

Appendix C: CCPOR Technical Work Session (Non-functional)



Administrative Office of the Courts

Technical work session -
General Design
California Courts Protective
Order Registry (CCPOR)



ADMINISTRATIVE OFFICE
OF THE COURTS

INFORMATION SERVICES DIVISION

Judicial Council of California
Administrative Office of the Courts
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California Courts Protective Order Registry (CCPOR)
 Technical work session - General Design - v1.1

Revision History:

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Reference Documents:

Doc. No.	Version	Date	Document Title	Author	JCC Webex Location
[1]	1.0	10-Jun-08	CCPOR Conceptual Diagram 061008	AOC	Group Documents / Data Integration Program / CCPOR / Outreach
[2]			Findings and Evaluation Report	MTG Management Consultants	Group Documents / Data Integration Program / CCPOR / JAD Sessions Documentation Folder
[3]			CCPOR Recommended Business Model & Deployment Strategy	MTG Management Consultants	Group Documents / Data Integration Program / CCPOR / JAD Sessions Documentation Folder
[4]	1.1	20-Aug-08	CCPOR Project brief	TIBCO PSG	Group Documents / Data Integration Program / CCPOR / TIBCO Deliverables
[5]	1.0	20-Aug-08	CCPOR JAD TWS parking lot	TIBCO PSG	Group Documents / Data Integration Program / CCPOR / TIBCO Deliverables / JAD Functional specification and TWS General design
[6]	1.0	20-Aug-08	CCPOR JAD Functional Specification Data Requirements	TIBCO PSG	Group Documents / Data Integration Program / CCPOR / TIBCO Deliverables / JAD Functional specification and TWS General design
[7]	3	15-Aug-08	CCPOR project RAM	TIBCO PSG	Group Documents / Data Integration Program / CCPOR / Project Management Documents
[8]		On-going	CCPOR Action Register	AOC	Group Documents / Data Integration Program / CCPOR / Project Management Documents
[9]	1.0	20-Aug-08	CCPOR JAD Functional Specification	TIBCO PSG	Group Documents / Data Integration Program / CCPOR / TIBCO Deliverables / JAD Functional specification and TWS General design

Reviewed By and Distribution List:

Please see the CCPOR Project RAM (reference document [5]) for a list of for contract approvers and for the distribution list for this document.

Issue list:

Please see the CCPOR Project issue list (reference document [8]) for a list of issues for this project and for the current status of each issue.

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1. Executive Summary

A. 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 [4]):

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

Please note that items have been included as parking lot items from the functional joint application development (JAD) and technical work sessions (TWS) which require further investigation prior to final resolution. The resolution of these parking lot items may impact the scope of the CCPOR application. Such changes in scope will be captured through a change request and as amendments to relevant existing documentation or as additional documents. A comprehensive list of parking lot items is to be found in reference document [5].

B. Document purpose

This document further defines the CCPOR high level design concept including:

- Address and refines detailed technical areas for application development.
- Identifies key technical areas that require further exploration and input for the CCPOR system.
- Describes a comprehensive understanding of the end-to-end CCPOR process and data flows, gathered and validated detailed business requirements that will enable the application design.

C. Document outline

This document is organized to provide the reader a top-down layered approach to understanding the CCPOR application.

Chapter 2 provides an architectural review from both an application and a component standpoint.

Chapter 3 provides an overview of the various DMS models to be supported by the CCPOR application.

Chapter 4 maps each of the use cases defined during the functional JADs to the architecture as defined in Chapter 2.

Chapter 5 lists the non-functional i.e. technical requirements of the CCPOR application.

D. Requirement Naming Convention

To enable concrete identification of each requirement for the purpose of discussions and follow-ups in designs/implementation/tests, each requirement is given an ID with the following naming convention:

<Court>.<ProjectName>.<RequirementGroup>.<RequirementType>.<RequirementNumberID>

Where

<i>Court</i>	<i>ISB (i.e. for all courts)</i>
<i>ProjectName</i>	<i>CCPOR</i>
<i>RequirementGroup</i>	<i>ScenarioID or (N)on-functional</i>
<i>RequirementType</i>	<i>Requirement type (depends on context)</i>
<i>RequirementNumberID</i>	<i>a unique integer ID sequentially assigned</i>

Examples:

ISB.CCPOR.N.UI.1 – User Interface (UI) non-functional requirement number 1.

2. Architecture Overview

A. Application view

The application view is a high-level view for the CCPOR solution. Court users can login into a secure web server to access the CCPOR application portal using a client browser. Users are authenticated on the server before they can access the application. TIBCO ISB layer provides a user interface for court users to perform various R&PO order functions. TIBCO ISB layer integrates with the CCPOR database where the order data is stored. The ISB layer also integrates with the CCPOR DMS server to appropriate store images on the server. The ISB layer also integrates with the DVROS system via the Datamaxx Comm server.

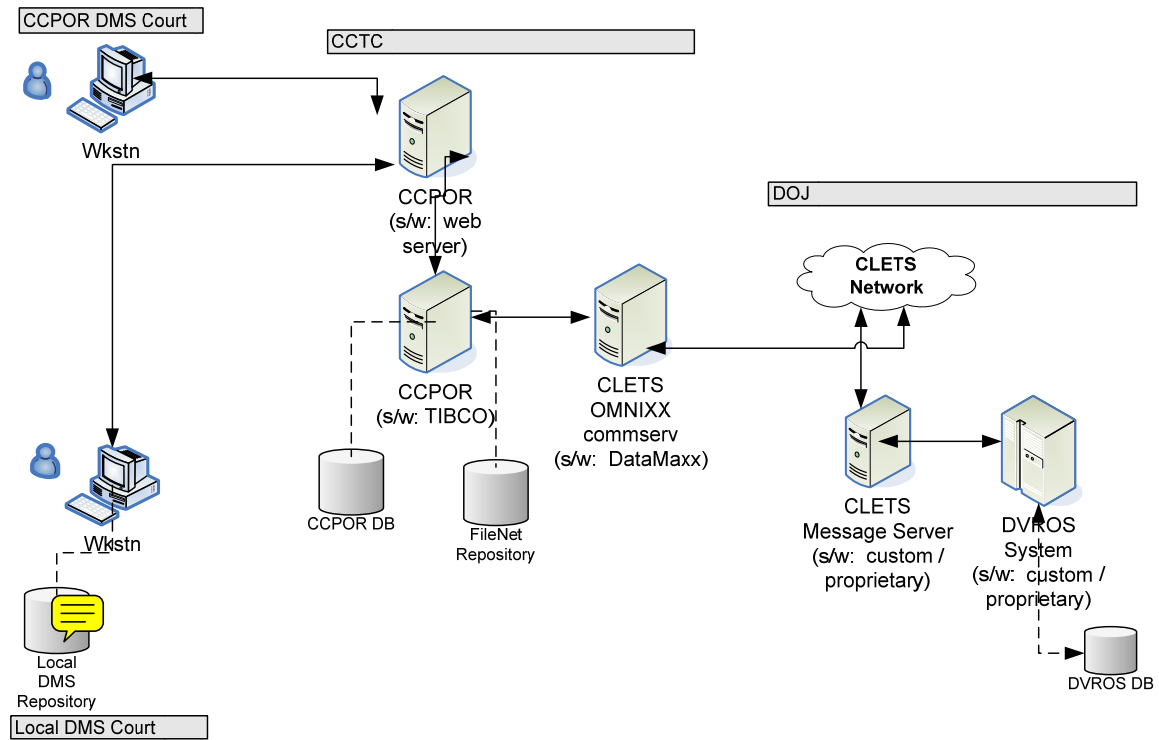


Figure 1 Application View

B. Component view

The component view is a conceptual n-tier layered architecture for the CCPOR solution. The details of each component are explained in relevant integration scenarios in the following chapter.

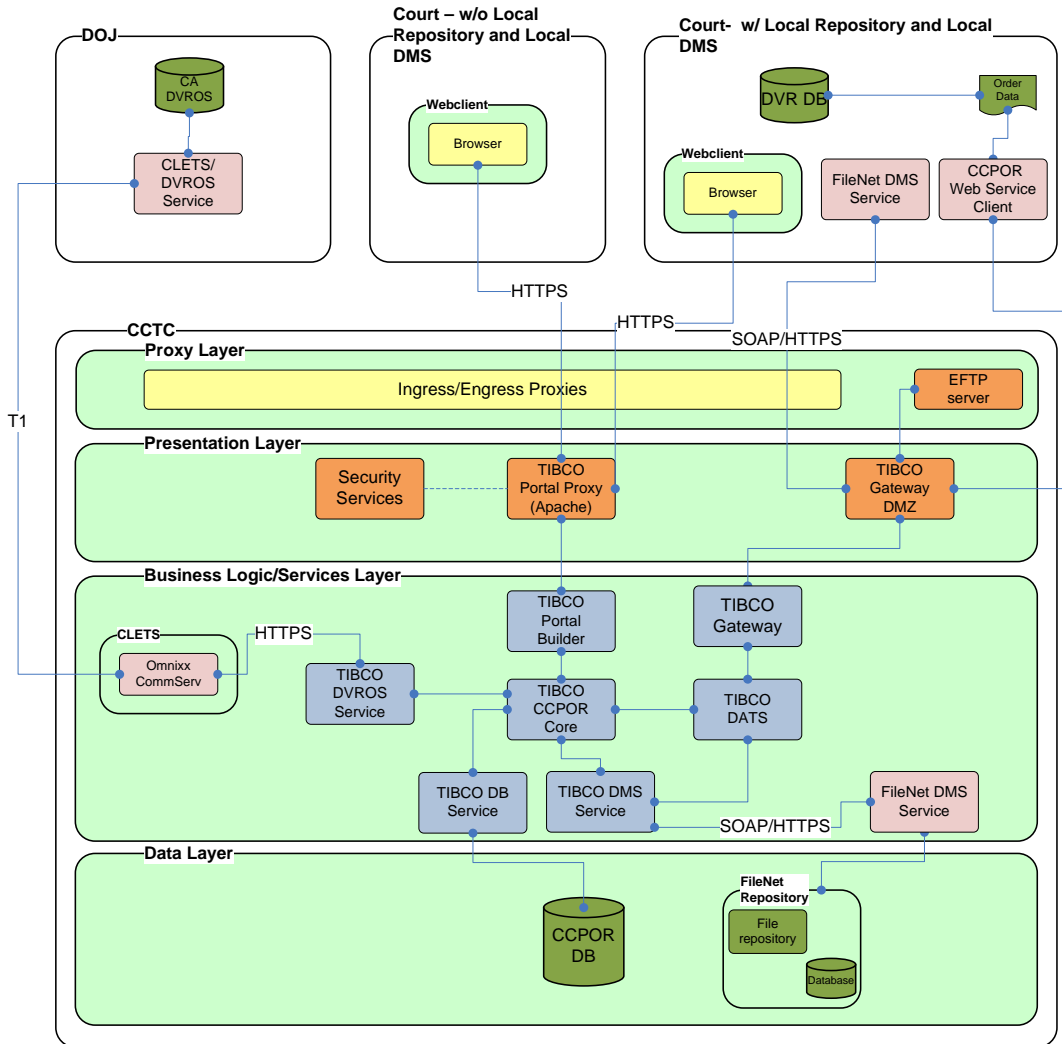


Figure 2 Component View

C. Product mapping

The purpose of this section is to capture the various products used on the CCPOR implementation.

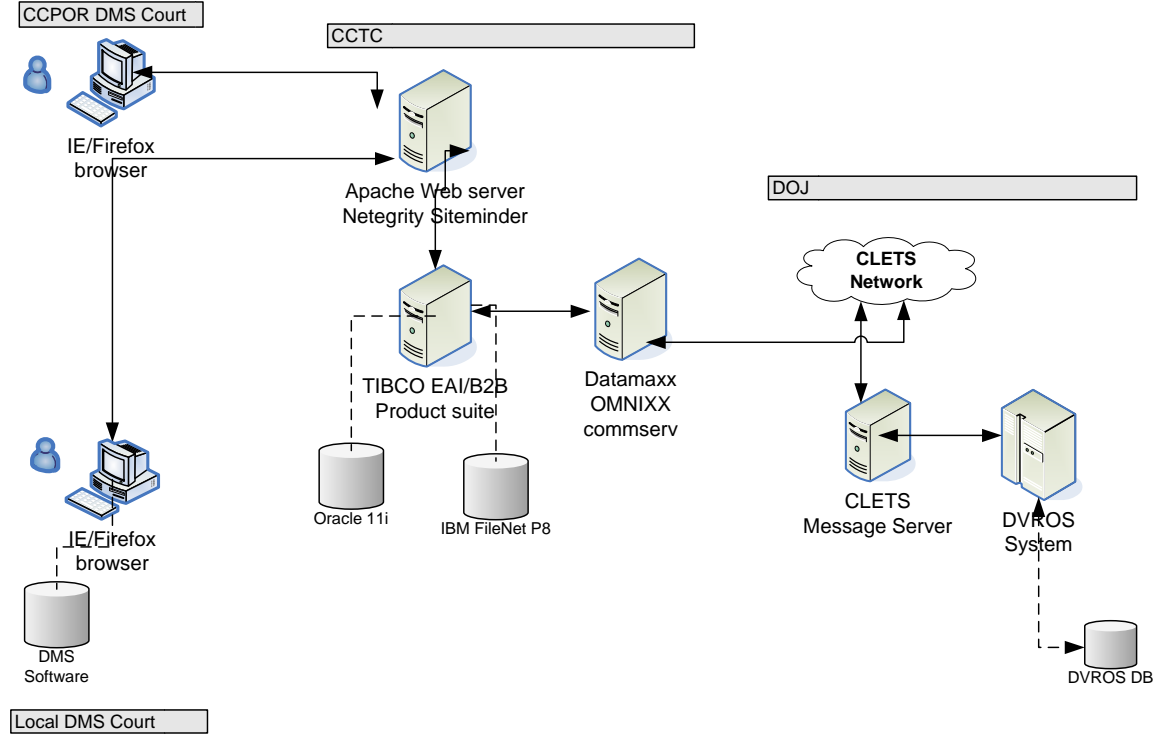


Figure 3 Product Mapping

CCTC/Court Components	Software Vendor
Court DMS Software	OC (FileNet P8)
	Sacramento (FileNet)
	LA (FileNet)
CCTC Web Server	Apache
CCTC Security Services	Netegrity Siteminder
CCTC Middleware	TIBCO EAI/B2B product suite
CCTC DVROS integration	Datamaxx Omnixx comm. Server
CLETS software	NA

Table 1 Software Component Versions

3. CCPOR Models

The next two sub-sections cover the different models that need to be supported by CCPOR application. In the context of this section, “Document” is referred to as a hard-copy paper document. “Image” is referred to as a scanned document present either on local network or DMS. “Metadata” is referred to as properties in DMS to identify an image. One key implementation aspect for DMS would be to standardize entry of metadata for all documents in Local/CCPOR DMS. The standardization will include the filename to be maintained for the documents.

A key assumption for models 3.A.2 and 3.A.3 below is to have the local DMS courts expose their DMS operations as web services.

Please also note that the following feature has been requested to be provided by CCPOR application.

1. Auto-linking (Note: Functional JAD Parking Lot #7) – Based on the metadata entered for a scanned document in the DMS and the R&PO data entered into CCPOR DB, Document ID will be populated into CCPOR DB.
 - a. In cases where the document is scanned into Local DMS, an auto-link sync file to be sent to CCPOR by the Local Court
 - b. Document scanned into CCPOR DMS, the CCPOR DMS system to expose an auto-link sync XML file to be sent to CCPOR.

A. Local DMS Courts

3.A.1 Model 1 (Note: Functional JAD Parking Lot #7)

- Document is scanned into Local DMS.
- R&PO data entry using CCPOR UI.
- Local Court to upload an auto-link sync file.
- CCPOR to process the sync file to automatically link CCPOR orders to the images from the Local DMS.

3.A.2 Model 2

- Document is scanned into Local DMS.
- R&PO data entry using CCPOR UI.
- Use the Add/Modify CCPOR UI to retrieve document list per document metadata and attach the image to the CCPOR order.

3.A.3 Model 3

- Document is scanned into Local network.
- R&PO data entry using CCPOR UI.
- Use the Add/Modify CCPOR UI to retrieve document list per document metadata and attach the image to the CCPOR order. Since the image would be missing in the Local DMS, upload the image from local network into the Local DMS and also attach the image to the CCPOR order.

B. CCPOR DMS Courts

3.B.1 Model 1 (Note: Functional JAD Parking Lot #12)

- Document is scanned into CCPOR DMS.
- R&PO data entry using CCPOR UI.
- CCPOR DMS system to expose a auto-link sync file
- CCPOR to process the sync file to automatically link CCPOR orders to the images from the CCPOR DMS.

3.B.2 Model 2

- Document is scanned into Local network.
- R&PO data entry using CCPOR UI.
- Use the Add/Modify CCPOR UI to upload the image from the local network into CCPOR DMS and also attach the image to the CCPOR order.

4. Use Case Application Architecture Mapping

The following functional use cases are supported by the CCPOR application.

- 1) Use case 1 – Add order
- 2) Use case 2 – Modify order
- 3) Use case 3 – Record Proof of Service (PoS)
- 4) Use case 4 – Cancel order
- 5) Use case 5 – Pending
- 6) Use case 6 – Order search
- 7) Use case 7 – Draft order
- 8) Use case 8 – Reports

The following sub-sections address the general design aspects of these use cases in the context of the CCPOR Models as described in Chapter 3.

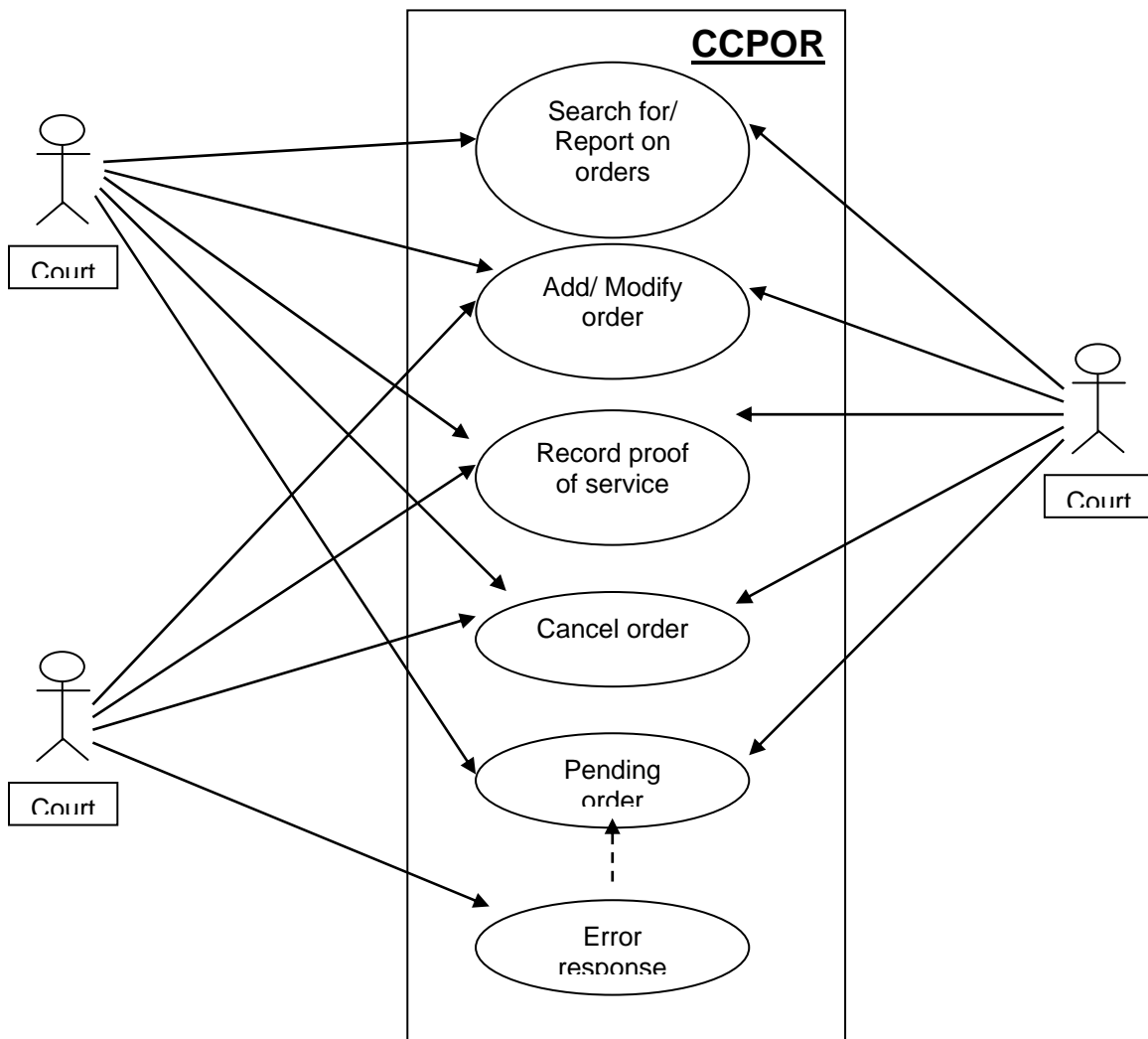
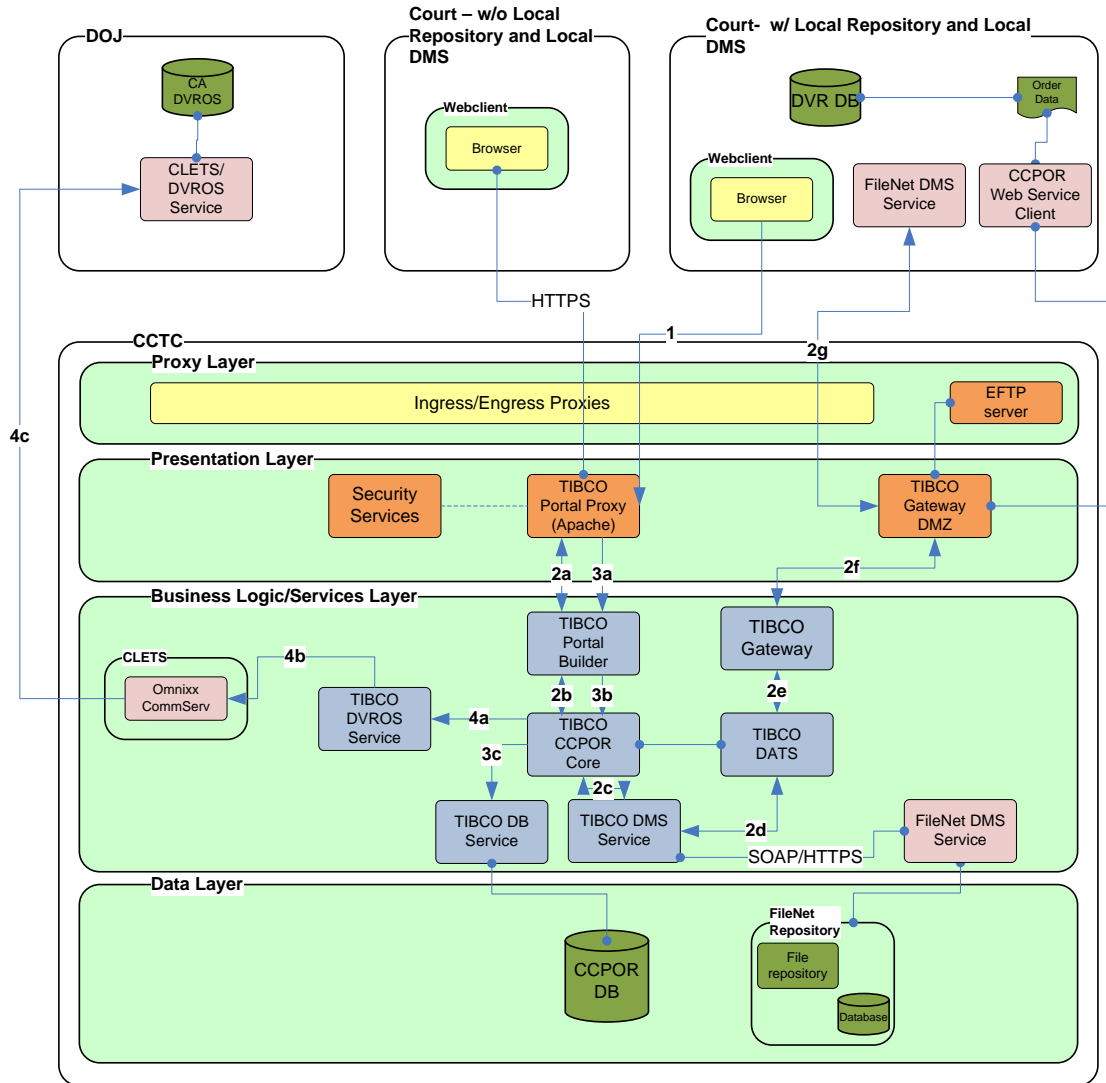


Figure 4: Overall use case

A. Scenario 1 – Add/ Modify order, image in local DMS

Add/Modify order for local DMS court, where, the document has been scanned and added to the local DMS, previously.

4.A.1 Run-time view



4.A.2 Steps for the scenario

The following is the sequence of message flows (**Message Sequence**) between various integration points within the CCPOR application, as shown in the diagram above:

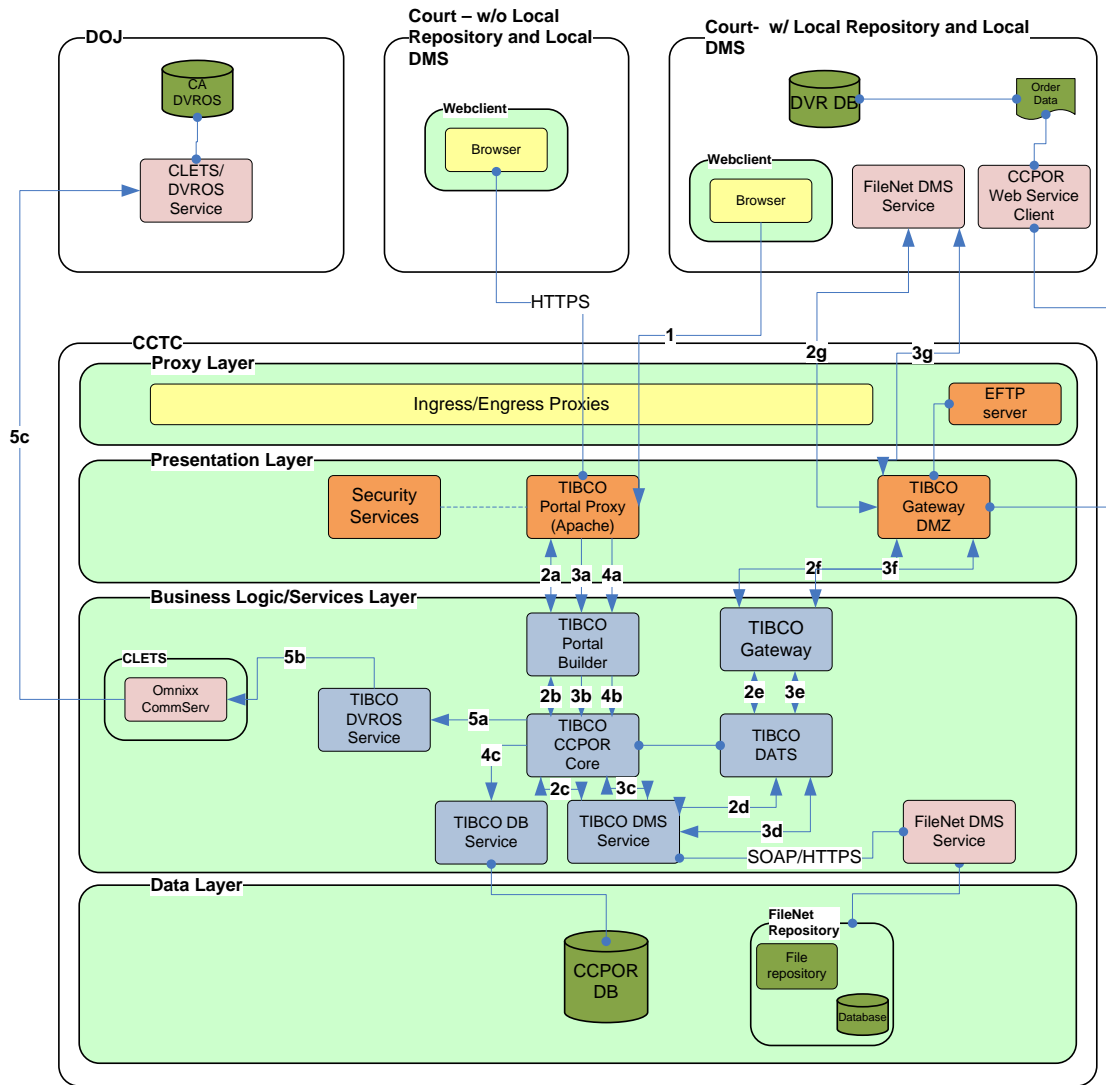
- **MS 1:** The data entry operator logs into the CCPOR portal, and enters all required data for the order. At this point, it is assumed that the data has passed all data validations as mandated by the DOJ. The order data is packaged into a SOAP message and sent over HTTPS to the CCTC presentation layer via the CCTC proxy layer.

- **MS 2:**
 - **MS 2a:** As part of the order data entry, the data entry operator links the order image present in the local DMS to the order data entered into CCPOR. This Web Service request (SOAP/HTTPS) from the operator's browser is received by TIBCO Portal Builder via the CCTC Proxy and Presentation layers. Here the request enters the Service Layer.
 - **MS 2b:** The TIBCO Portal Builder further forwards the request to TIBCO CCPOR Core service.
 - **MS 2c:** Based on the type of request received, the TIBCO CCPOR Core service processes the received request, and forwards it to one of the three specialized services. As the request requires communication to a DMS, the TIBCO Core Service forwards the request to its DMS Service to handle all communications with DMS applications.
 - **MS 2d:** Here, the TIBCO DMS Service processes the request, forwarded to it. Based on the data entry operator's court and the DMS Web Service hosted by the court, the TIBCO DMS Service generates a Court DMS specific Web Service request, which is then handed over to the TIBCO DATS service to be sent to the Court's DMS Web Service.
 - **MS 2e:** TIBCO DATS service is the single point of communication for all TIBCO Components before the request goes to the TIBCO Gateway and out of the Business Logic/Service Layer. The TIBCO DATS forwards the request it received from TIBCO DMS Service to TIBCO Gateway.
 - **MS 2f:** TIBCO Gateway takes the request out of the Business Logic/Service layer and into the Presentation Layer. Here, the request is handed to the TIBCO Gateway DMZ.
 - **MS 2g:** TIBCO Gateway DMZ makes the request to the Court's DMS Service after it goes through the Proxy layer.
 - After the request reaches the appropriate court's DMS service, the response message flows back through the same chain of components. The operator is now able to access the court's DMS and link the previously scanned order specific document to the order data.
- **MS 3:**
 - **MS 3a:** The TIBCO Portal Proxy in the presentation layer receives the Web Service (SOAP/HTTPS) request to Add/Modify order (via proxy layer) from the Operator's browser and forwards it to TIBCO Portal Builder in the Business Logic/Services layer.
 - **MS 3b:** The TIBCO Portal Builder receives the Web Service request to Add/Modify an order and forwards it to the TIBCO CCPOR Core Service.
 - **MS 3c:** The TIBCO CCPOR Core Service receives and processes the request to Add/Modify an order. As part of Add/Modify request the order data is to be updated in the CCPOR and DVROS. First, TIBCO CCPOR Core Service forwards the request to its TIBCO DB Service to update the order data in the CCPOR.
- **MS 4:**
 - **MS 4a:** After a successful update of order data in the CCPOR, the TIBCO CCPOR Core Service calls its TIBCO DVROS Service to update the order data in DVROS.
 - **MS 4b:** The TIBCO DVROS Service, formats and packages the order data in the data model mandated by DVROS, and sends the message across to the Omnixx CommServ. The Omnixx CommServ acts as an interface to CLETS.
 - **MS 4c:** The Omnixx CommServ has the responsibility of communicating with the DOJ realm via CLETS and forwards the order data to CLETS/DVROS Service, which, takes care of updating the order data in DVROS.
 - Any response messages from DVROS or CCPOR application flows back through the same chain of components and back to the operator. At this point, the transaction of an Add/Modify Order is considered complete.

B. Scenario 2 – Add/ Modify order, image not in local DMS

Add/Modify order for local DMS court, where the document has been scanned previously, but not added to the local DMS.

4.B.1 Run-time view



4.B.2 Steps for the scenario

The following is the sequence of message flows (**Message Sequence**) between various integration points within the CCPOR application, as shown in the diagram above:

- **MS 1:** The data entry operator logs into the CCPOR portal, and enters all required data for the order. At this point, it is assumed that the data has passed all data validations as mandated by the DOJ. The order data is packaged into a SOAP

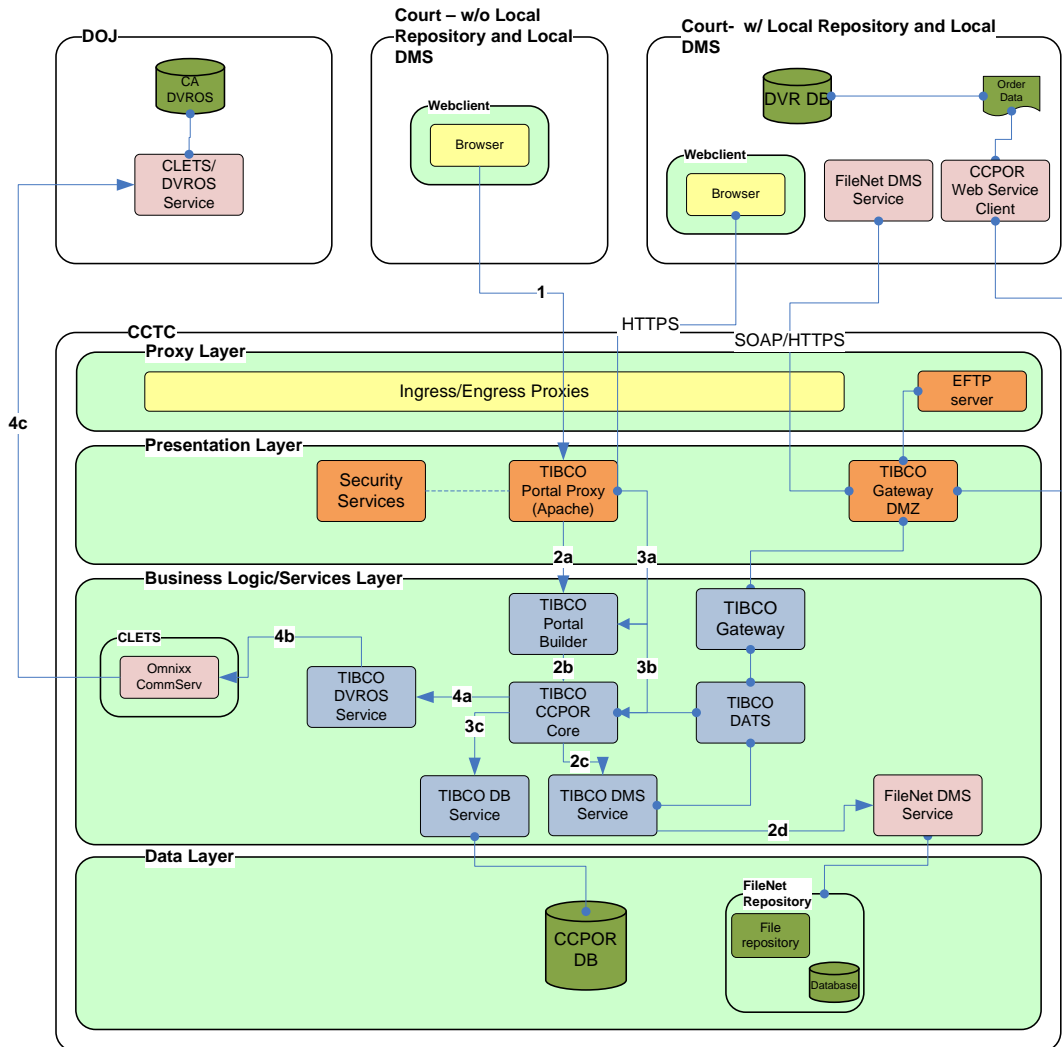
- message and sent over HTTPS to the CCTC presentation layer via the CCTC proxy layer.
- **MS 2:**
 - **MS 2a:** As part of the order data entry, the data entry operator links the order specific document in the local DMS to the order data. Since, the document does not exist in the local DMS yet. The operator requests to add the previously scanned, order specific document into the local DMS. This Web Service request (SOAP/HTTPS) from the operator's browser is received by TIBCO Portal Builder via the CCTC Proxy and Presentation layers. Here the request enters the Service Layer.
 - **MS 2b:** The TIBCO Portal Builder further forwards the request to TIBCO CCPOR Core service.
 - **MS 2c:** Based on the type of request received, the TIBCO CCPOR Core service processes the received request, and forwards it to one of the three specialized services. As, the request requires communication to a DMS, the TIBCO Core Service forwards the request to its DMS Service to handle all communications with DMS applications.
 - **MS 2d:** Here, the TIBCO DMS Service processes the request, forwarded to it. Based on the data entry operator's court and the DMS Web Service hosted by the court, the TIBCO DMS Service generates a Court DMS specific Web Service request, which is then handed over to the TIBCO DATS service to be sent to the Court's DMS Web Service.
 - **MS 2e:** TIBCO DATS service is the single point of communication for all TIBCO Components before the request goes to the TIBCO Gateway and out of the Business Logic/Service Layer. The TIBCO DATS forwards the request it received from TIBCO DMS Service to TIBCO Gateway.
 - **MS 2f:** TIBCO Gateway takes the request out of the Business Logic/Service layer and into the Presentation Layer. Here, the request is handed to the TIBCO Gateway DMZ.
 - **MS 2g:** TIBCO Gateway DMZ makes the request to the Court's DMS Service after it goes through the Proxy layer.
 - After the request reaches the appropriate court's DMS service, the response message flows back through the same chain of components. The scanned order document is now added to the local DMS and the operator can proceed to link the document to the order data.
 - **MS 3:**
 - **MS 3a:** The data entry operator links the order specific document in the local DMS to the order data. This Web Service request (SOAP/HTTPS) from the operator's browser is received by TIBCO Portal Builder via the CCTC Proxy and Presentation layers. Here the request enters the Service Layer.
 - **MS 3b:** The TIBCO Portal Builder further forwards the request to TIBCO CCPOR Core service.
 - **MS 3c:** Based on the type of request received, the TIBCO CCPOR Core service processes the received request, and forwards it to one of the three specialized services. As, the request requires communication to a DMS, the TIBCO Core Service forwards the request to its DMS Service to handle all communications with all DMS applications.
 - **MS 3d:** Here, the TIBCO DMS Service processes the request, forwarded to it. Based on the data entry operator's court and the DMS Web Service hosted by the court, the TIBCO DMS Service generates a Court DMS specific Web Service request, which is then handed over to the TIBCO DATS service to be sent to the Court's DMS Web Service.
 - **MS 3e:** TIBCO DATS service is the single point of communication for all TIBCO Components before the request goes to the TIBCO Gateway and out of the Business Logic/Service Layer. The TIBCO DATS forwards the request it received from TIBCO DMS Service to TIBCO Gateway.

- **MS 3f:** TIBCO Gateway takes the request out of the Business Logic/Service layer and into the Presentation Layer. Here, the request is handed to the TIBCO Gateway DMZ.
- **MS 3g:** TIBCO Gateway DMZ makes the request to the Court's DMS Service after it goes through the Proxy layer.
- After the request reaches the appropriate court's DMS service, the response message flows back through the same chain of components. The operator is now able access the courts's DMS and link the order specific document to the order data.
- **MS 4:**
 - **MS 4a:** The TIBCO Portal Proxy in the presentation layer receives the Web Service (SOAP/HTTPS) request to Add/Modify order (via proxy layer) from the Operator's browser and forwards it to TIBCO Portal Builder in the Business Logic/Services layer.
 - **MS 4b:** The TIBCO Portal Builder receives the Web Service request to Add/Modify an order and forwards it to the TIBCO CCPOR Core Service.
 - **MS 4c:** The TIBCO CCPOR Core Service receives and processes the request to Add/Modify an order. As part of Add/Modify request the order data is to be updated in the CCPOR and DVROS. First, TIBCO CCPOR Core Service forwards the request to its TIBCO DB Service to update the order data in the CCPOR.
- **MS 5:**
 - **MS 5a:** After a successful update of order data in the CCPOR, the TIBCO CCPOR Core Service calls its TIBCO DVROS Service to update the order data in DVROS.
 - **MS 5b:** The TIBCO DVROS Service, formats and packages the order data in the data model mandated by DVROS, and sends the message across to the Omnixx CommServ. The Omnixx CommServ acts as an interface to CLETS.
 - **MS 5c:** The Omnixx CommServ has the responsibility of communicating with the DOJ realm via CLETS and forwards the order data to CLETS/DVROS Service, which, takes care of updating the order data in DVROS.
 - Any response messages from DVROS or CCPOR application flows back through the same chain of components and back to the operator. At this point, the transaction of an Add/Modify Order is considered complete.

C. Scenario 3 – Add/ Modify order, image in CCPOR DMS

Add/Modify order for CCPOR DMS court, where, the document has been scanned previously, but not added to the CCPOR DMS.

4.C.1 Run-time view



4.C.2 Steps for the scenario

The following is the sequence of message flows (**Message Sequence**) between various integration points within the CCPOR application, as shown in the diagram above:

- **MS 1:** The data entry operator logs into the CCPOR portal, and enters all required data for the order. At this point, it is assumed that the data has passed all data validations as mandated by the DOJ. The order data is packaged into a SOAP

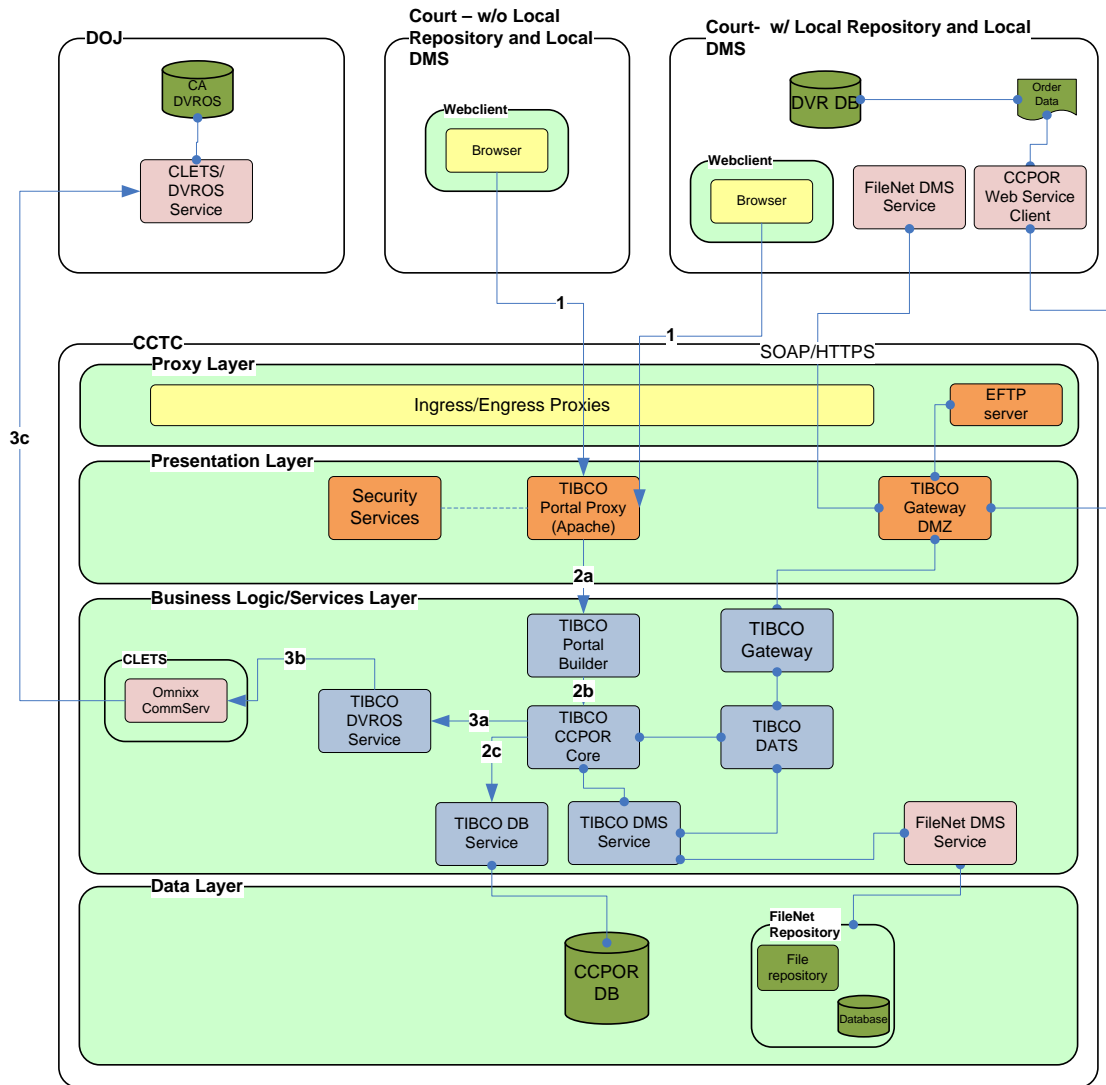
message and sent over HTTPS to the CCTC presentation layer via the CCTC proxy layer.

- **MS 2:**
 - **MS 2a:** As part of the order data entry add/modify, the data entry operator links the order specific document in CCPOR DMS to the order data. In order to do this, the data entry operator first adds the scanned document into the CCPOR DMS. The document scanning into CCPOR DMS could be a direct scan into the DMS or upload a scanned document from the local network (ref. JAD parking lot item #12). This Web Service request (SOAP/HTTPS) from the operator's browser is received by TIBCO Portal Builder via the CCTC Proxy and Presentation layers. Here the request enters the Service Layer.
 - **MS 2b:** The TIBCO Portal Builder further forwards the request to TIBCO CCPOR Core service.
 - **MS 2c:** Based on the type of request received, the TIBCO CCPOR Core service processes the received request, and forwards it to one of the three specialized services. As, the request requires communication to a DMS, the TIBCO Core Service forwards the request to its DMS Service to handle all communications with DMS applications.
 - **MS 2d:** Here, the TIBCO DMS Service processes the request, forwarded to it. Based on the data entry operator's court, the TIBCO DMS Service recognizes the court to be using the CCPOR DMS and sends a Web Service request to the CCPOR FileNet DMS Service to add and link the scanned document.
 - After the request reaches the CCPOR FileNet DMS service, the response message flows back through the same chain of components. The operator is now able access the CCPOR DMS and adds/links the previously scanned order specific document to the order data.
- **MS 3:**
 - **MS 3a:** The TIBCO Portal Proxy in the presentation layer receives the Web Service (SOAP/HTTPS) request to Add/Modify order (via proxy layer) from the Operator's browser and forwards it to TIBCO Portal Builder in the Business Logic/Services layer.
 - **MS 3b:** The TIBCO Portal Builder receives the Web Service request to Add/Modify an order and forwards it to the TIBCO CCPOR Core Service.
 - **MS 3c:** The TIBCO CCPOR Core Service receives and processes the request to Add/Modify an order. As part of Add/Modify request the order data is to be updated in the CCPOR and DVROS. First, TIBCO CCPOR Core Service forwards the request to its TIBCO DB Service to insert/update the order data in the CCPOR.
- **MS 4:**
 - **MS 4a:** After a successful entry of order data (add/modify) in the CCPOR, the TIBCO CCPOR Core Service calls its TIBCO DVROS Service to transmit the order data to DVROS.
 - **MS 4b:** The TIBCO DVROS Service, formats and packages the order data in the data model mandated by DVROS, and sends the message across to the Omnixx CommServ. The Omnixx CommServ acts as an interface to CLETS.
 - **MS 4c:** The Omnixx CommServ has the responsibility of communicating with the DOJ realm via CLETS and forwards the order data to CLETS/DVROS Service, which, takes care of committing the order data to DVROS.
 - Any response messages from DVROS or CCPOR application flows back through the same chain of components and back to the operator. At this point, the transaction of an Add/Modify Order is considered complete.

D. Scenario 4 – Record service/ cancel order

Record Service/Cancel to an existing order.

4.D.1 Run-time view



4.D.2 Steps for the scenario

The following is the sequence of message flows (**Message Sequence**) between various integration points within the CCPOR application, as shown in the diagram above:

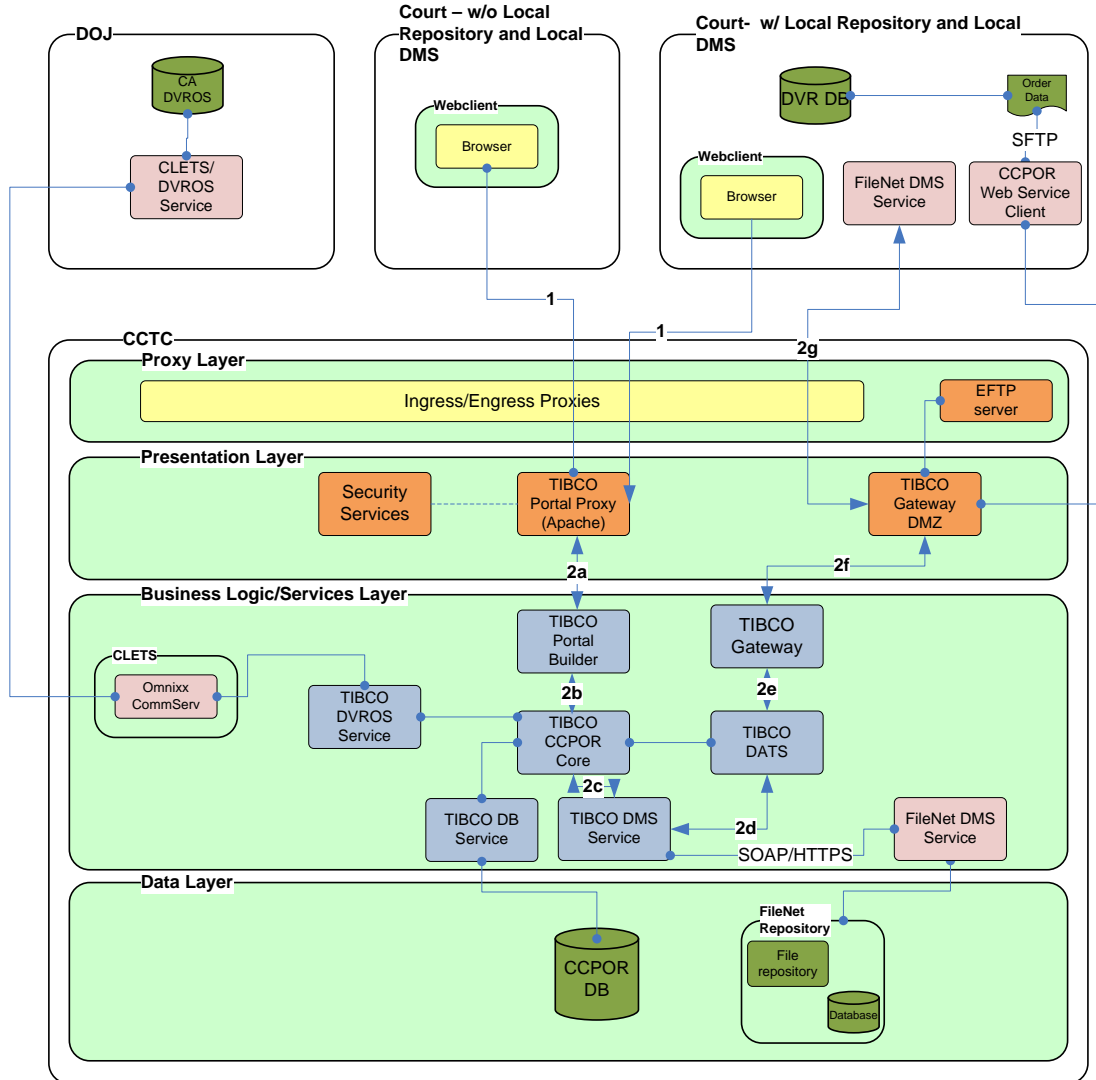
- **MS 1:** The data entry operator logs into the CCPOR portal, and records a Service/Cancel against the order. At this point, it is assumed that the data has passed all data validations as mandated by the DOJ. The order data is packaged into a SOAP message and sent over HTTPS to the CCTC presentation layer via the CCTC proxy layer.

- **MS 2:**
 - **MS 2a:** The Web Service request (SOAP/HTTPS) from the operator's browser to Service/Cancel order is received by TIBCO Portal Builder via the CCTC Proxy (TIBCO Portal Proxy) and Presentation layers. Here the request enters the Business Logic/Services layer.
 - **MS 2b:** The TIBCO Portal Builder receives the Web Service request to Service/Cancel an order and forwards it to the TIBCO CCPOR Core Service.
 - **MS 2c:** The TIBCO CCPOR Core Service receives and processes the request to Service/Cancel an order. As part of Service/Cancel request the order data is to be updated in the CCPOR and DVROS. First, TIBCO CCPOR Core Service forwards the request to its TIBCO DB Service to update the order data in the CCPOR.
- **MS 3:**
 - **MS 3a:** After a successful update of order data in the CCPOR, the TIBCO CCPOR Core Service calls its TIBCO DVROS Service to update the order data in DVROS.
 - **MS 3b:** The TIBCO DVROS Service, formats and packages the order data in the data model mandated by DVROS, and sends the message across to the Omnixx CommServ. The Omnixx CommServ acts as an interface to CLETS.
 - **MS 3c:** The Omnixx CommServ has the responsibility of communicating with the DOJ realm via CLETS and forwards the order data to CLETS/DVROS Service, which, takes care of updating the order data in DVROS.
 - Any response messages from DVROS or CCPOR application flows back through the same chain of components and back to the operator. At this point, the transaction of a Service/Cancel Order is considered complete.

E. Scenario 5 – View order, attachment in local DMS

View order attachment present in local DMS.

4.E.1 Run-time view



4.E.2 Steps for the scenario

The following is the sequence of message flows (**Message Sequence**) between various integration points within the CCPOR application, as shown in the diagram above:

- **MS 1:** The user logs into the CCPOR portal, and enters the search parameters. The user then proceeds to select an order of interest and chooses to view one or more of its attachments (present in a local DMS). The Web Service request (SOAP/HTTPS)

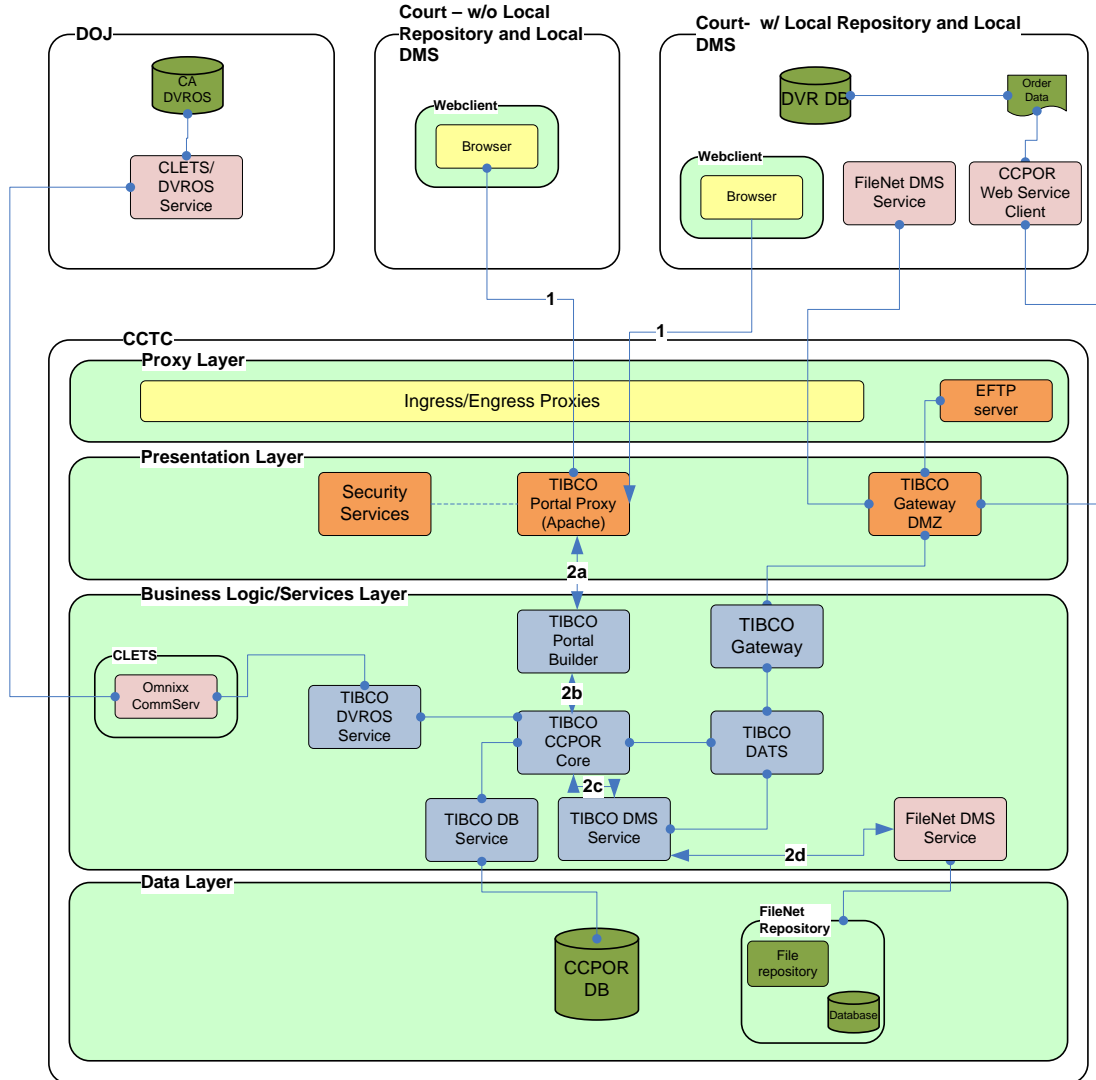
to view the attachment is sent to the CCTC presentation layer via the CCTC proxy layer.

- **MS 2:**
 - **MS 2a:** This Web Service request (SOAP/HTTPS) from the operator's browser is received by TIBCO Portal Builder via the CCTC Proxy and Presentation layers. Here the request enters the Service Layer.
 - **MS 2b:** The TIBCO Portal Builder further forwards the request to TIBCO CCPOR Core service.
 - **MS 2c:** Based on the type of request received, the TIBCO CCPOR Core service processes the received request, and forwards it to one of the three specialized services. As, the request requires communication to a DMS, the TIBCO Core Service forwards the request to its DMS Service to handle all communications with DMS applications.
 - **MS 2d:** Here, the TIBCO DMS Service processes the request, forwarded to it. Based on the order's originating court (w/ local DMS) and the DMS Web Service hosted by the court, the TIBCO DMS Service generates a Court DMS specific Web Service request, which is then handed over to the TIBCO DATS service to be sent to the Court's DMS Web Service.
 - **MS 2e:** TIBCO DATS service is the single point of communication for all TIBCO Components before the request goes to the TIBCO Gateway and out of the Business Logic/Service Layer. The TIBCO DATS forwards the request it received from TIBCO DMS Service to TIBCO Gateway.
 - **MS 2f:** TIBCO Gateway takes the request out of the Business Logic/Service layer and into the Presentation Layer. Here, the request is handed to the TIBCO Gateway DMZ.
 - **MS 2g:** TIBCO Gateway DMZ makes the request to the Court's DMS Service after it goes through the Proxy layer.
 - After the request reaches the appropriate court's DMS service, the response message flows back through the same chain of components. The user can now view the attachment he/she chose to view. At this point, the transaction to view attachment from a local DMS is considered complete.

F. Scenario 6 – View order, attachment in CCPOR DMS

View Order attachment present in CCPOR DMS.

4.F.1 Run-time view



4.F.2 Steps for the scenario

The following is the sequence of message flows (**Message Sequence**) between various integration points within the CCPOR application, as shown in the diagram above:

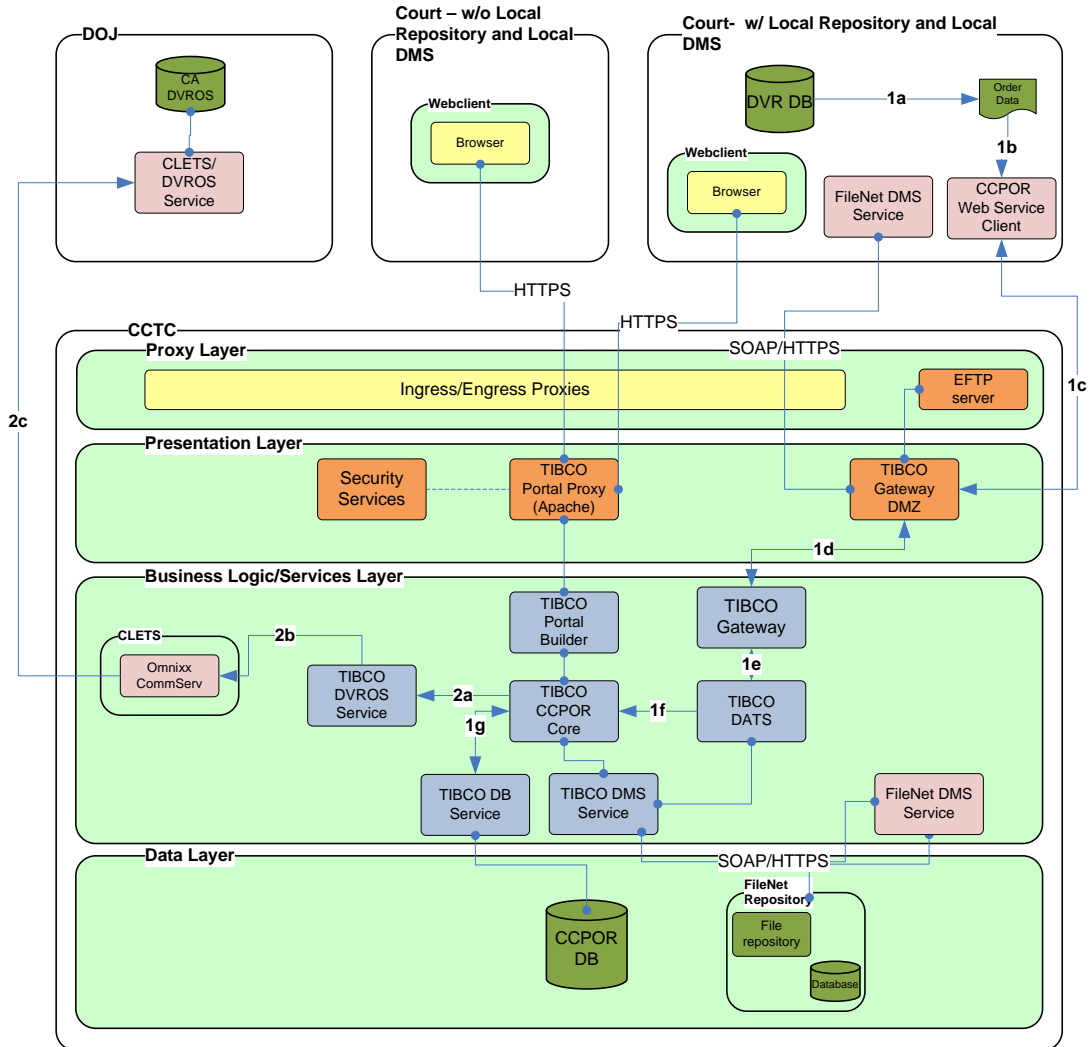
- **MS 1:** The user logs into the CCPOR portal, and enters the search parameters. The user then proceeds to select an order of interest and chooses to view its attachment (present in a CCPOR DMS). The Web Service request (SOAP/HTTPS) to view the attachment is sent to the CCTC presentation layer via the CCTC proxy layer.

- **MS 2:**
 - **MS 2a:** This Web Service request (SOAP/HTTPS) from the operator's browser is received by TIBCO Portal Builder via the CCTC Proxy and Presentation layers. Here the request enters the Service Layer.
 - **MS 2b:** The TIBCO Portal Builder further forwards the request to TIBCO CCPOR Core service.
 - **MS 2c:** Based on the type of request received, the TIBCO CCPOR Core service processes the received request, and forwards it to one of the three specialized services. As, the request requires communication to a DMS, the TIBCO Core Service forwards the request to its DMS Service to handle all communications with DMS applications.
 - **MS 2d:** Here, the TIBCO DMS Service processes the request, forwarded to it. Based on the order's originating court (w/ CCPOR DMS), the TIBCO DMS Service recognizes the court to be using the CCPOR DMS and sends a Web Service request to the CCPOR FileNet DMS Service to view the attachment.
 - After the request reaches the CCPOR FileNet DMS service, the response message flows back through the same chain of components. The user can now view the attachment he/she chose to view. At this point, the transaction to view attachment from CCPOR DMS is considered complete.

G. Scenario 7 – Regularly scheduled import of R&POs

Interim Supporting Process to allow courts to Add/ Modify/ Cancel/ Service order without using the CCPOR User Interface.

4.G.1 Run-time view



4.G.2 Steps for the scenario

The following is the sequence of message flows (**Message Sequence**) between various integration points within the CCPOR application, as shown in the diagram above:

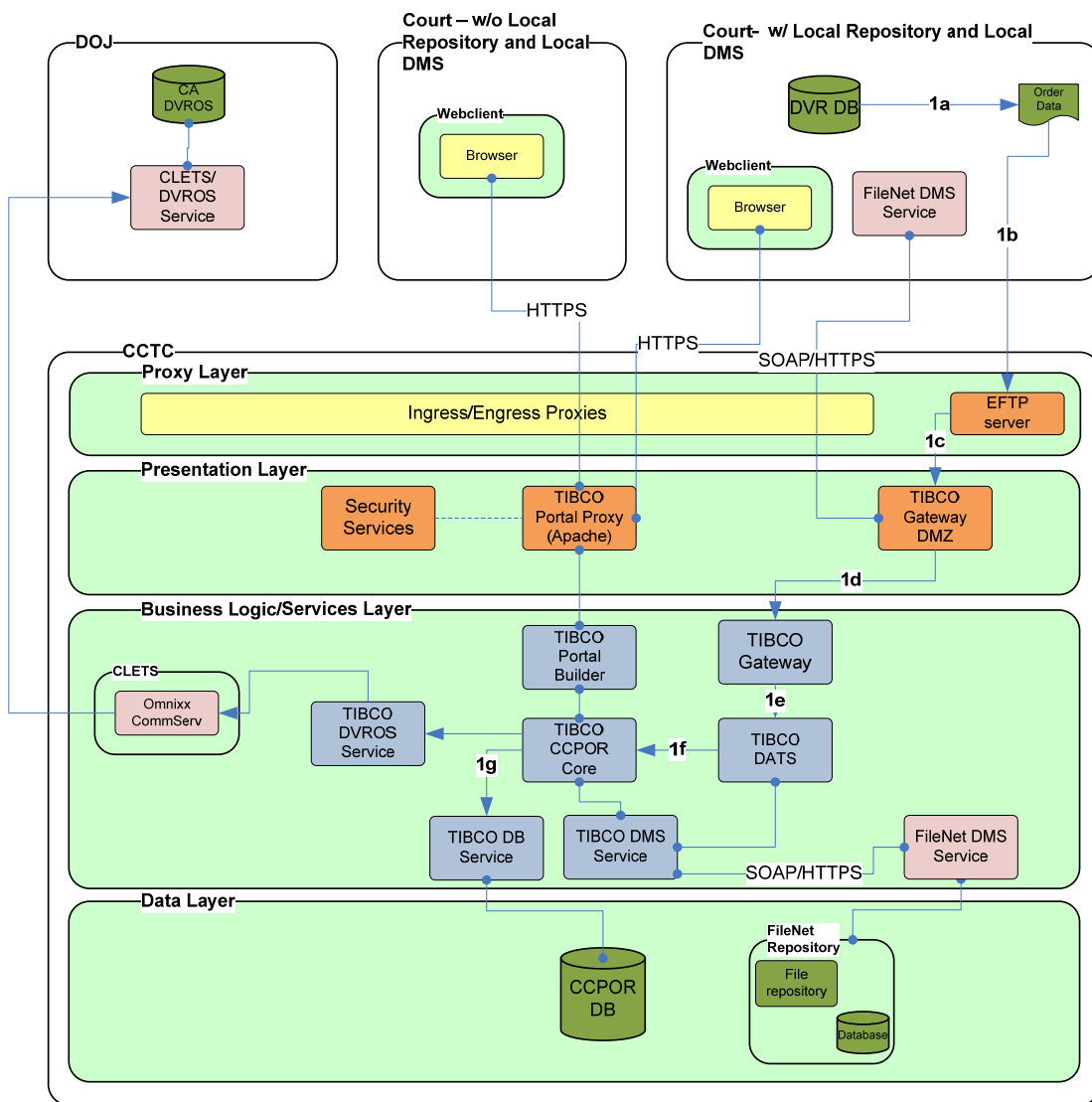
- **MS 1:**
 - **MS 1a:** Courts using the interim supporting process extract the Order data from their local R&PO repository.

- **MS 1b:** The extracted Order data is packaged into a SOAP message and sent over HTTPS as a Web Service Request to the CCPOR application.
- **MS 1c:** The Web Service request is received by the TIBCO Gateway DMZ in the CCTC Presentation Layer, after it passes through the CCTC Proxy layer.
- **MS 1d:** The TIBCO Gateway DMZ further forwards the request into the Business Logic/ Service Layer, where it is received by the TIBCO Gateway.
- **MS 1e:** All communications between the TIBCO Gateway and TIBCO Application Components are handled by TIBCO DATS. The Web Service request received by TIBCO Gateway is forwarded to TIBCO DATS.
- **MS 1f:** TIBCO DATS forwards the Web Service request to TIBCO CCPOR Core for appropriate processing.
- **MS 1g:** The TIBCO CCPOR Core Service receives and processes the request to Add/Modify/Service/Cancel an order. As part of Add/Modify /Service/Cancel request the order data is to be updated in the CCPOR and DVROS. First, TIBCO CCPOR Core Service forwards the request to its TIBCO DB Service to update the order data in the CCPOR.
- **MS 2:**
 - **MS 2a:** After a successful update of order data in the CCPOR, the TIBCO CCPOR Core Service calls its TIBCO DVROS Service to update the order data in DVROS.
 - **MS 2b:** The TIBCO DVROS Service, formats and packages the order data in the data model mandated by DVROS, and sends the message across to the Omnixx CommServ. The Omnixx CommServ acts as an interface to CLETS.
 - **MS 2c:** The Omnixx CommServ has the responsibility of communicating with the DOJ realm via CLETS and forwards the order data to CLETS/DVROS Service, which, takes care of updating the order data in DVROS.
 - Any response messages from DVROS or CCPOR application flows back through the same chain of components and back to the CCPOR Web Service Client at the court. At this point, the transaction of Add/Modify/Service/Cancel an order data to CCPOR is considered complete.

H. Scenario 8 – Historical data upload

This is a one time initial load of historical R&PO data from court's local repository into CCPOR. This scenario would leverage the existing connectivity with the court to collect historic data. The effort involved in this scenario is strictly a data conversion activity to upload historical R&PO data from court's local repository into CCPOR. As a result, there is no real time flow of data from the court to CCTC. The validation errors encountered during data conversion are communicated back with the same setup. Alternatively, historic R&PO data files can be obtained from the court using other offline procedures. No CLETS historical data synch will occur in the initial phase of the implementation. Only image links corresponding to the Local Court historical data is synchronized with CCPOR. No historical R&PO data or images for a CCPOR DMS court will be available in CCPOR. Scope to include data of all status i.e. active, cancelled, expired

4.H.1 Run-time view



4.H.2 Steps for the scenario

The following is the sequence of message flows (**M**essage **S**equence) between various integration points within the CCPOR application, as shown in the diagram above:

- **MS 1:**
 - **MS 1a:** As part of their CCPOR on-boarding process, the court extracts all required historical R&PO data from their local R&PO repository.
 - **MS 1b:** The extracted historical R&PO data is put in files, and transferred over to the EFTP Server hosted in the CCTC Proxy layer.
 - **MS 1c:** The historical R&PO data extract file is pulled into the TIBCO Gateway DMZ in the CCTC Presentation Layer.
 - **MS 1d:** The TIBCO Gateway DMZ further forwards the extract file into the Business Logic/ Service Layer, where it is received by the TIBCO Gateway.
 - **MS 1e:** All communications between the TIBCO Gateway and TIBCO Application Components are handled by TIBCO DATS. The extract file received by TIBCO Gateway is forwarded to TIBCO DATS.
 - **MS 1f:** TIBCO DATS sends the extract file to TIBCO CCPOR Core for appropriate processing.
 - **MS 1g:** The TIBCO CCPOR Core Service receives the extract file and passes it on its TIBCO DB Service to update the historical order data in the CCPOR.
 - All data validation errors encountered during DB update is compiled and communicated back to the court using the same process. Alternatively, the errors can be communicated back to the court using other offline procedures.

5. Non-functional Requirements

A. Front-End

5.A.1 User Interface

Requirement ID	Requirement Details
ISB.CCPOR.UI.1	All fields on any order entry screen should be on one single screen.
ISB.CCPOR.UI.2	Required Fields must have Field Names highlighted and suffixed with an asterisk “**”
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.
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.
ISB.CCPOR.UI.5	<p>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.</p> <p>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.</p> <p>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.</p>
ISB.CCPOR.UI.6	On search result pages, pagination functionality must be supported to display large result sets.
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.
ISB.CCPOR.UI.9	For any input field, white spaces will be trimmed from the beginning and end of the entered string.
ISB.CCPOR.UI.10	UI Standards and Guidelines setup for AOC V4 project should be adhered.

Requirement ID	Requirement Details
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

Table 2 Non-Functional Requirements - User Interface

5.A.2 Form Validation

Requirement ID	Requirement Details
ISB.CCPOR.General.FormValidation.1	Validation errors displayed in Alert Boxes.

Table 3 Non-Functional Requirements - Form Validation

5.A.3 Client-side

ID	Requirement
ISB.CCPOR.N.Client.1	Browser supports for both IE 6.x and Firefox 1.5 or above

Table 4 Non-Functional Requirements - Client-side

B. Environment & Infrastructure

ID	Requirement
ISB.CCPOR.N.Env.1	The solution must be deployed on the existing ISB hub infrastructure at the CCTC.
ISB.CCPOR.N.Env.2	Two physical environments must be setup for each court on-boarding onto CCPOR. For example, at Orange County: STAGING and PRODUCTION. A similar set of physical environments must be setup at CCTC. STAGING is where end-to-end integration test and stress test will first be conducted to create a benchmark.
ISB.CCPOR.N.Env.3	Two physical environments must be setup at CCTC for DataMaxx comm server: STAGING and PRODUCTION. STAGING is where end-to-end integration test and stress test will first be conducted.

Table 5 Non-Functional Requirements - CCTC Environments and Infrastructure

C. Capacity & SLA

ID	Requirement
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ID	Requirement
ISB.CCPOR.N.CapacitySLA.1	The system needs to support the following volumes (metrics to be collected from the Courts to arrive at benchmarks) Min Order Entry – TBD Max Order Entry – TBD Min Order Search – TBD Max Order Search – TBD Min Attachment viewing – TBD Max Attachment viewing - TBD
ISB.CCPOR.N.CapacitySLA.2	The system needs to support the following key response times Order Entry (DVROS acknowledgement) – 1 mins

Table 6 Non-Functional Requirements – Capacity and SLA

D. Security

ID	Requirement
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
ISB.CCPOR.N.Security.2	Encryption: All accesses to the Portal will be via HTTP over SSL (HTTP/S).
ISB.CCPOR.N.Security.3	Message and Transport level security for web services to be determined (TBD).

Table 7 Non-Functional Requirements - Security

E. Error Handling

ID	Requirement
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.
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.
ISB.CCPOR.N.ErrorHandling.3	System should provide feature to report errors that fail DVROS validations. Subsequently, the system should provide a way to address the error.

Table 8 Non-Functional Requirements – Error Handling

F. Auditing/Logging

ID	Requirement
ISB.CCPOR.N.AuditLog.1	Track per user all changes in the database.
ISB.CCPOR.N.AuditLog.2	Capture per user all transaction logs.

Table 9 Non-Functional Requirements - Auditing/Logging

G. Monitoring

ID	Requirement
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.
ISB.CCPOR.N.Monitoring.2	Any scheduled Portal Gateway downtime managed by CCTC must be published with prior notice.

Table 10 Non-Functional Requirements - Monitoring

H. System/Network Availability

ID	Requirement
ISB.CCPOR.N.FT.1	The ISB Portal services must be highly-available, and fault-tolerant, capable of recovering from software or hardware component failure.

Table 11 Non-Functional Requirements - System/Network Availability

I. Reporting

ID	Requirement
ISB.CCPOR.N.Reporting.1	Produce tracking information reports based on user.
ISB.CCPOR.N.Reporting.2	Produce transaction logs based on user.

Table 12 Non-Functional Requirements - Reporting