

Copyright Clearance Center

Academic Gateway API Reference

Version 2.2

Company Confidential

Proprietary Information

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Revision History

Date	Version	Description	Author
December 2009	2.1	Clean up based on feedback from partners	Mona Doherty
November 2010	2.2	Clarification on Modify orders; no change to functionality	Mona Doherty

Contents

1. Overview

- 1.1 Create Order Header
- 1.2 Modify Order Header
- 1.3 Create Order Detail
- 1.4 Modify Order Detail
- 1.5 Commit Order Detail
- 1.6 Cancel Order Detail
- 1.7 Check Order Detail Status
- 1.8 HTTP Header Authorization

2. Create Order Header API Details

- 2.1 Purpose
- 2.2 Create Order Header Request Format
- 2.3 Create Order Header Results Format
- 2.4 Error Codes

3. Modify Order Header API Details

- 3.1 Purpose
- 3.2 Modify Order Header Request Format

- 3.3 Modify Order Header Results Format
- 3.4 Error Codes

4. Create Order Detail API Details

- 4.1 Purpose
- 4.2 Create Order Detail Request Format
- 4.3 Create Order Detail Results Format
- 4.4 Error Codes

5. Commit Order Detail API Details

- 5.1 Purpose
- 5.2 Commit Order Detail Request Format
- 5.3 Commit Order Detail Results Format
- 5.4 Error Codes

6. Modify Order Detail API Details

- 6.1 Purpose
- 6.2 Modify Order Detail Request Format
- 6.3 Modify Order Detail Results Format
- 6.4 Error Codes

7. Cancel Order Detail API Details

- 7.1 Purpose
- 7.2 Cancel Order Detail Request Format
- 7.3 Cancel Order Detail Results Format
- 7.4 Error Codes

8. Check Order Detail Status API Details

- 8.1 Purpose
- 8.2 Check Order Detail Status Request Format
- 8.3 Check Order Detail Status Results Format
- 8.4 Error Codes

Appendix A – CCC Response XML Schema (DEMO environment)

Appendix B – Sample of Create Order Header Response

Appendix C – Sample of Create Order Detail Response

Appendix D – Sample of Commit Order Detail Response

Appendix E – Sample of Modify Order Detail Response

Appendix F – Sample of Modify Order Header Response

Appendix G – Sample of Check Order Status Response

Appendix H – Sample of Cancel Order Detail Response

1. Overview

The purpose of this document is to provide the implementation details for an arrangement between your company and Copyright Clearance Center (CCC) whereby your company can use CCC's Permissions Gateway in order to service our mutual end-user customers. There also exists an agreement entitled Permissions Gateway Service Agreement which provides the legal terms for our business arrangement.

This document explains in detail the semantics of the function calls you can make using the Copyright Clearance Center **Academic Permission Service** and **Electronic Course Content Service** Gateway, or in short Academic Gateway API. It details:

- The functions provided by the Gateway.
- Descriptions and format of all request and response data.
- Sample code illustrating calls to these functions.
- Error Conditions that may arise and explanations of their cause.

Note: There is an optional **mode** attribute for the root element of CCC gateway responses, <ccc_response>. If this attribute is included in the returned XML and set to "DEMO", it indicates that the call was made to the CCC DEMO site. Your application must recognize the **mode** attribute, and if it is set to "DEMO", convey that this version is for development, demonstration and testing purposes only. In addition, the rightsholder terms and conditions will contain verbiage at the beginning indicating that these responses are for demonstration purposes only and that the user has not been granted permission to use the requested material.

WSDL for Demo:

<http://rightsconnectdem1.copyright.com/wsdl/AcademicGatewayImplService.wsdl>

Schema for Demo:

http://rightsconnectdem1.copyright.com/wsdl/AcademicGatewayImplService_schema1.xsd

WSDL for Prod:

<http://rightsconnect.copyright.com/wsdl/AcademicGatewayImplService.wsdl>

Schema for Prod:

http://rightsconnect.copyright.com/wsdl/AcademicGatewayImplService_schema1.xsd

Note: CCC strongly encourages you to cache a local copy of the production WSDL and develop your application in such a way as to make calls against your local copy, rather than directly using the URL listed above, which is CCC's published copy of the WSDL. This practice will help to greatly reduce the impact your network transactions will have on CCC's production servers. Please be aware that you will be responsible for periodically refreshing your local copy of the WSDL with the latest version that CCC publishes. A once daily or once weekly refresh will be sufficient.

Please refer to the Permissions Gateway Service Agreement for additional terms of use.

Please direct comments, questions and other feedback to mdoherty@copyright.com.

1.1 Create Order Header (createOrderHeader)

This function creates an order header which is required for placing all order details.

1.2 Modify Order Header (modifyOrderHeader)

This function modifies an existing order header.

1.3 Create Order Detail (createOrderDetail)

This function creates an order detail that specifies the work, publication year, number of pages to be copied, number of copies, and total fee. This function is also used to order a title that is not in the CCC catalog. The detail created is incomplete until the commitOrderDetail function is called.

1.4 Commit Order Detail (commitOrderDetail)

This function sets the status of a previously created order detail record resulting from the createOrderDetail function to completed. It returns the permission, fee and rightsholder terms and conditions for the detail.

1.5 Modify Order Detail (modifyOrderDetail)

This function modifies a completed order detail if the order has not been cancelled or invoiced previously.

1.6 Cancel Order Detail (cancelOrderDetail)

This function cancels a completed order detail if the order has not been cancelled or invoiced previously.

1.7 Check Order Detail Status (checkOrderDetailStatus)

This function allows the user to check the details about a completed order detail.

1.8 HTTP Header Authorization

The Rightstconnect Gateway uses an authorization scheme for each request submitted to the web service. At account setup, each partner will be provided with a 20-character access key and a 44-character access secret. To be properly authorized, each request submitted through the Rightsconnect gateway will require a base64 encoding of this access key/password combination, separated by a colon (":") and prepended with the string "Basic " (including trailing space) sent in the "Authorization" attribute of the HTTP request header. See Appendix J – HTTP Header Authorization for examples of populating this attribute.

2. Create Order Header API Details

2.1 Purpose

The createOrderHeader() function creates a CCC Order Header which is required in order to place order details inside of it.

2.2 Create Order Header Request Format

createOrderHeader(username, password, prdAbv, edInstitution, courseName, startOfTerm, instructorName, courseNumber, acctRefNum, enteredBy, custRefNum)

Username

Description:	User's login name at copyright.com
Format:	String, 80 characters max
Required:	Yes

password

Description:	User's password at copyright.com
Format:	String, 25 characters max
Required:	Yes

prdAbrv

Description: Product abbreviation
Format: String, 3 characters exactly
Content: Values will be distributed separately for security purposes.
Required: Yes

edInstitution

Description: Name of the educational institution
Format: String, 255 characters max
Required: Yes

courseName

Description: Name of the course in which the material will be used
Format: String, 255 characters max
Required: Yes

startOfTerm

Description: The month, date, and year when the course begins
Format: String, 10 characters exactly
Content: A date in MM/DD/YYYY format
Required: Yes

instructorName

Description: Name of the instructor for the course
Format: String, 255 characters max
Required: No

courseNumber

Description: E.g., PSYCH 101
Format: String, 255 characters max
Required: No

acctRefNum

Description: A free-text reference field that will appear on the

invoice
Format: String, 50 characters max
Required: No

enteredBy

Description: The name of the individual entering the request
Format: String, 30 characters max
Required: No

custRefNum

Description: A free-text reference field that will appear on the invoice
Format: String, 55 characters max
Required: No

2.3 Create Order Header Results Format

The ***createOrderHeader*** function will return a `ccc_response` object containing the Order Header ID. The object will be mapped to a well formed XML conforming to the format specified in `rightsConnectResponse.xsd`. This XML schema file specifies the format of the possible elements returned by the CCC Gateways. An example XML file is also provided in Appendix B – Sample of Create Order Header Response. There are two possible elements that will be returned inside of the `<ccc_response>` root element, `<ccc_order_header>` and `<ccc_error>`. The `<ccc_error>` element will be detailed in section 2.4 below.

The `<ccc_response>` element contains a single **`<ccc_order_header>`** which contains the following child attributes:

id

Description: CCC Order Header ID
Format: Numeric, 15 digits max

The **`<ccc_response>`** root element also has the following optional attribute:

mode

Description: Optional attribute that indicates the instance the response is from. The important value to note is

"DEMO" which indicates that this is NOT returned from CCC's production instance.

Format: String

Content: Only "PROD" or "DEMO" is allowed

2.4 Error Codes

The following error conditions are possible from the ***createOrderHeader*** function of the Academic gateway.

error_code	Possible Causes
CCC_001	<ul style="list-style-type: none">• Database inaccessible• Application server inaccessible
CCC_002	<ul style="list-style-type: none">• Database transaction failure• Unrecoverable application exception
CCC_100	<ul style="list-style-type: none">• Missing required field(s),<ul style="list-style-type: none">○ username○ password○ prdAbrv○ edInstitution○ courseName○ startOfTerm
CCC_101	<ul style="list-style-type: none">• Invalid data format<ul style="list-style-type: none">○ startOfTerm not in MM/DD/YYYY format○ Product Abbreviation (prdAbrv)○ Publication Year YYYY must be in the range of 1000 to 3000
CCC_102	<ul style="list-style-type: none">• Input field lengths exceeded limits<ul style="list-style-type: none">○ username (>80)○ password (>25)○ edInstitution (>255)○ courseName (>255)○ instructorName (>255)○ courseNumber (>255)○ acctRefNum (>50)○ enteredBy (>30)○ custRefNum (>50)

CCC_200	<ul style="list-style-type: none"> Invalid username/password
CCC_203	<ul style="list-style-type: none"> Party account is on hold. Cannot place orders at this time

3. Modify Order Header API Details

3.1 Purpose

The `modifyOrderHeader()` function modifies a previously created CCC Order Header.

General Rules:

All fields need to be submitted.

Only the fields being changed need to be populated.

All other fields that DO NOT CHANGE can either be populated with what exists or (example): `<customerRefNum></customerRefNum>` if the field was empty to begin with, the example will be passed.

3.2 Modify Order Header Request Format

3.2.1 `modifyOrderHeader`(username, password, orderHeaderId, edInstitution, courseName, startOfTerm, instructorName, courseNumber, acctRefNum, enteredBy, custRefNum, numCopiesStdnts)

Username

Description: User's login name at copyright.com

Format: String, 80 characters max

Required: Yes

Password

Description: User's password at copyright.com

Format: String, 25 characters max

Required: Yes

orderHeaderId

Description: The ID of the order header that's intended to be modified

Format: Long, 15 digits max
Content: Positive values only
Required: Yes

edInstitution

Description: Name of the educational institution
Format: String, 255 characters max
Required: No* *See Note below*

courseName

Description: Name of the course in which the material will be used
Format: String, 255 characters max
Required: No* *See Note below*

startOfTerm

Description: The month, date, and year when the course begins
Format: String, 10 characters exactly
Content: A date in MM/DD/YYYY format
Required: No* *See Note below*

instructorName

Description: Name of the instructor for the course
Format: String, 255 characters max
Required: No* *See Note below*

courseNumber

Description: E.g., PSYCH 101
Format: String, 255 characters max
Required: No* *See Note below*

acctRefNum

Description: A free-text reference field that will appear on the invoice
Format: String, 50 characters max
Required: No* *See Note below*

enteredBy

Description: The name of the individual entering the request
Format: String, 30 characters max
Required: No* *See Note below*

custRefNum

Description: A free-text reference field that will appear on the invoice
Format: String, 50 characters max
Required: No* *See Note below*

numCopiesStdnts

Description: The number of copies for which permission is requested, to cascade to all order details.
Format: Integer, max value 99999
Content: Positive values, or -999999 to indicate no modification to the data
Required: No* *See Note below*

The checkOrderDetailStatus function will need to be used to return the updated status of each order detail within the order header.

* *Note:* In order to change the order header, at least one of the above fields needs to be specified with a value.

3.3 Modify Order Header Results Format

The ***modifyOrderHeader*** function will return a ccc_response object containing the Order Header ID. The object will be mapped to a well formed XML conforming to the format specified in rightsConnectResponse.xsd. This XML schema file specifies the format of the possible elements returned by the CCC Gateways. An example XML file is also provided in Appendix F – Sample of Modify Order Header Response. There are two possible elements that will be returned inside of the <ccc_response> root element, <ccc_order_header> and <ccc_error>. The <ccc_error> element will be detailed in section 3.4 below.

The <ccc_response> element contains a single <ccc_order_header> which contains the following child attributes:

id

Description: CCC Order Header ID
Format: Numeric, 15 digits max

The **<ccc_response>** root element also has the following optional attribute:

mode

Description: Optional attribute that indicates the instance the response is from. The important value to note is "DEMO" which indicates that this is NOT returned from CCC's production instance.
Format: String
Content: Only "PROD" or "DEMO" is allowed

3.4 Error Codes

The following error conditions are possible from the ***modifyOrderHeader*** function of the Academic gateway.

error_code	Possible Causes
CCC_001	<ul style="list-style-type: none">• Database inaccessible• Application server inaccessible
CCC_002	<ul style="list-style-type: none">• Database transaction failure• Unrecoverable application exception
CCC_100	<ul style="list-style-type: none">• Missing required field(s),<ul style="list-style-type: none">○ username○ password○ orderHeaderId
CCC_101	<ul style="list-style-type: none">• Invalid data format<ul style="list-style-type: none">○ orderHeaderId not in range 1 to 999999999999999 (fifteen digits max.)○ startOfTerm not in MM/DD/YYYY format, or YYYY < 1000 or YYYY > 3000○ numCopiesStdnts not in range 1 to 99999, or equal to -999999

CCC_102	<ul style="list-style-type: none"> Input field lengths exceeded limits <ul style="list-style-type: none"> username (>80) password (>25) edInstitution (>255) courseName (>255) instructorName (>255) courseNumber (>255) acctRefNum (>50) enteredBy (>30) custRefNum (>50)
CCC_200	<ul style="list-style-type: none"> Invalid username/password
CCC_201	<ul style="list-style-type: none"> User does not have privilege to access the order header with given ID
CCC_203	<ul style="list-style-type: none"> Party account is on hold. Cannot place orders at this time
CCC_205	<ul style="list-style-type: none"> Cannot find the order header with given ID

4. Create Order Detail API Details

4.1 Purpose

The `createOrderDetail()` function allows the user to place an order with CCC by specifying the work, publication year, number of pages to be copied, and number of copies. (For photocopies, `numCopiesStdnts` is the same as the Number of Students. For e-reserves, `numCopiesStdnts` is the same as the Number of Sets.)

** Please note that the order detail created by this function will **NOT** be completed until a successful `commitOrderDetail()` function call is made.*

4.2 Create Order Detail Request Format

createOrderDetail(username, password, orderHeaderId, cccWorkInst, publicationYear, numCopiesStdnts, numPages, fromPage, toPage, stdnum, title, publisherName, author, dateOfIssue, volume, edition, chapterArticle, customerRefNum)

username

Description: User's login name at copyright.com

Format: String, 80 characters max
Required: Yes

password

Description: User's password at copyright.com
Format: String, 25 characters max
Required: Yes

orderHeaderId

Description: CCC Order Header ID
Format: Long, 15 digits max
Content: Positive values only
Required: Yes

cccWorkInst

Description: Unique CCC number which identifies a particular work in CCC's database
Format: Long, 15 digits max
Content: Positive value or -1 only
(Set to -1 for Manual Orders, see note below)
Required: Yes ***See Note #3 below**

publicationYear

Description: The publication year of the work
Format: String, 4 characters exactly
Content: Must be a number from 1000 to 3000.
Required: Yes

numCopiesStdnts

Description: The number of copies for which permission is requested
Format: Integer, max value is 99999
Content: Positive values only
Required: Yes

numPages

Description: The number of original pages being photocopied

Format: Integer, max value is 99999
Content: Positive values, or -999999 to indicate "no value"
Required: No * **See Note #1 below**

fromPage

Description: The starting page being photocopied
Format: String, 20 characters max
Content: Integer or alphanumeric
Required: Yes * **See Note #2 below**

toPage

Description: The ending page being photocopied
Format: String, 20 characters max
Content: Integer or alphanumeric
Required: Yes * **See Note #2 below**

stdnum

Description: ISBN/ISSN standard number
Format: String, 20 characters max
Content: Alphanumeric and hyphens are allowed
Required: No

title

Description: The title of a book, journal, newspaper, etc.
Format: String, 255 characters max
Required: No ***See Note #3 below**

publisherName

Description: The bibliographic publisher of the work
Format: String, 255 characters max
Required: No ***See Note #3 below**

author

Description: The author or editor of the work
Format: String, 255 characters max
Required: Yes

dateOfIssue

Description: The date of issue of the publication

Format: String, 20 characters max

Required: No

volume

Description: The volume of the publication

Format: String, 10 characters max

Required: No

edition

Description: The edition of the publication

Format: String, 10 characters max

Required: No

chapterArticle

Description: A free-text field

Format: String, 255 characters max

Required: No

customerRefNum

Description: A free text reference field that will appear on the invoice

Format: String, 255 characters max

Required: No

*** Notes:**

1. The numPages field is required if data in either the fromPage or the toPage field (or both) is not numeric.
2. If the data in both the fromPage and the toPage fields are numeric, the numPages value is not required, and may be submitted as -999999. If a value is entered for numPages, it must match the mathematical difference between fromPage and toPage.
3. When a title cannot be found in the CCC catalog (search results), a Manual Order can be placed using the Order Detail module. The title and publisherName are required for Manual Orders. **The cccWorkInst field must be populated with “-1” for Manual Orders.**

4.3 Create Order Detail Results Format

The ***createOrderDetail*** function will return a `ccc_response` object containing the temporary Order Detail ID. The object will be mapped to a well formed XML conforming to the format specified in `rightsConnectResponse.xsd`. This XML schema file specifies the format of the possible elements returned by the CCC Gateways. An example XML file is also provided in Appendix C – Sample of Create Order Detail Response. There are two possible elements that will be returned inside of the `<ccc_response>` root element, `<ccc_temp_order_detail>` and `<ccc_error>`. The `<ccc_error>` element will be detailed in section 4.4 below.

The `<ccc_response>` element contains a single `<ccc_temp_order_detail>` which contains the following attribute:

Id

Description: Attribute to `<ccc_temp_order_detail>` indicating the CCC Order Detail ID

Format: Numeric, 15 digits max

The `<ccc_response>` root element also has the following optional attribute:

mode

Description: Optional attribute that indicates the instance the response is from. The important value to note is "DEMO" which indicates that this is NOT returned from CCC's production instance.

Format: String

Content: Only "PROD" or "DEMO" is allowed

4.4 Error Codes

The following error conditions are possible from the ***createOrderDetail*** function of the Academic gateway.

error_code	Possible Causes
CCC_001	<ul style="list-style-type: none">Database inaccessibleApplication server inaccessible
CCC_002	<ul style="list-style-type: none">Database transaction failureUnrecoverable application exception
CCC_100	<ul style="list-style-type: none">Missing required field(s),<ul style="list-style-type: none">username

	<ul style="list-style-type: none"> ○ password ○ orderHeaderId ○ numCopiesStdnts ○ numPages ○ fromPage ○ toPage ○ author ○ cccWorkInst or title/publisherName combination
CCC_101	<ul style="list-style-type: none"> • orderHeaderId not in range 1 to 999999999999999 (fifteen digits max.) • publicationYear is not in range 1000 to 3000 • numCopiesStdnts is not in range 1 to 99999 • numPages not in range 1 to 99999, or equal to -999999 • cccWorkInst not in range 1 to 999999999999999 (fifteen digits max.), or equal to -1 • dateOfIssue not in MM/DD/YYYY format, or YYYY < 1000 or YYYY > 3000
CCC_102	<ul style="list-style-type: none"> • Input field lengths exceeded limits <ul style="list-style-type: none"> ○ username (>80) ○ password (>25) ○ title (>255) ○ publisherName (>255) ○ fromPage (>20) ○ toPage (>20) ○ author (>255) ○ volume (>10) ○ edition (>10) ○ isbn (>20) ○ customerRefNum (>255) ○ chapterArticle (>255)
CCC_103	<ul style="list-style-type: none"> • value of from and to pages does not equal number of pages
CCC_200	<ul style="list-style-type: none"> • Invalid username/password
CCC_201	<ul style="list-style-type: none"> • User does not have privilege to access the order detail with given ID

CCC_202	<ul style="list-style-type: none"> Product on order detail does not match the order header
CCC_203	<ul style="list-style-type: none"> Party account is on hold. Cannot place orders at this time
CCC_205	<ul style="list-style-type: none"> Cannot find the order header with given ID
CCC_207	<ul style="list-style-type: none"> Fees to use this title cannot be calculated. This title can be requested as a special order
CCC_218	<ul style="list-style-type: none"> Your request exceeds a system limit. Please reduce the quantity requested to obtain permission.

5. Commit Order Detail API Details

5.1 Purpose

The `commitOrderDetail()` function saves a newly created order detail into CCC's database.

5.2 Commit Order Detail Request Format

commitOrderDetail(username, password, orderDetailId)

username

Description: User's login name at copyright.com

Format: String, 80 characters max

Required: Yes

password

Description: User's password at copyright.com

Format: String, 25 characters max

Required: Yes

orderDetailId

Description: The unique CCC Order Detail ID

Format:	Long, 15 digits max
Content:	Positive values only
Required:	Yes

5.3 Commit Order Detail Results Format

The ***commitOrderDetail*** function will return a `ccc_response` object containing the committed order detail result. The object will be mapped to a well formed XML conforming to the format specified in `rightsConnectResponse.xsd`. This XML schema file specifies the format of the possible elements returned by the CCC Gateways. An example XML file is also provided in Appendix D – Sample of Commit Order Detail Response. There are two possible elements that will be returned inside of the `<ccc_response>` root element, `<ccc_order_detail>` and `<ccc_error>`. The `<ccc_error>` element will be detailed in section 5.4 below.

The `<ccc_response>` element contains a single **`<ccc_order_detail>`** which contains the following child elements/attribute:

id

Description:	Attribute to <code><ccc_order_detail></code> indicating the CCC Order Detail ID
Format:	Numeric, 15 digits max

cancelled

Description:	Attribute to <code><ccc_order_detail></code> indicating if the order detail has been cancelled
Format:	Alphabetic, exactly 1 character long
Content:	Only "Y" or "N" is allowed

invoiced

Description:	Attribute to <code><ccc_order_detail></code> indicating if the order detail has been invoiced
Format:	Alphabetic, exactly 1 character long
Content:	Only "Y" or "N" is allowed

right

Description:	See note below for definitions of the return values
Format:	Alphabetic, 30 characters max
Content:	6 possible values: GRANTED, DENIED,

FORWARDED TO RIGHTSHOLDER,
PENDING, CONTACT RIGHTSHOLDER
DIRECTLY, PUBLIC DOMAIN. PERMISSION
NOT REQUIRED

terms

Description: Terms and conditions set by rightsholder
Format: Alphanumeric, 4000 characters max
Optional: Yes

fee

Description: Total fee for this order detail
Format: Numeric, integer or float, can be empty

The **<ccc_response>** root element also has the following optional attribute:

mode

Description: Optional attribute that indicates the instance the response is from. The important value to note is "DEMO" which indicates that this is NOT returned from CCC's production instance.
Format: String
Content: Only "PROD" or "DEMO" is allowed

Note: The Order functions (Commit, Modify, Check Status) use the following permission responses:

- GRANTED – Permission to photocopy the requested material is granted by the rightsholder.
- DENIED – Permission to photocopy the requested material is denied by the rightsholder.
- CONTACT RIGHTSHOLDER DIRECTLY – The rightsholder has requested that CCC refer customers directly to them for permission to photocopy their material. The user should submit a permission request directly to the rightsholder.
- PUBLIC DOMAIN. PERMISSION NOT REQUIRED– The work is in public domain. You do not need to obtain permission to photocopy this material.
- FORWARDED TO RIGHTSHOLDER – CCC will contact the rightsholder to determine whether permission is granted (or not) and applicable fees.
- PENDING – The ordered work requires additional research by CCC.

5.4 Error Codes

The following error conditions are possible from the ***commitOrderDetail*** function of the Academic gateway.

error_code	Possible Causes
CCC_001	<ul style="list-style-type: none"> Database inaccessible Application server inaccessible
CCC_002	<ul style="list-style-type: none"> Database transaction failure Unrecoverable application exception
CCC_100	<ul style="list-style-type: none"> Missing required field(s), <ul style="list-style-type: none"> username password orderDetailId
CCC_101	<ul style="list-style-type: none"> Order Detail ID is not numeric or is > 15 digits
CCC_102	<ul style="list-style-type: none"> Input field lengths exceeded limits <ul style="list-style-type: none"> username (>80) password (>25)
CCC_200	<ul style="list-style-type: none"> Invalid username/password
CCC_201	<ul style="list-style-type: none"> User does not have privilege to access the order detail with given ID
CCC_203	<ul style="list-style-type: none"> Party account is on hold. Cannot place orders at this time
CCC_206	<ul style="list-style-type: none"> Cannot find the order detail with given ID
CCC_212	<ul style="list-style-type: none"> Order detail has already been committed.

6. Modify Order Detail API Details

6.1 Purpose

The `modifyOrderDetail()` function allows the user to change certain parameters of a completed order detail. The order must have been previously completed using the `commitOrderDetail` function. Cancelled or invoiced details cannot be modified.

General Rules:

All fields need to be submitted.

Only the fields being changed need to be populated.

All other fields that DO NOT CHANGE can either be populated with what exists or (example): <customerRefNum></customerRefNum> if the field was empty to begin with, the example will be passed.

6.2 Modify Order Detail Request Format

modifyOrderDetail (username, password, orderDetailId, publicationYear, numCopiesStdnts, numPages, fromPage, toPage, author, dateOfIssue, volume, edition, customerRefNum, chapterArticle)

Username

Description: User's login name at copyright.com
Format: String, 80 characters max
Required: Yes

password

Description: User's password at copyright.com
Format: String, 25 characters max
Required: Yes

orderDetailId

Description: The unique CCC Order Detail ID
Format: Long, 15 digits max
Content: Positive values only
Required: Yes

publicationYear

Description: The publication year of the work
Format: String, 4 characters exactly
Content: Must be a number from 1000 to 3000.
Required: Yes ***See Note #2 below**

numCopiesStdnts

Description: The number of copies for which permission is requested
Format: Integer, max value is 99999
Content: Positive values, or -999999 to indicate no modification to the data
Required: Yes ***See Note #2 below**

numPages

Description: The number of original pages being photocopied
Format: Integer, max value is 99999
Content: Positive values, or -999999 to indicate no modification to the data
Required: Yes ***See Note #1 below**

fromPage

Description: The starting page being photocopied
Format: String, 20 characters max
Content: Integer or alphanumeric
Required: Yes ***See Note #1 below**

toPage

Description: The ending page being photocopied
Format: String, 20 characters max
Content: Integer or alphanumeric
Required: Yes ***See Note #1 below**

author

Description: The author or editor of the work
Format: String, 255 characters max
Required: Yes ***See Note #2 below**

dateOfIssue

Description: The date of issue of the publication
Format: String, 20 characters max
Required: No

volume

Description: The volume of the publication
Format: String, 10 characters max
Required: No

edition

Description: The edition of the publication
Format: String, 10 characters max
Required: No

customerRefNum

Description: A free text reference field that will appear on the invoice
Format: String, 255 characters max
Required: No ***See Note #2 below**

chapterArticle

Description: A free-text field
Format: String, 255 characters max
Required: No ***See Note #2 below**

*** Notes:**

1. fromPage/toPage/numPages values must conform to the same rules as in createOrderDetail().
2. Only the field(s) to be changed needs to be populated for a successful order detail modification.

6.3 Modify Order Detail Results Format

The ***modifyOrderDetail*** function will return a ccc_response object containing results of the modification. The object will be mapped to a well formed XML conforming to the format specified in rightsConnectResponse.xsd. This XML schema file specifies the format of the possible elements returned by the CCC Gateways. An example XML file is also provided in Appendix E – Sample of Modify Order Detail Response. There are two possible elements that will be returned inside of the <ccc_response> root element, <ccc_order_detail> and <ccc_error>. The <ccc_error> element will be detailed in section 6.4 below.

The <ccc_order_detail> returned as a result of a successful modification will have the exact same format as in section 5.3.

6.4 Error Codes

The following error conditions are possible from the ***commitOrderDetail*** function of the Academic gateway.

error_code	Possible Causes
CCC_001	<ul style="list-style-type: none">• Database inaccessible• Application server inaccessible
CCC_002	<ul style="list-style-type: none">• Database transaction failure• Unrecoverable application exception
CCC_100	<ul style="list-style-type: none">• Missing required field(s),<ul style="list-style-type: none">◦ username◦ password◦ orderDetailId
CCC_101	<ul style="list-style-type: none">• Order Detail ID is not numeric or is > 15 digits
CCC_102	<ul style="list-style-type: none">• Input field lengths exceeded limits<ul style="list-style-type: none">◦ username (>80)◦ password (>25)
CCC_200	<ul style="list-style-type: none">• Invalid username/password
CCC_201	<ul style="list-style-type: none">• User does not have privilege to access the order detail with given ID
CCC_203	<ul style="list-style-type: none">• Party account is on hold. Cannot place orders at this time
CCC_206	<ul style="list-style-type: none">• Cannot find the order detail with given ID
CCC_212	<ul style="list-style-type: none">• Order detail has already been committed.

7. Cancel Order Detail API Details

7.1 Purpose

The `cancelOrderDetail()` function allows the user to cancel a completed order detail.

7.2 Cancel Order Detail Request Format

cancelOrderDetail(username, password, orderDetailId)

username

Description: User's login name at copyright.com
Format: String, 80 characters max
Required: Yes

password

Description: User's password at copyright.com
Format: String, 25 characters max
Required: Yes

orderDetailId

Description: The unique CCC Order Detail ID
Format: Long, 15 digits max
Content: Positive values only
Required: Yes

7.3 Cancel Order Detail Results Format

The ***cancelOrderDetail*** function will return a `ccc_response` object containing the results of the cancellation. The object will be mapped to a well formed XML conforming to the format specified in `rightsConnectResponse.xsd`. This XML schema file specifies the format of the possible elements returned by the CCC Gateways. An example XML file is also provided in Appendix H – Sample of Cancel Order Detail Response. There are two possible elements that will be returned inside of the `<ccc_response>` root element, `<ccc_cancelled_order_detail>` and `<ccc_error>`. The `<ccc_error>` element will be detailed in section 7.4 below.

The `<ccc_response>` element contains a single `<ccc_cancelled_order_detail>` which contains the following child elements/attribute:

id

Description: Attribute to `<ccc_cancelled_order_detail>` indicating the CCC Order Detail ID which this cancellation has applied on.
Format: Numeric, 15 digits max

fee

Description: Cancellation fee for this order detail

Format: Numeric, integer or float

The **<ccc_response>** root element also has the following optional attribute:

mode

Description: Optional attribute that indicates the instance the response is from. The important value to note is "DEMO" which indicates that this is NOT returned from CCC's production instance.

Format: String

Content: Only "PROD" or "DEMO" is allowed

7.4 Error Codes

The following error conditions are possible from the ***cancelOrderDetail*** function of the Academic gateway.

error_code	Possible Causes
CCC_001	<ul style="list-style-type: none">• Database inaccessible• Application server inaccessible
CCC_002	<ul style="list-style-type: none">• Database transaction failure• Unrecoverable application exception
CCC_100	<ul style="list-style-type: none">• Missing required field(s),<ul style="list-style-type: none">◦ username◦ password◦ orderDetailId
CCC_101	<ul style="list-style-type: none">• Order Detail ID is not numeric or is > 15 digits
CCC_102	<ul style="list-style-type: none">• Input field lengths exceeded limits<ul style="list-style-type: none">◦ username (>80)◦ password (>25)
CCC_200	<ul style="list-style-type: none">• Invalid username/password

CCC_201	<ul style="list-style-type: none"> User does not have privilege to access the order detail with given ID
CCC_203	<ul style="list-style-type: none"> Party account is on hold. Cannot place orders at this time
CCC_204	<ul style="list-style-type: none"> Order detail has already been cancelled or invoiced
CCC_206	<ul style="list-style-type: none"> Cannot find the order detail with given ID
CCC_211	<ul style="list-style-type: none"> Cannot cancel order detail.

8. Check Order Detail Status API Details

8.1 Purpose

The `checkOrderDetailStatus()` function returns the status of an order detail.

8.2 Check Order Detail Status Request Format

checkOrderDetailStatus(username, password, orderDetailId)

username

Description: User's login name at copyright.com
Format: String, 80 characters max
Required: Yes

password

Description: User's password at copyright.com
Format: String, 25 characters max
Required: Yes

orderDetailId

Description: The unique CCC Order Detail ID
Format: Long, 15 digits max
Content: Positive values only

Required: Yes

8.3 Check Order Detail Status Results Format

The ***checkOrderDetailStatus*** function will return a `ccc_response` object containing the order detail information. The object will be mapped to a well formed XML conforming to the format specified in `rightsConnectResponse.xsd`. This XML schema file specifies the format of the possible elements returned by the CCC Gateways. An example XML file is also provided in Appendix G – Sample of Check Order Detail Status Response. There are two possible elements that will be returned inside of the `<ccc_response>` root element, `<ccc_order_detail>` and `<ccc_error>`. The `<ccc_error>` element will be detailed in section 8.4 below.

The `<ccc_order_detail>` returned as a result of a check order detail status will have the exact same format as in section 5.3.

The primary purpose of this function is for querying order details with a right of FORWARDED TO RIGHTSHOLDER or PENDING to get the updated right.

The function can also be used to update changes made to a GRANTED item as well as to determine whether this detail has been invoiced or cancelled via the invoiced and cancelled attributes of the `<ccc_order_detail>` element.

8.4 Error Codes

The following error conditions are possible from the ***checkOrderDetailStatus*** function of the Academic gateway.

error_code	Possible Causes
CCC_001	<ul style="list-style-type: none">• Database inaccessible• Application server inaccessible
CCC_002	<ul style="list-style-type: none">• Database transaction failure• Unrecoverable application exception
CCC_100	<ul style="list-style-type: none">• Missing required field(s),<ul style="list-style-type: none">○ username○ password○ orderDetailId

CCC_101	<ul style="list-style-type: none"> Order Detail ID is not numeric or is > 15 digits
CCC_102	<ul style="list-style-type: none"> Input field lengths exceeded limits <ul style="list-style-type: none"> username (>80) password (>25)
CCC_200	<ul style="list-style-type: none"> Invalid username/password
CCC_201	<ul style="list-style-type: none"> User does not have privilege to access the order detail with given ID
CCC_203	<ul style="list-style-type: none"> Party account is on hold. Cannot place orders at this time
CCC_206	<ul style="list-style-type: none"> Cannot find the order detail with given ID

Appendix A – CCC Response XML Schema (DEMO environment)

http://rightsconnectdem1.copyright.com/wsdl/AcademicGatewayImplService_schema1.xsd

Appendix B – Sample of Create Order Header Response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createOrderHeaderResponse xmlns:ns2="http://rightsconnect.copyright.com">
      <ccc_response platform="rightsconnect" mode="LOCAL">
        <ccc_order_header id="2010722"/>
      </ccc_response>
    </ns2:createOrderHeaderResponse>
  </S:Body>
</S:Envelope>
```

Appendix C – Sample of Create Order Detail Response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:createOrderDetailResponse xmlns:ns2="http://rightsconnect.copyright.com">
      <ccc_response platform="rightsconnect" mode="LOCAL">
```

```

        <ccc_temp_order_detail id="19541635"/>
    </ccc_response>
</ns2:createOrderDetailResponse>
</S:Body>
</S:Envelope>

```

Appendix D – Sample of Commit Order Detail Response

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:commitOrderDetailResponse xmlns:ns2="http://rightsconnect.copyright.com">
      <ccc_response platform="rightsconnect" mode="LOCAL">
        <ccc_order_detail invoiced="N" cancelled="N" id="19541635">
          <right>PENDING</right>
          <terms>-- FOR DEMONSTRATION AND TESTING ONLY -- This application is currently directed at the
Copyright Clearance Center's testing and demonstration server. No rights are actually being granted or orders generated
by this software. -- null</terms>
          <fee>1102.00</fee>
        </ccc_order_detail>
      </ccc_response>
    </ns2:commitOrderDetailResponse>
  </S:Body>
</S:Envelope>

```

Appendix E – Sample of Modify Order Detail Response

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:modifyOrderDetailResponse xmlns:ns2="http://rightsconnect.copyright.com">
      <ccc_response platform="rightsconnect" mode="LOCAL">
        <ccc_error id="355165">
          <error_code>CCC_204</error_code>
          <error_level>2</error_level>
          <error_detail>This order cannot be modified or canceled. It has already been invoiced or
canceled.</error_detail>
        </ccc_error>
      </ccc_response>
    </ns2:modifyOrderDetailResponse>
  </S:Body>
</S:Envelope>

```

Appendix F – Sample of Modify Order Header Response

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:modifyOrderHeaderResponse xmlns:ns2="http://rightsconnect.copyright.com">
      <ccc_response platform="rightsconnect" mode="LOCAL">
        <ccc_order_header id="2010722"/>
      </ccc_response>
    </ns2:modifyOrderHeaderResponse>
  </S:Body>
</S:Envelope>

```

Appendix G – Sample of Check Order Detail Status Response

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>

```



```

<ns2:checkOrderDetailStatusResponse xmlns:ns2="http://rightsconnect.copyright.com">
  <ccc_response platform="rightsconnect" mode="LOCAL">
    <ccc_order_detail invoiced="N" cancelled="N" id="27033959">
      <right>GRANTED</right>
      <terms>-- FOR DEMONSTRATION AND TESTING ONLY -- This application is currently directed at the
Copyright Clearance Center's testing and demonstration server. No rights are actually being granted or orders generated
by this software. -- Caution about "Only Globe Staff materials may be used": Verification of authorship is your
responsibility. Please check the author of the article before using this material. Contact the Globe directly for
permission for articles authored by "Globe Correspondents", for photo use or for editorials and articles by Judy
Foreman, Ellen Goodman, David Shribman, and Dan Wasserman - 617-929-2659.</terms>
      <fee>23.00</fee>
    </ccc_order_detail>
  </ccc_response>
</ns2:checkOrderDetailStatusResponse>
</S:Body>
</S:Envelope>

```

Appendix H – Sample of Cancel Order Detail Response

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:cancelOrderDetailResponse xmlns:ns2="http://rightsconnect.copyright.com">
      <ccc_response platform="rightsconnect" mode="LOCAL">
        <ccc_cancelled_order_detail id="19541640">
          <fee>0.00</fee>
        </ccc_cancelled_order_detail>
      </ccc_response>
    </ns2:cancelOrderDetailResponse>
  </S:Body>
</S:Envelope>

```

Appendix I – Sample of CCC Error

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
    <ns2:modifyOrderDetailResponse xmlns:ns2="http://rightsconnect.copyright.com">
      <ccc_response platform="rightsconnect" mode="LOCAL">
        <ccc_error id="355188">
          <error_code>CCC_100</error_code>
          <error_level>1</error_level>
          <error_detail>A required parameter value was not supplied. User Name is a required field.</error_detail>
        </ccc_error>
        <ccc_error id="355189">
          <error_code>CCC_100</error_code>
          <error_level>1</error_level>
          <error_detail>A required parameter value was not supplied. Password is a required field.</error_detail>
        </ccc_error>
        <ccc_error id="355190">
          <error_code>CCC_101</error_code>
          <error_level>1</error_level>
          <error_detail>Invalid input value. User-provided input does not match a required format. Order Detail
Number must be in the range 1 to 99999999999999 (fifteen digits max).</error_detail>
        </ccc_error>
        <ccc_error id="355191">
          <error_code>CCC_101</error_code>
          <error_level>1</error_level>
          <error_detail>Invalid input value. User-provided input does not match a required format. Number of copies
must be in the range 1 to 99999, or -999999 to indicate no change.</error_detail>
        </ccc_error>
        <ccc_error id="355192">
          <error_code>CCC_101</error_code>

```

```
        <error_level>1</error_level>
        <error_detail>Invalid input value. User-provided input does not match a required format. Number of pages
must be in the range 1 to 99999, or -999999 to indicate no change.</error_detail>
    </ccc_error>
    <ccc_error id="355193">
        <error_code>CCC_100</error_code>
        <error_level>1</error_level>
        <error_detail>A required parameter value was not supplied. At least one modifiable parameter must be
provided to modify an Order Detail.</error_detail>
    </ccc_error>
</ccc_response>
</ns2:modifyOrderDetailResponse>
</S:Body>
</S:Envelope>
```

Appendix J – HTTP Header Authorization

Using Java:

```
// start: setting HTTP headers

String username = "SZBHIOT56YCDCG8GKCB1";
String password = "+8fbIwB2h9f7QhBudlGSeFCB31dCa4rESjROw=";

byte[] credential = (username + ":" + password).getBytes();
String authorization = new
String(org.apache.commons.codec.binary.Base64.encodeBase64(credential));

Map requestContext = ((BindingProvider) port).getRequestContext();
Map<String, List<String>> httpHeaders = new HashMap<String, List<String>>();
httpHeaders.put("Authorization", Collections.singletonList("Basic " + authorization));
requestContext.put(MessageContext.HTTP_REQUEST_HEADERS, httpHeaders);
.
.
.
```

Using .NET:

```
HttpRequestMessageProperty httpRequest = new HttpRequestMessageProperty();

OperationContext.Current.OutgoingMessageProperties.Add(HttpRequestMessageProperty.Name
, httpRequest);
byte[] authbytes = Encoding.ASCII.GetBytes("SZBHIOT56YCDCG8GKCB1:+
8fbIwB2h9f7QhBudlGSeFCB31dCa4rESjROw=");
string base64 = Convert.ToBase64String(authbytes);
httpRequest.Headers.Add("Authorization", "Basic " + base64);
```

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