
MSG_DOJ	CLOB	N/A	DVROS Message		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
DOC_ID_META	VARCHAR2(20)	N/A	Document ID	Y	PK
CNT_META	VARCHAR2(2)	CNT	County/Region	Y	PK
NAME_META	VARCHAR2(50)	N/A	Document Name		
CCN_META	VARCHAR2(20)	N/A	Court Case Number(Legacy)		
NAM_META	VARCHAR2(30)	NAM	Restrained Person Name		
PPN_META	VARCHAR2(30)	PPN	Primary Protected Person Name		
FCN_META	VARCHAR2(13)	FCN	File Control Number		
LINKED_META	VARCHAR2(1)	N/A	Flag to indicate if this data has been successfully linked		constraint check('T','F','R','O')

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_MAST	VARCHAR2(20)	N/A	Order ID	Y	PK
CCN_MAST	VARCHAR2(20)	CCN	Court Case Number (Legacy)	Y	
CCMS_MAST	VARCHAR2(20)	N/A	CCMS Case Number	Y	
CNT_MAST	VARCHAR2(2)	CNT	County/Region	Y	
CON_MAST	VARCHAR2(1)	CON	Contact Protected Person	Y	
CRT_MAST	VARCHAR2(5)	CRT	Court	Y	
DOB_MAST	DATE	DOB	Date of Birth	Y	
EXP_MAST	DATE	EXP	Expiration Date of Restraining/Protective Order	Y	
FAP_MAST	VARCHAR2(1)	FAP	Firearms Provision	Y	
FCN_MAST	VARCHAR2(13)	FCN	File Control Number		
ISS_MAST	DATE	ISS	Issue Date of the Restraining/Protective Order	Y	
MIS_MAST	VARCHAR2(500)	MIS	Miscellaneous Information		
NAM_MAST	VARCHAR2(30)	NAM	Name (LAST, FIRST MIDDLE SUFFIX)	Y	
OCA_MAST	VARCHAR2(20)	OCA	Originating Case Number	Y	
ORI_MAST	VARCHAR2(9)	ORI	Originating Agency Identifier	Y	
OTHER_MAST	VARCHAR2(500)	ОТО	Other Orders		
PPD_MAST	DATE	PPD	Protected Person Date of Birth		
PPN_MAST	VARCHAR2(30)	PPN	Protected Person Name (First/Last/Middle/Suffix)	Y	
PPR_MAST	VARCHAR2(1)	PPR	Protected Person Race		
PPS_MAST	VARCHAR2(1)	PPS	Protected Person Sex	Y	
PRS_MAST	VARCHAR2(1)	PRS	Present in Court	Y	
RAC_MAST	VARCHAR2(1)	RAC	Race	Y	
SEX_MAST	VARCHAR2(1)	SEX	Sex	Y	
STY_MAST	VARCHAR2(4)	STY	Stay Away		
TYP_MAST	VARCHAR2(3)	TYP	Restraining/Protective Order Type	Y	
YRD_MAST	NUMBER(4)	YRD	Yards to Stay Away		
NOA_MAST	VARCHAR2(1)	NOA	Notify Originating Agency		
NIC_MAST	VARCHAR2(10)	NIC	NIC Number		
STA_MAST	VARCHAR2(1)	N/A	Order Status	Y	
TRNS_MAST	VARCHAR2(1)	N/A	Transmission Status	Y	
FRM_MAST	VARCHAR2(6)	N/A	Form Type	Y	
IMG_STA_MAST	VARCHAR2(1)	N/A	Image Status	Y	
MNE_MAST	VARCHAR2(4)	MNE	Mnemonic	Y	
SOI_MAST	VARCHAR2(2)	SOI	State of Issuance		
DOE_MAST	DATE	N/A	Data Entry Date	Y	
ADD_CMT_MAST	VARCHAR2(500)	ACM	Additional Comment		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
DOC_MAST	DATE	DOC	Date of Cancellation	Y	
REASON_MAST	VARCHAR2(1)	REASON	Reason for Cancel	Y	
CUS_MAST	VARCHAR2(2)	CUS	Custody		
VAC_MAST	VARCHAR2(60)	VAC	Vacate Address		
VIS_MAST	VARCHAR2(1)	VIS	Visitation		
AGE_MAST	NUMERIC(2)	AGE	Age		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_NCIC	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK,FK
ENS_NCIC	VARCHAR2(1)	ENS	Expanded Name Search		
RSH_NCIC	VARCHAR2(1)	RSH	Related Search Hit		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_RPD	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK,FK
ADR_RPD	VARCHAR2(30)	ADR	Street Address		
CAU_RPD	VARCHAR2(1)	CAU	Caution		
CTY_RPD	VARCHAR2(30)	CTY	City		
EYE_RPD	VARCHAR2(3)	EYE	Eye Color		
FBI_RPD	VARCHAR2(9)	FBI	FBI Number		
FPC_RPD	VARCHAR2(20)	FPC	Fingerprint Classification		
HAI_RPD	VARCHAR2(3)	HAI	Hair Color		
HGT_RPD	NUMBER(3)	HGT	Height		
POB_RPD	VARCHAR2(2)	POB	Place of Birth		
SKN_RPD	VARCHAR2(3)	SKN	Skin Tone		
SSN_RPD	NUMERIC(9)	SOC	Social Security Number		
STT_RPD	VARCHAR2(2)	STT	State		
WGT_RPD	NUMBER(3)	WGT	Weight		
ZIP_RPD	NUMBER(9)	ZIP	ZIP code		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_SERV	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK.FK
AGI_SERV	VARCHAR2(5)	AGI	Agent ID Number		
AGN_SERV	VARCHAR2(30)	AGN	Agency		
PSM_SERV	VARCHAR2(500)	PSM	Proof of Service Miscellaneous		
SAC_SERV	VARCHAR2(20)	SAC	Serving Agency Case Number		
SEV_SERV	DATE	SEV	Date Restraining/Protective Order Served		
WHO_SERV	VARCHAR2(30)	WHO	Served By		
TIM_SERV	VARCHAR2(5)	TIM	Time Served		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_VIO	VARCHAR2(20)	N/A	Unique Order ID	Y	PK,FK
	VARCHAR2(1)				
CHL_VIO		CHL	Child(ren) Present		
COM_VIO	VARCHAR2(500)	СОМ	Comment		
DOV_VIO	DATE	DOV	Date of Violation	Y	
HVO_VIO	VARCHAR2(5)	HVO	How Violatoin Occurred	Υ	
RPT_VIO	VARCHAR2(21)	RPT	Report Number	Y	
STV_VIO	VARCHAR2(1)	STV	Status of Violator	Y	
TOV_VIO	NUMBER(4)	TOV	Time of Violation		
VNM_VIO	NUMERIC(3)	VNM	Violation Number		
VOP_VIO	VARCHAR2(1)	VOP	Violator on Parole or Probation		
VUW_VIO	VARCHAR2(1)	VUW	Violator Used Weapon		
WVO_VIO	VARCHAR2(1)	WVO	Where Violation Occurred	Y	
WTP_VIO	VARCHAR2(1)	N/A	Weapon Type		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes	
ORDERID_SMT	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Υ	PK,FK	
SEQ_SMT	NUMBER(1)		Sequence number for multiple SMTs	Y	PK	
SMT_SMT	VARCHAR2(10)	SMT	Scars, Marks, and Tattoos	Y		

## RPO\_CMC

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes	
ORDERID_CMC	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK,FK	
SEQ_CMC	NUMBER(1)		Sequence ID for multiple CMCs	Y	PK	
CMC_CMC	VARCHAR2(2)	СМС	Caution and Medical Conditions	Y		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes	
ORDERID_MNU	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK,FK	
SEQ_MNU	NUMBER(1)		Sequnce ID for multiple MNUs	Y	PK	
MNU_MNU	VARCHAR2(15)	MNU	ID Number and associated Miscellaneous Number	Y		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_OLG	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK,FK
OLN_OLG	VARCHAR2(20)	OLN	Operator's License Number	Y	
OLS_OLG	VARCHAR2(2)	OLS	Operator's License State	Y	
OLY_OLG	VARCHAR2(4)	OLY	Operator's License Year of Expiration		

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_LIG	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK,FK
NUM_LIG	VARCHAR2(10)	LIC	License Plate Number	Y	
LIS_LIG	VARCHAR2(2)	LIS	License Plate State	Y	
LIT_LIG	VARCHAR2(2)	LIT	License Plate Type	Y	
LIY_LIG	VARCHAR2(4)	LIY	License Plate Year	Y	

TB Field Name	Format	Field Name in DVROS	Field	Not Null	Attributes
ORDERID_VEG	VARCHAR2(20)	CCPOR Specific	Unique Order ID	Y	PK,FK
VCO_VEG*	VARCHAR2(7)	VCO*	Vehicle Color		
VIN_VEG*	VARCHAR2(20)	VIN*	Vehicle Identification Number	Y	
VMA_VEG*	VARCHAR2(24)	VMA*	Vehicle Make	Y	
VMO_VEG*	VARCHAR2(30)	VMO*	Vehicle Model	Y	
VST_VEG*	VARCHAR2(2)	VST*	Vehicle Style	Y	
VYR_VEG*	NUMERIC(4)	VYR*	Vehicle Year	Y	

ETL\_ReadMe

CCPOR ETL Schema Documentation
R & PO data will be extracted from the local repositories into a set a extract files(CS\
The set of extract files together are built to hold the entire order dat
The set of extract files together are built to maintain the relations with in an order da
To maintain the integrity of an Order, all data required for an Order by CARPOS should be appropriately extracted into the corresponding extract fi
This workbook explains the expected format of the extract files(CSV:
Each sheet in the workbook corresponds to a extract file (CSV
The sheets are named with the expected names for the extract file
OrderDetails.csv holds the master data for an Order, other extract files hold data related to this master dat
Each line in the extract file(CSV) holds aRECORD
Each <b>RECORD</b> holds <b>fields/columns</b> values separated by comma(,)
Each RECORD ends at a newline characte
The sheets in the workbook describe the various extract files and the expecteFields/Columns in them
The <i>Fields/Columns</i> are <i>labeled</i> as in CARPOS, and the sheets provide <i>description</i> to each one of them
The sheets in the workbook describe the various extract files and the expecte format of the Fields/Columns in them
The sheets in the workbook describe the various extract files and the expecte ordering of the Fields/Columns in them
The sheets in the workbook describe the various extract files and define if aField/Column value is required/optional
If the value for a Field/Column contains a special character (, * / \ - etc) the value should be enclosed within aquotation marks ("")
All Field/Column which are <i>required</i> should have valid values in ther
If optional Field/Column don't have a value available, aempty string (, <empty string="">,) should be entered in the extract file to maintain the Field Sequence in the</empty>
Record
Pulse specific to an extract file are specified in individual shoets for the extract fi

Rules specific to an extract file are specified in individual sheets for the extract fi

### AlsoKnownAs.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Y
2	AKA	varchar2(30)	AKA	Also Known As 1	N
3	AKA	varchar2(30)	AKA	Also Known As 2	Ν
4	AKA	varchar2(30)	AKA	Also Known As 3	N
5	AKA	varchar2(30)	AKA	Also Known As 4	N
6	AKA	varchar2(30)	AKA	Also Known As 5	Ν
7	AKA	varchar2(30)	AKA	Also Known As 6	N
8	AKA	varchar2(30)	AKA	Also Known As 7	Ν
9	AKA	varchar2(30)	AKA	Also Known As 8	Ν
10	AKA	varchar2(30)	AKA	Also Known As 9	Ν
Only 9 Also Known	As fields are allowed p	per record, other values will be	ignored		
Only one Also Know	n As record is allowed	d per Order, other values will be	e ignored		

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Υ
2	APN	varchar2(30)	APN	Additional Protected Person Name	Υ
3	APS	varchar2(1)	APS	Additional Protected Person Sex	Υ
4	APR	varchar2(1)	APR	Additional Protected Person Race	Ν
5	APD	date	APD	Additional Protected Person DOB	Ν
Only 9 Additional F	Protected Person re				
The Additional Protected Person Number will be assigned based on the sequence the record appears					
For example, the first	st Additional Protecte	ed Person record for an Order that	appears in the file will be co	onstrued as Additional Protected Person 1	for that Order

### Attachment.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Υ
2	DOC_ID	varchar2(20)	N/A	Document ID	Y
3	NAME	varchar2(50)	N/A	Document Name	Ν

### OrderDetails.csv

Field Sequence	TB Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Υ
2	CCN	varchar2(20)	CCN	Court Case Number (Legacy)	Υ
3	CCMS	varchar2(20)	N/A	CCMS Case Number	Υ
4	CNT	varchar2(2)	CNT	County/Region	Υ
5	CON	varchar2(1)	CON	Contact Protected Person	Υ
6	CRT	Varchar2(5)	CRT	Court	Υ
7	DOB	date	DOB	Date of Birth	Υ
8	EXP	date	EXP	Expiration Date of Restraining/Protective Order	Υ
9	FAP	varchar2(1)	FAP	Firearms Provision	Υ
10	FCN	varchar2(13)	FCN	File Control Number	Ν
11	ISS	date	ISS	Issue Date of the Restraining/Protective Order	Υ
12	MIS	varchar2(500)	MIS	Miscellaneous Information	Ν
13	NAM	varchar2(30)	NAM	Name (LAST, FIRST MIDDLE SUFFIX)	Υ
14	OCA	VARCHAR2(20)	OCA	Originating Case Number	Υ
15	ORI	varchar2(9)	ORI	Originating Agency Identifier	Υ
16	OTHER	varchar2(500)	ОТО	Other Orders	Ν
17	PPD	Date	PPD	Protected Person Date of Birth	Ν
18	PPN	VARCHAR2(30)	PPN	Protected Person Name (First/Last/Middle/Suffix)	Y
19	PPR	varchar2(1)	PPR	Protected Person Race	Ν
20	PPS	VARCHAR2(1)	PPS	Protected Person Sex	Υ
21	PRS	varchar2(1)	PRS	Present in Court	Υ
22	RAC	varchar2(1)	RAC	Race	Υ
23	SEX	varchar2(1)	SEX	Sex	Υ
24	STY	varchar2(4)	STY	Stay Away	Ν
25	TYP	Varchar2(3)	TYP	Restraining/Protective Order Type	Υ
26	YRD	Number(4)	YRD	Yards to Stay Away	Ν
27	NOA	varchar2(1)	NOA	Notify Originating Agency	Ν
28	NIC	varchar2(10)	NIC	NIC Number	Ν
29	STA	varchar2(1)	N/A	Order Status	Y
30	FRM	varchar2(6)	N/A	Form Type	Y
31	IMG_STA	varchar2(1)	N/A	Image Status	Y
32	MNE	varchar2(4)	MNE	Mnemonic	Y
33	SOI	varchar2(2)	SOI	State of Issuance	N
34	ADD_CMT	varchar2(500)	ACM	Additional Comment	N
35	DOC	date	DOC	Date of Cancellation	Y
36	REASON	varchar2(1)	REASON	Reason for Cancel	Y

#### OrderDetails.csv

Field Sequence	TB Field Name	Format	Field Name in DVROS	Field	Required
37	CUS	varchar2(2)	CUS	Custody	Ν
38	VAC	varchar2(60)	VAC	Vacate Address	Ν
39	VIS	varchar2(1)	VIS	Visitation	Ν
40	AGE	numeric(2)	AGE	Age	Ν
Only one Order De	etails record is allowed per Order	r, other values will be	e ignored		

### RestrainedPerson.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Υ
2	ADR	varchar2(30)	ADR	Street Address	Ν
3	CAU	varchar2(1)	CAU	Caution	Ν
4	СТҮ	varchar2(30)	CTY	City	Ν
5	EYE	varchar2(3)	EYE	Eye Color	Ν
6	FBI	varchar2(9)	FBI	FBI Number	Ν
7	FPC	varchar2(20)	FPC	Fingerprint Classification	N
8	HAI	varchar2(3)	HAI	Hair Color	N
9	HGT	number(3)	HGT	Height	N
10	POB	varchar2(2)	POB	Place of Birth	N
11	SKN	varchar2(3)	SKN	Skin Tone	Ν
12	SSN	numeric(9)	SOC	Social Security Number	N
13	STT	varchar2(2)	STT	State	Ν
14	WGT	number(3)	WGT	Weight	N
15	ZIP	number(9)	ZIP	ZIP code	Ν
Only one Restrained	Person record is	allowed per Order, other	values will be ignored		

### Service.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Y
2	AGI	varchar2(5)	AGI	Agent ID Number	Ν
3	AGN	varchar2(30)	AGN	Agency	Ν
4	PSM	varchar2(500)	PSM	Proof of Service Miscellaneous	Ν
5	SAC	varchar2(20)	SAC	Serving Agency Case Number	Ν
6	SEV	DATE	SEV	Date Restraining/Protective Order Served	Ν
7	WHO	varchar2(30)	WHO	Served By	Ν
8	TIM	varchar2(5)	TIM	Time Served	Ν
Only one Service	record is allowed p	per Order, other values w			

## ScarsMarksTattoos.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Y
2	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 1	Ν
3	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 2	Ν
4	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 3	Ν
5	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 4	Ν
6	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 5	Ν
7	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 6	Ν
8	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 7	Ν
9	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 8	Ν
10	SMT	varchar2(10)	SMT	Scars, Marks, and Tattoos 9	Ν
Only 9 Scars, Marks & Tattoos fields are allowed per record, other values will be ignored					
Only one Scars,M	arks & Tattoos	record is allowed pe	er Order, other values will be	ignored	

#### CautionMedicalConditions.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Υ
2	CMC	varchar2(2)	CMC	Caution and Medical Conditions 1	Ν
3	CMC	varchar2(2)	CMC	Caution and Medical Conditions 2	Ν
4	CMC	varchar2(2)	CMC	Caution and Medical Conditions 3	Ν
5	CMC	varchar2(2)	CMC	Caution and Medical Conditions 4	Ν
6	CMC	varchar2(2)	CMC	Caution and Medical Conditions 5	Ν
7	CMC	varchar2(2)	CMC	Caution and Medical Conditions 6	Ν
8	CMC	varchar2(2)	CMC	Caution and Medical Conditions 7	Ν
9	CMC	varchar2(2)	CMC	Caution and Medical Conditions 8	Ν
10	CMC	varchar2(2)	CMC	Caution and Medical Conditions 9	Ν
Only 9 Caution And Medical Conditions fields are allowed per record, other values will be ignored					
Only one Caution	And Medical	Conditions rec	cord is allowed per Order,	, other values will be ignored	

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Y
2	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 1	Ν
3	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 2	N
4	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 3	N
5	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 4	Ν
6	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 5	N
7	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 6	Ν
8	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 7	Ν
9	MNU	varchar2(15)	MNU	ID Number and associated Miscellaneous Number 8	Ν
Only 8 ID Numbe	r and associate	d Miscellaneous	Number fields are allow	ed per record, other values will be ignored	
Only one ID Num	ber and associa	ted Miscellanec	ous Number record is allo	wed per Order, other values will be ignored	

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Y
2	OLN	varchar2(20)	OLN	Operator's License Number	Y
3	OLS	varchar2(2)	OLS	Operator's License State	Y
4	OLY	varchar2(4)	OLY	Operator's License Year of Expiration	Ν
Only one Operato	r License Gr	oup record is allow	ed per Order, other value	s will be ignored	

# LicenseGroup.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Υ
2	LIC	varchar2(10)	LIC	License Plate Number	Υ
3	LIS	varchar2(2)	LIS	License Plate State	Υ
4	LIT	varchar2(2)	LIT	License Plate Type	Υ
5	LIY	varchar2(4)	LIY	License Plate Year	Υ
Only one License	Group record is al				

# VehicleGroup.csv

Field Sequence	Field Name	Format	Field Name in DVROS	Field	Required
1	ORDERID	varchar2(20)	N/A	Unique Order ID	Y
2	VCO	varchar2(7)	VCO	Vehicle Color	Ν
3	VIN	varchar2(20)	VIN	Vehicle Identification Number	Υ
4	VMA	varchar2(24)	VMA	Vehicle Make	Y
5	VMO	varchar2(30)	VMO	Vehicle Model	Y
6	VST	varchar2(2)	VST	Vehicle Style	Υ
7	VYR	numeric(4)	VYR	Vehicle Year	Y
Only one Vehicle Gr	oup record is a	llowed per Order, o	other values will be ignored		

CCPORD~1. WSD <?xml version="1.0" encoding="UTF-8"?> <! -- Created by TIBCO WSDL--> <wsdl : defi ni ti ons xml ns: wsdl ="http://schemas.xml soap.org/wsdl/"</p> xml ns: tns="http://xml ns. exampl e. com/1227680191093" xml ns: soap="http://schemas.xml soap.org/wsdl/soap/"
xml ns: ns0="https://i sb. srv. courts-tc. ca. gov/portal/i sb/schema/gl obal/CCPOR/Local DMSW ebServices/schema/1.0.0/Local DMSSchema.xsd" name="Untitled" targetNamespace="http://xmlns.example.com/1227680191093"> <wsdl : types> <xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml ns="https://isb.srv.courts-tc.ca.gov/portal/isb/schema/global/CCPOR/LocalDMSWebSe rvi ces/schema/1. 0. 0/Local DMSSchema. xsd' targetNamespace="https://isb.srv.courts-tc.ca.gov/portal/isb/schema/global/CCPOR/Loc al DMSWebServices/schema/1.0.0/Local DMSSchema.xsd" el ementFormDefault="qualified" attributeFormDefault="unqualified"> <xsd: compl exType name="CourtCaseNumberType"> <xsd: complexContent> <xsd: extensi on base="ns0: MetadataType"> <xsd: sequence> <xsd: any processContents="strict" namespace="##any"/> </xsd: sequence> </xsd: extensi on> </xsd: compl exContent> </xsd: compl exType> <xsd: compl exType name="CourtIdType"> <xsd: compl exContent> <xsd: extensi on base="ns0: MetadataType"> <xsd: sequence> <xsd: any processContents="strict" namespace="##any"/> </xsd: sequence> </xsd: extensi on> </xsd: compl exContent> </xsd: compl exType> <xsd: compl exType name="DocumentObj ectRequestType"> < xsd: compl exContent> <xsd: extensi on base="ns0: Obj ectRequestType"> <xsd: sequence> <xsd:element name="MetadataProperties"</pre> type="ns0: MetadataType" min0ccurs="0" max0ccurs="unbounded"/> </xsd: sequence> </xsd: extensi on> </xsd: compl exContent> </xsd: compl exType> <xsd: compl exType name="DocumentObj ectResponseType"> <xsd: compl exContent> <xsd: extensi on base="ns0: Obj ectResponseType"> <xsd: sequence> <xsd: el ement name="Val ue" type="ns0: Obj ectType"/>
<xsd: el ement name="MetadataProperti es"</pre> type="ns0: MetadataType" minOccurs="0" maxOccurs="unbounded"/> </xsd: sequence> </xsd: extensi on> </xsd: compl exContent> </xsd: compl exType> <xsd: compl exType name="FCNNumberType"> <xsd: complexContent> <xsd: extensi on base="ns0: MetadataType"> <xsd: sequence> <xsd:any processContents="strict" namespace="##any"/> </xsd: sequence> </xsd: extensi on> </xsd: compl exContent> </xsd: compl exType>

```
Page 1
```

CCPORD~1. WSD <xsd: compl exType name="MetadataType" abstract="true"/> <xsd: compl exType name="Obj ectRequestType" abstract="true"> <xsd:attribute name="Id" use="required" type="xsd:string"/> </xsd: compl exType> </xsd: compl exType> <xsd: compl exType name="Obj ectType"> <xsd: sequence> <xsd:any processContents="strict" namespace="##any"/> </xsd: sequence> </xsd: compl exType> <xsd: extensi on base="ns0: MetadataType"> <xsd: sequence> <xsd: any processContents="strict" namespace="##any"/> </xsd: sequence> </xsd: extensi on> </xsd: compl exContent> </xsd: compl exType> <xsd: compl exType name="RestrainedPersonNameType"> <xsd: compl exContent> <xsd: extensi on base="ns0: MetadataType"> <xsd: sequence> <xsd: any processContents="strict" namespace="##any"/> </xsd: sequence> </xsd: extensi on> </xsd: compl exContent> </r>
</xsd: compl exType> </xsd: compl exType> </xsd: el ement name="Document0bj ectRequest" type="ns0: Document0bj ectRequestType"/> </r>
xsd: el ement name="Document0bj ectResponse" type="ns0: DocumentObj ectResponseType"/> </xsd: schema> </wsdl:types> <wsdl:service name="Local DMSWSDL-service0"> <wsdl:port name="GetObjects\_PortTypeEndpoint0"</pre> bi ndi ng="tns: GetObj ects\_PortTypeEndpoi ntOBi ndi ng"> <soap: address location="http://LENOVO-62FBB97D: 8080/SharedResources/SOAP/Local DMSWebServices/Local DMSWSDL-servi ce0. servi ceagent/Get0bj ects\_PortTypeEndpoi nt0"/> </wsdl:port> </wsdl:service> <wsdl : portType name="GetObj ects\_PortType"> <wsdl:operation name="Get0bjects"> <wsdl:input message="tns:GetObjects\_In\_Request"/> <wsdl:output message="tns:GetObjects\_Out\_Response"/> </wsdl:operation> </wsdl:portType> <wsdl : bi ndi ng name="Get0bj ects\_PortTypeEndpoi nt0Bi ndi ng"</pre> type="tns:Get0bjects\_PortType"> <soap: bi ndi ng styl e="document" transport="http://schemas.xml soap.org/soap/http"/> <wsdl:operation name="GetObjects"> <soap: operation style="document"</pre> soapAction="/SharedResources/SOAP/Local DMSWebServices/Local DMSWSDL-service0.servicea gent/Get0bj ects\_PortTypeEndpoi nt0/Get0bj ects"/> <wsdl : i nput> <soap: body use="literal" parts="request"/> </wsdl:input> <wsdl : output> <soap: body use="literal" parts="response"/> Page 2

</wsdl:output> </wsdl:operation> </wsdl:binding> <wsdl:message\_name="GetObjects\_In\_Request"> <wsdl:message\_name="GetObjects\_In\_Request"> </wsdl:message <wsdl:message> <wsdl:message\_name="GetObjects\_Out\_Response"> <wsdl:message\_name="GetObjects\_Out\_Response"> </wsdl:message </wsdl:message> </wsdl:message>
CREATE TABLE RPO\_ACK ( ORDERID\_ACK VARCHAR2(20 BYTE) NOT NULL, SEQ\_ACK NUMBER(2) NOT NULL, DVR\_ACK CLOB ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 INITRANS 1 MAXTRANS 255 STORAGE ( INITIAL 64K NEXT 64K MINEXTENTS 1 2147483645 MAXEXTENTS PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING NOCOMPRESS LOB (DVR ACK) STORE AS (TABLESPACE CPRDATA ENABLE STORAGE IN ROW CHUNK 8192 PCTVERSION 0 NOCACHE STORAGE ( INITIAL 64K NEXT 64K MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER POOL DEFAULT ) ) NOCACHE NOPARALLEL MONITORING; ALTER TABLE RPO\_ACK ADD ( CONSTRAINT RPO ACK PK PRIMARY KEY (ORDERID ACK, SEQ ACK) USING INDEX TABLESPACE CPRINDX);

## ALTER TABLE RPO\_ACK ADD ( FOREIGN KEY (ORDERID\_ACK) REFERENCES RPO\_MAST (ORDERID\_MAST));

CREATE TABLE RPO\_AKA ( ORDERID\_AKA VARCHAR2(20 BYTE) NOT NULL, SEQ\_AKA NUMBER(1) NOT NULL, NAM\_AKA VARCHAR2(30 BYTE) NOT NULL ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 **INITRANS** 1 MAXTRANS 255 STORAGE ( **INITIAL** 64K 64K NEXT MINEXTENTS 1 2147483645 MAXEXTENTS PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING **NOCOMPRESS NOCACHE** NOPARALLEL MONITORING;

ALTER TABLE RPO\_AKA ADD ( CONSTRAINT RPO\_AKA\_PK PRIMARY KEY (ORDERID\_AKA, SEQ\_AKA) USING INDEX TABLESPACE CPRINDX);

ALTER TABLE RPO\_AKA ADD ( FOREIGN KEY (ORDERID\_AKA) REFERENCES RPO\_MAST (ORDERID\_MAST));

ALTER TABLE RPO\_AKA ADD ( CONSTRAINT RPO\_AKA\_PK PRIMARY KEY (ORDERID\_AKA) USING INDEX TABLESPACE CPRINDX);

ALTER TABLE RPO\_AKA ADD ( FOREIGN KEY (ORDERID AKA) REFERENCES RPO\_MAST (ORDERID\_MAST)); CREATE TABLE RPO\_APP ( ORDERID\_APP VARCHAR2(20 BYTE) NOT NULL, SEQ\_APP NUMBER(1) NOT NULL, APN\_APP VARCHAR2(30 BYTE) NOT NULL, APS\_APP VARCHAR2(1 BYTE) NOT NULL, APR\_APP VARCHAR2(1 BYTE), APD APP DATE ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 INITRANS 1 MAXTRANS 255 STORAGE ( INITIAL 64K NEXT 64K MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER POOL DEFAULT ) LOGGING **NOCOMPRESS** NOCACHE NOPARALLEL MONITORING:

ALTER TABLE RPO\_APP ADD ( CONSTRAINT RPO\_APP\_PK PRIMARY KEY (ORDERID\_APP, SEQ\_APP) USING INDEX TABLESPACE CPRINDX);

ALTER TABLE RPO\_APP ADD (

FOREIGN KEY (ORDERID\_APP) REFERENCES RPO\_MAST (ORDERID\_MAST));

```
CREATE TABLE RPO_DOCS
(
ORDERID DOCS VARCHAR2(20 BYTE)
                                      NOT NULL,
DOC_ID_DOCS VARCHAR2(20 BYTE)
                                     NOT NULL,
ID DOCS
         VARCHAR2(20 BYTE)
                                  NOT NULL,
NAME_DOCS VARCHAR2(50 BYTE)
)
TABLESPACE CPRDATA
PCTUSED 0
PCTFREE 10
INITRANS 1
MAXTRANS 255
STORAGE (
    INITIAL
               64K
    NEXT
               64K
    MINEXTENTS
                  1
    MAXEXTENTS
                   2147483645
    PCTINCREASE
                  0
    BUFFER_POOL DEFAULT
    )
LOGGING
NOCOMPRESS
NOCACHE
NOPARALLEL
MONITORING;
ALTER TABLE RPO_DOCS ADD (
CONSTRAINT RPO DOCS PK
PRIMARY KEY
(ORDERID DOCS, DOC ID DOCS)
USING INDEX TABLESPACE CPRINDX);
ALTER TABLE RPO_DOCS ADD (
FOREIGN KEY (ORDERID DOCS)
REFERENCES RPO MAST (ORDERID MAST));
CREATE TABLE RPO DMS
(
```

ID\_DMS VARCHAR2(20 BYTE)

SERVER\_DMS VARCHAR2(20 BYTE) NOT NULL, PORT\_DMS NUMBER(5), URL\_DMS VARCHAR2(50 BYTE) ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 **INITRANS** 1 MAXTRANS 255 STORAGE ( INITIAL 64K NEXT 64K MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING NOCOMPRESS **NOCACHE** NOPARALLEL MONITORING; ALTER TABLE RPO DMS ADD ( CONSTRAINT RPO\_DMS\_PK PRIMARY KEY (ID DMS) USING INDEX TABLESPACE CPRINDX); CREATE TABLE RPO DOJ ( ORDERID DOJ VARCHAR2(20 BYTE) NOT NULL, MSG\_ID\_DOJ VARCHAR2(10 BYTE) NOT NULL, MSG DOJ CLOB ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 INITRANS 1 MAXTRANS 255 STORAGE ( INITIAL 64K NEXT 64K MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0

```
BUFFER_POOL
                   DEFAULT
    )
LOGGING
NOCOMPRESS
LOB (MSG_DOJ) STORE AS
  (TABLESPACE CPRDATA
   ENABLE
            STORAGE IN ROW
   CHUNK
            8192
   PCTVERSION 0
   NOCACHE
   STORAGE (
                   64K
        INITIAL
        NEXT
                  64K
        MINEXTENTS
                      1
        MAXEXTENTS
                       2147483645
        PCTINCREASE
                      0
        BUFFER POOL
                       DEFAULT
        )
  )
NOCACHE
NOPARALLEL
MONITORING;
ALTER TABLE RPO_DOJ ADD (
PRIMARY KEY
(ORDERID_DOJ, MSG_ID_DOJ)
USING INDEX TABLESPACE CPRINDX);
ALTER TABLE RPO_DOJ ADD (
FOREIGN KEY (ORDERID DOJ)
REFERENCES RPO_MAST (ORDERID_MAST));
CREATE TABLE RPO_META
(
DOC_ID_META VARCHAR2(20 BYTE) NOT NILL,
CNT META VARCHAR2(2 BYTE)
                              NOT NULL,
NAME META VARCHAR2(50 BYTE),
LINKED_META VARCHAR2(1) CHECK(LINKED_META IN ('T','F', 'R','O'))
)
TABLESPACE CPRDATA
PCTUSED 0
PCTFREE 10
```

```
INITRANS 1
```

MAXTRANS 255 STORAGE ( INITIAL 64K NEXT 64K **MINEXTENTS** 1 2147483645 MAXEXTENTS PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING **NOCOMPRESS** NOCACHE NOPARALLEL MONITORING; ALTER TABLE RPO\_META ADD ( CONSTRAINT RPO META PK PRIMARY KEY (DOC\_ID\_META, CNT\_META) USING INDEX TABLESPACE CPRINDX); CREATE TABLE RPO\_MAST ( ORDERID\_MAST VARCHAR2(20 BYTE) NOT NULL, CCN\_MAST VARCHAR2(20 BYTE) NOT NULL, CCMS MAST NOT NULL, VARCHAR2(20 BYTE) CNT\_MAST VARCHAR2(2 BYTE) NOT NULL. CON MAST VARCHAR2(1 BYTE) NOT NULL, CRT MAST VARCHAR2(5 BYTE) NOT NULL, DOB MAST NOT NULL, DATE EXP MAST DATE NOT NULL, FAP\_MAST VARCHAR2(1 BYTE) NOT NULL, FCN MAST VARCHAR2(13 BYTE), ISS MAST NOT NULL, DATE MIS MAST VARCHAR2(500 BYTE), NAM MAST VARCHAR2(30 BYTE) NOT NULL, NOT NULL, OCA MAST VARCHAR2(20 BYTE) ORI MAST VARCHAR2(9 BYTE) NOT NULL, OTHER MAST VARCHAR2(500 BYTE), PPD\_MAST DATE. PPN MAST VARCHAR2(30 BYTE) NOT NULL, PPR\_MAST VARCHAR2(1 BYTE), PPS MAST VARCHAR2(1 BYTE) NOT NULL. PRS MAST VARCHAR2(1 BYTE) NOT NULL, RAC\_MAST VARCHAR2(1 BYTE) NOT NULL,

```
SEX MAST
            VARCHAR2(1 BYTE)
                                   NOT NULL.
STY_MAST
            VARCHAR2(4 BYTE),
TYP_MAST
            VARCHAR2(3 BYTE)
                                   NOT NULL,
YRD MAST
            NUMBER(4),
NOA MAST
            VARCHAR2(1 BYTE),
NIC_MAST
            VARCHAR2(10 BYTE),
STA MAST
            VARCHAR2(1 BYTE)
                                   NOT NULL,
TRNS_MAST
            VARCHAR2(1 BYTE)
                                    NOT NULL,
FRM MAST
            VARCHAR2(6 BYTE)
                                   NOT NULL,
                                      NOT NULL,
IMG_STA_MAST VARCHAR2(1 BYTE)
MNE_MAST
            VARCHAR2(4 BYTE)
                                    NOT NULL,
SOI MAST
           VARCHAR2(2 BYTE),
DOE MAST
            DATE
                             NOT NULL,
ADD_CMT_MAST VARCHAR2(500 BYTE)
ADD_CMT_MAST VARCHAR2(500 BYTE),
DOC_MAST
            DATE
                             NOT NULL,
REASON MAST VARCHAR2(1 BYTE)
                                     NOT NULL,
CUS_MAST
            VARCHAR2(2 BYTE),
VAC_MAST
            VARCHAR2(60 BYTE),
VIS_MASR
           VARCHAR2(1 BYTE),
AGE_MAST
            NUMBER(2)
)
TABLESPACE CPRDATA
PCTUSED 0
PCTFREE 10
INITRANS 1
MAXTRANS 255
STORAGE (
     INITIAL
               64K
     NEXT
               64K
     MINEXTENTS
                   1
     MAXEXTENTS
                   2147483645
     PCTINCREASE
                   0
     BUFFER POOL
                   DEFAULT
    )
LOGGING
NOCOMPRESS
NOCACHE
NOPARALLEL
MONITORING:
ALTER TABLE RPO_MAST ADD (
CONSTRAINT RPO MAST PK
PRIMARY KEY
(ORDERID_MAST)
```

CREATE TABLE RPO\_NCIC ( ORDERID\_NCIC VARCHAR2(20 BYTE) NOT NULL, ENS\_NCIC VARCHAR2(1 BYTE), RSH NCIC VARCHAR2(1 BYTE) ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 INITRANS 1 MAXTRANS 255 STORAGE ( INITIAL 64K 64K NEXT MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING NOCOMPRESS NOCACHE NOPARALLEL MONITORING: ALTER TABLE RPO\_NCIC ADD ( CONSTRAINT RPO\_NCIC\_PK PRIMARY KEY (ORDERID NCIC) USING INDEX TABLESPACE CPRINDX); ALTER TABLE RPO\_NCIC ADD ( FOREIGN KEY (ORDERID NCIC) REFERENCES RPO\_MAST (ORDERID\_MAST)); CREATE TABLE RPO RPD ( ORDERID RPD VARCHAR2(20 BYTE) NOT NULL, ADR\_RPD VARCHAR2(30 BYTE), CAU RPD VARCHAR2(1 BYTE), CTY\_RPD VARCHAR2(30 BYTE),

EYE\_RPD VARCHAR2(3 BYTE),

FBI\_RPD VARCHAR2(9 BYTE), FPC\_RPD VARCHAR2(20 BYTE), HAI\_RPD VARCHAR2(3 BYTE), HGT\_RPD NUMBER(3), POB\_RPD VARCHAR2(2 BYTE), SKN\_RPD VARCHAR2(3 BYTE), SSN RPD NUMBER(9), STT\_RPD VARCHAR2(2 BYTE), WGT RPD NUMBER(3), ZIP\_RPD NUMBER(9) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 INITRANS 1 MAXTRANS 255 STORAGE ( INITIAL 64K 64K NEXT MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING **NOCOMPRESS** NOCACHE NOPARALLEL MONITORING; ALTER TABLE RPO RPD ADD ( CONSTRAINT RPO\_RPD\_PK PRIMARY KEY (ORDERID RPD) USING INDEX TABLESPACE CPRINDX); ALTER TABLE RPO RPD ADD ( FOREIGN KEY (ORDERID RPD) REFERENCES RPO\_MAST (ORDERID\_MAST)); CREATE TABLE RPO\_SERV ORDERID\_SERV VARCHAR2(20 BYTE) AGI\_SERV VARCHAR2(5 BYTE),

)

(

```
AGN_SERV VARCHAR2(30 BYTE),
PSM_SERV VARCHAR2(500 BYTE),
SAC_SERV VARCHAR2(20 BYTE),
SEV_SERV DATE,
WHO_SERV VARCHAR2(30 BYTE),
TIM_SERV VARCHAR2(5)
)
TABLESPACE CPRDATA
PCTUSED 0
PCTFREE 10
INITRANS 1
MAXTRANS 255
STORAGE (
     INITIAL
               64K
     NEXT
               64K
     MINEXTENTS
                  1
     MAXEXTENTS
                   2147483645
     PCTINCREASE
                   0
     BUFFER POOL
                   DEFAULT
    )
LOGGING
NOCOMPRESS
NOCACHE
NOPARALLEL
MONITORING;
ALTER TABLE RPO_SERV ADD (
CONSTRAINT RPO SERV PK
PRIMARY KEY
(ORDERID SERV)
USING INDEX TABLESPACE CPRINDX);
ALTER TABLE RPO SERV ADD (
FOREIGN KEY (ORDERID SERV)
REFERENCES RPO_MAST (ORDERID_MAST));
CREATE TABLE RPO VIO
(
ORDERID_VIO VARCHAR2(20 BYTE)
                                 NOT NULL,
CHL VIO VARCHAR2(1 BYTE),
COM_VIO VARCHAR2(500 BYTE),
DOV_VIO DATE
                             NOT NULL.
HVO VIO VARCHAR2(5 BYTE)
                                   NOT NULL,
```

RPT\_VIO VARCHAR2(21 BYTE)

```
STV_VIO VARCHAR2(1 BYTE)
                                    NOT NULL,
TOV_VIO NUMBER(4),
VNM_VIO NUMBER(3),
VOP_VIO VARCHAR2(1 BYTE),
VUW_VIO VARCHAR2(1 BYTE),
WVO_VIO VARCHAR2(1 BYTE)
                                    NOT NULL,
WTP VIO VARCHAR2(1 BYTE)
)
TABLESPACE CPRDATA
PCTUSED 0
PCTFREE 10
INITRANS 1
MAXTRANS 255
STORAGE (
     INITIAL
               64K
               64K
     NEXT
     MINEXTENTS
                   1
     MAXEXTENTS
                   2147483645
     PCTINCREASE
                   0
     BUFFER_POOL
                   DEFAULT
    )
LOGGING
NOCOMPRESS
NOCACHE
NOPARALLEL
MONITORING:
ALTER TABLE RPO_VIO ADD (
CONSTRAINT RPO VIO PK
PRIMARY KEY
(ORDERID VIO)
USING INDEX TABLESPACE CPRINDX);
ALTER TABLE RPO VIO ADD (
FOREIGN KEY (ORDERID VIO)
REFERENCES RPO_MAST (ORDERID_MAST));
CREATE TABLE RPO_SMT
(
```

ORDERID\_SMT VARCHAR2(20 BYTE) NOT NULL, SEQ\_SMT NUMBER(1) NOT NULL, SMT\_SMT VARCHAR2(10 BYTE) NOT NULL **TABLESPACE CPRDATA** PCTUSED 0 PCTFREE 10 **INITRANS** 1 MAXTRANS 255 STORAGE ( INITIAL 64K 64K NEXT MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING **NOCOMPRESS** NOCACHE NOPARALLEL MONITORING; ALTER TABLE RPO\_SMT ADD ( CONSTRAINT RPO\_SMT\_PK PRIMARY KEY (ORDERID\_SMT, SEQ\_SMT) USING INDEX TABLESPACE CPRINDX); ALTER TABLE RPO SMT ADD ( FOREIGN KEY (ORDERID\_SMT) REFERENCES RPO\_MAST (ORDERID\_MAST)); CREATE TABLE RPO CMC ( ORDERID CMC VARCHAR2(20 BYTE) SEQ CMC NUMBER(1) NOT NULL, CMC\_CMC VARCHAR2(2 BYTE) NOT NULL ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 INITRANS 1 MAXTRANS 255 STORAGE ( INITIAL 64K

NEXT

64K

MINEXTENTS 1

```
MAXEXTENTS 2147483645
    PCTINCREASE 0
    BUFFER_POOL DEFAULT
    )
LOGGING
NOCOMPRESS
NOCACHE
NOPARALLEL
MONITORING;
ALTER TABLE RPO_CMC ADD (
CONSTRAINT RPO_CMC_PK
PRIMARY KEY
(ORDERID_CMC, SEQ_CMC)
USING INDEX TABLESPACE CPRINDX);
ALTER TABLE RPO_CMC ADD (
FOREIGN KEY (ORDERID_CMC)
REFERENCES RPO_MAST (ORDERID_MAST));
CREATE TABLE RPO MNU
(
ORDERID MNU VARCHAR2(20 BYTE)
                                    NOT NULL,
SEQ_MNU NUMBER(1)
                             NOT NULL,
MNU MNU VARCHAR2(15 BYTE)
                                  NOT NULL
)
TABLESPACE CPRDATA
PCTUSED 0
PCTFREE 10
INITRANS 1
MAXTRANS 255
STORAGE (
    INITIAL
               64K
              64K
    NEXT
    MINEXTENTS
                 1
    MAXEXTENTS
                  2147483645
    PCTINCREASE
                  0
    BUFFER POOL DEFAULT
    )
LOGGING
NOCOMPRESS
NOCACHE
NOPARALLEL
MONITORING;
```

ALTER TABLE RPO\_MNU ADD ( CONSTRAINT RPO\_MNU\_PK PRIMARY KEY (ORDERID\_MNU, SEQ\_MNU) USING INDEX TABLESPACE CPRINDX); ALTER TABLE RPO\_MNU ADD ( FOREIGN KEY (ORDERID MNU) REFERENCES RPO\_MAST (ORDERID\_MAST)); CREATE TABLE RPO\_OLG ( ORDERID\_OLG VARCHAR2(20 BYTE) NOT NULL, OLN\_OLG VARCHAR2(20 BYTE) NOT NULL, OLS\_OLG NOT NULL, VARCHAR2(2 BYTE) OLY OLG VARCHAR2(4 BYTE) ) **TABLESPACE CPRDATA** PCTUSED 0 PCTFREE 10 **INITRANS** 1 MAXTRANS 255 STORAGE ( INITIAL 64K NEXT 64K MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER POOL DEFAULT ) LOGGING NOCOMPRESS **NOCACHE** NOPARALLEL **MONITORING:** ALTER TABLE RPO\_OLG ADD ( CONSTRAINT RPO OLG PK PRIMARY KEY (ORDERID\_OLG) USING INDEX TABLESPACE CPRINDX);

ALTER TABLE RPO\_OLG ADD ( FOREIGN KEY (ORDERID\_OLG)

## REFERENCES RPO\_MAST (ORDERID\_MAST));

NOT NULL,

## CREATE TABLE RPO\_LIG

( ORDERID\_LIG VARCHAR2(20 BYTE) NUM\_LIG VARCHAR2(10 BYTE) NOT NULL, LIS LIG VARCHAR2(2 BYTE) NOT NULL, LIT\_LIG VARCHAR2(2 BYTE) NOT NULL, LIY LIG VARCHAR2(4 BYTE) NOT NULL ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 **INITRANS** 1 MAXTRANS 255 STORAGE ( **INITIAL** 64K NEXT 64K MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER POOL DEFAULT ) LOGGING **NOCOMPRESS NOCACHE** NOPARALLEL MONITORING; ALTER TABLE RPO LIG ADD ( CONSTRAINT RPO\_LIG\_PK **PRIMARY KEY** 

(ORDERID\_LIG) USING INDEX TABLESPACE CPRINDX);

ALTER TABLE RPO\_LIG ADD ( FOREIGN KEY (ORDERID\_LIG) REFERENCES RPO MAST (ORDERID MAST));

CREATE TABLE RPO VEG

(

ORDERID VEG VARCHAR2(20 BYTE) NOT NULL. VCO\_VEG VARCHAR2(7 BYTE), VIN\_VEG VARCHAR2(20 BYTE) NOT NULL,

VMA\_VEG VARCHAR2(24 BYTE) NOT NULL, VMO\_VEG VARCHAR2(30 BYTE) NOT NULL, VST\_VEG VARCHAR2(2 BYTE) NOT NULL, VYR\_VEG NUMBER(4) NOT NULL ) TABLESPACE CPRDATA PCTUSED 0 PCTFREE 10 INITRANS 1 MAXTRANS 255 STORAGE ( INITIAL 64K NEXT 64K MINEXTENTS 1 MAXEXTENTS 2147483645 PCTINCREASE 0 BUFFER\_POOL DEFAULT ) LOGGING **NOCOMPRESS** NOCACHE

NOPARALLEL MONITORING;

ALTER TABLE RPO\_VEG ADD ( CONSTRAINT RPO\_VEG\_PK PRIMARY KEY (ORDERID\_VEG) USING INDEX TABLESPACE CPRINDX);

ALTER TABLE RPO\_VEG ADD ( FOREIGN KEY (ORDERID\_VEG) REFERENCES RPO\_MAST (ORDERID\_MAST));