polaris

Polaris API Reference

6.5

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innovative

World Headquarters
1900 Powell Street, Suite 400
Emeryville, CA 94608
+1.510.655.6200

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Polaris API - Overview

The Polaris REST Application Programming Interface (PAPI) is a Web-based service comprised of a set of URIs which return data and/or perform actions on the Polaris application database. Method calls are made over TCP connections by sending HTTP GET, PUT, POST and DELETE requests. Nearly any computer language can be used to communicate over HTTP with the REST server. This document details the REST API methods, including the URIs, HTTP verbs, request headers and request bodies required to execute Polaris functionality.

See Also:

- "Revision History" on the next page.
- "Setup" on page 13.
- "PAPI Web Service Authorization" on page 13.
- "HTTP Method" on page 13.
- "PAPI Web Service Authorization - Sample Code" on page 14.
- "Web.config - AuthenticationLevel" on page 16.
- "SSL in Polaris 4.0.676 and later; 4.1.442 and later" on page 17.
- "HTTP Request Header" on page 18.
- "PAPI Protected Methods" on page 22.
- "Staff and Patron Logon to PAPI" on page 23.
- "Using Public Methods as an Authenticated Staff User" on page 23.
- "PAPI Error Codes" on page 24.
- "Application IDs" on page 28.
- "Material Format Types" on page 28.
- "General URI Parameters" on page 30.
- "PAPI and Swagger" on page 31.

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Revision History

The following changes have been made after the release of Polaris 5.1:

- **Updated Type of Material (TOM) list** - Polaris 5.1. See "Material Format Types" on page 28.
- **Method to authenticate patron** - Polaris 5.1 SP1. See "AuthenticatePatron" on page 32.
- **PAPI uses Swagger** - Polaris 5.2. See "PAPI and Swagger" on page 31.
- **AuthenticatePatron changes** - Polaris 5.2. AuthenticatePatron supports either barcode or username in the XML body Barcode element. The method supports the **PAC override password** and **Enable Patron username** options as specified in the Polaris Administration PAC profile **Patron Access options - Log In**. See "AuthenticatePatron" on page 32.
- **NotificationUpdate changes** - Polaris 5.2. Method now supports email and text messaging for specific types of notices. Notification types have been added: 2nd Notice (ID=18); Missing Part (ID=19); Manual Bill (ID=20). See "NotificationUpdate" on page 100.
- **PatronHoldRequestsGet changes** - Polaris 5.2. Designation and VolumeNumber are returned if present in the data. PACDisplayNotes (up to 255 characters from the PAC Display Note field) are returned. See "PatronHoldRequestsGet" on page 163.
- **PatronitemsOutGet changes** - Polaris 5.2. Designation and VolumeNumber are returned if present in the data. CanItemBeRenewed (true/false) is returned. See "PatronItemsOutGet" on page 170.
- **PatronRegistrationCreate changes** - Polaris 5.2. XML body elements now include ExpirationDate, AddrCheckDate, and PatronCode. A new error code, Invalid_Patron_Code (-3612) is added. See "PatronRegistrationCreate" on page 184.
- **PatronUpdate changes** - Polaris 5.2. Now supports patron requests to change address. The following xml body elements are added: AltEmail address; EnableSMS; PhoneVoice2; PhoneVoice3; Phone1CarrierID; Phone2CarrierID; Phone3CarriedID; TxtPhoneNumber; EReceiptOptionID (including None); ExcludeFromAlmostOverdueAutoRenew; ExcludeFromPatronRecExpiration; ExcludeFromInactivePatron; ExpirationDate; AddrCheckDate; PatronCodeID; AddressID; FreeTextLabel; StreetOne; State; County; PostalCode; Country; AddressTypeID. Null (none) is now a valid input option for DeliveryOption. You can remove an email address by sending a blank EmailAddress or Altemail address in the request body; for example: **<EmailAddress><\EmailAddress>** would remove whatever was in the record. See "PatronRegistrationUpdate" on page 201.
- **DatesClosed** - Polaris 5.2. New method returns a list of dates closed by organization. See "DatesClosed" on page 57.
- **PatronCodesGetResult** - Polaris 5.2. New method returns a list of valid patron codes. See "PatronCodesGetResult" on page 133.
- **PatronILLRequestsGet** - Polaris 5.2. New method returns a list of ILL requests placed by the specified patron. The list can be filtered by the status of the request. See "PatronILLRequestsGet" on page 167.
- **RecordSetContentPut** - Polaris 5.2. New method adds or removes records from a patron record set. See "RecordSetContentPut" on page 212.

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- **RecordSetRecordsGet** - Polaris 5.2. New method returns a list of record IDs in a specified patron record set. See "RecordSetRecordsGet" on page 214.
- **SAMobilePhoneCarriersGetResult** - Polaris 5.2. New method returns content from the SA_MobilePhoneCarriers table for a specified organization, which specifies the mobile phone carrier selections available for patron record phone fields. See "SAMobilePhoneCarriersGetResult" on page 219.
- **UpdatePickupBranchID** - Polaris 5.2. New method updates the pickup branch for a hold request when the patron requests the change. See "UpdatePickupBranchID" on page 223.
- **PatronUpdate** - Polaris 5.2. Documentation updated: **PatronCodeID** element changed to **PatronCode**. See "PatronRegistrationUpdate" on page 201.
- **PatronPreferencesGet** - Added note that states when a patron does not have a delivery method, PAPI returns a description of “null” rather than “none”. "PatronPreferencesGet" on page 179.
- **PatronRegistationCreate** - Revised description for EnableSMS to Enable additional text message and values include 0/1 or False/True. See "PatronRegistrationCreate" on page 184.
- **Synch_GetDeletedAuthsPaged** - Polaris 5.5. New "paged" method allows the caller to retrieve the ID list in smaller packets to prevent timeouts when retrieving long lists. See "Synch_GetDeletedAuthsPaged" on page 249.
- **Synch_GetDeletedBibsPaged** - Polaris 5.5. New "paged" method allows the caller to retrieve the ID list in smaller packets to prevent timeouts when retrieving long lists. See "Synch_GetDeletedBibsPaged" on page 253.
- **Synch_GetDeletedItemsPaged** - Polaris 5.5. New "paged" method allows the caller to retrieve the ID list in smaller packets to prevent timeouts when retrieving long lists. See "Synch_GetDeletedItemsPaged" on page 257.
- **Synch_GetDeletedPatronsPaged** - Polaris 5.5. New "paged" method allows the caller to retrieve the ID list in smaller packets to prevent timeouts when retrieving long lists. See "Synch_GetDeletedPatronsPaged" on page 261.
- **Synch_GetUpdatedAuthsPaged** - Polaris 5.5. New "paged" method allows the caller to retrieve the ID list in smaller packets to prevent timeouts when retrieving long lists. See "Synch_GetUpdatedAuthsPaged" on page 281.
- **Synch_GetUpdatedBibsPaged** - Polaris 5.5. New "paged" method allows the caller to retrieve the ID list in smaller packets to prevent timeouts when retrieving long lists. See "Synch_GetUpdatedBibsPaged" on page 285..
- **Synch_GetUpdatedItemsPaged** - Polaris 5.5. New "paged" method allows the caller to retrieve the ID list in smaller packets to prevent timeouts when retrieving long lists. See "Synch_GetUpdatedItemsPaged" on page 290.
- Polaris 5.6 release - Updated title page and revised descriptions for methods RecordSetContentPut and RecordSetRecordsGet. Removed references to release 5.2 from descriptions and clarified that the methods are for patron record sets only.
- **CreatePatronBlocks** - Polaris 6.0. Updated documentation - workstation ID (wsid) is required.

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- **Error Codes** - Polaris 6.1. Error codes added: 3621 patron is secured; 4203-4208 cancel hold prevented for specific hold statuses.
- **Synch_GetBibsPaged** - Polaris 6.3. New endpoint allows a paged extraction of bib record data. See ""Synch_BibsPagedGet" on page 237.
- **PickupBranchesGet** - Polaris 6.3. New endpoint returns a list of valid pickup branches based on the organization ID. See "PickupBranchesGet" on page 131.
- **ShelfLocationsGet** - Polaris 6.3. New endpoint returns a list of shelf locations based on the organization ID. See "ShelfLocationsGet" on page 135.
- **ItemUpdateBarcode** - Polaris 6.3. The new parameter *BarcodeOrID* has been implemented that enables a barcode to be updated using either the item ID or the item barcode as an identifier. An additional new parameter, *isBarcode*, specifies whether the identifier used is an item record ID or a barcode. See "ItemUpdateBarcode" on page 95.
- **PatronHoldRequestGet** - Polaris 6.3. A new *CanSuspend* Boolean property has been added that indicates whether a patron's hold request can be suspended. See "PatronHoldRequestsGet" on page 163.
- **PatronReadingHistoryClear** - Polaris 6.3. Removes a range of historical reading history entries by specifying their ID using the new query string parameter *id*. See "PatronReadingHistoryClear" on page 182.
- **PatronRegistrationCreate** and **PatronRegistrationUpdate** - Polaris 6.4. Incoming phone number formats are now validated against customer-defined rules in Polaris System Adminstration. The TxtPhoneNumber parameter now supports "Unspecified" for instances where no phone number is indicated. The parameter StreetThree has been added as optional. The parameters Phone1CarrierID, Phone2CarrierID, and Phone3CarrierID support a value of -2 if the patron's branch has "Notice: Export text message" enabled in System Administration. See "PatronRegistrationCreate" on page 184. and "PatronRegistrationUpdate" on page 201.
- **PatronBasicDataGet** - Polaris 6.4. StreetThree has been added to the PatronAddresses return element. See "PatronBasicDataGet" on page 152.
- **SynchBibsByIDGet** - Polaris 6.4. Bibliographic records can now be queried using a single record ID, a comma-delimited list of IDs, or a range of IDs. A new query string parameter, includeItems, is supported when retrieving records. This parameter includes an 852 tag for each item record linked to the bibliographic record. See "Synch_BibsByIDGet" on page 234.
- **PatronBasicDataGet** and **PatronRegistrationCreate** - Polaris 6.5. The use of a patron's legal name is now supported. The legal name fields LegalNameFirst, LegalNameMiddle, LegalNameLast, and UseLegalNameOnNotices have been added to PatronBasicDataGet and PatronRegistrationCreate. PatronBasicDataGet also includes the new field LegalFullName. See "PatronBasicDataGet" on page 152. and "PatronRegistrationCreate" on page 184..
- **PatronBasicDataGet**, **PatronRegistrationCreate**, and **PatronRegistrationUpdate** - Polaris 6.5. The *state* address field can now be unidentified, if a country does not require a state definition. This requires "StateRequired" to be set to *no* in the System Administration "Countries" table. See "PatronBasicDataGet" on page 152., "PatronRegistrationCreate" on page 184., and "PatronRegistrationUpdate" on page 201.

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- **HoldRequestCancel** - Polaris 6.5. Shipped holds can now be cancelled with the status of "1 inactive", "2" active", and "4 pending". If enabled by the library, hold requests with a status of "5 shipped" can also be cancelled. See "HoldRequestCancel" on page 63..

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Setup

Polaris API Service (Public) license required

Web site must be configured for Anonymous only

*.svc handler mapping must be setup in IIS. If you installed IIS after Windows Communication Foundation (WCF) was installed, you must run the following command:
"%WINDIR%\Microsoft.Net\Framework\v4.0\Windows Communication Foundation\ ServiceModelReg.exe" -r

PAPI Web Service Authorization

Secure functions will check HTTP header for valid Authorization element.

Authorization - **PWS [PAPIAccessID]:[Signature]**

PWS must be in caps

No space before or after **:**

[PAPIAccessID] - Assigned by Polaris

[Signature] - The signature is the following, encoded with SHA1 UTF-8:

[HTTPMethod][URI][Date][PatronPassword]

HTTP Method

URI - Construct the URI as you would expect the server to receive it:

Example:

```
search/bibs/keyword/au?q=roald+dahl&sort=PDTI&limit=TOM=dvd
```

not

```
search/bibs/keyword/au?q=roald%20dahl&sort=PDTI&limit=TOM%3Ddvd
```

Date

Patron Password - Only used when accessing patron specific methods

Use HTTP Date format (RFC1123)

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ddd, dd MMM yyyy HH:mm:ss GMT

Example:
Wed, 17 Oct 2012 22:23:32 GMT

If you are unable to set the date in the HTTP header, pass the following name:value pair into the header:

PolarisDate: ddd, dd MMM yyyy HH:mm:ss GMT

PolarisDate: Wed, 17 Oct 2012 22:23:32 GMT

Date must be within +/- 30 minutes of current time or request will fail

Example:
Authorization: PWS polarisdev:8TD4Nfu+cxdUZPwqlQMVBuDOvMw=

Private key to create HMAC is assigned by Polaris

Current {version} is **v1**

PAPI Web Service Authorization - Sample Code

In order to build the string (hash), you need data. The data is built by concatenating the HTTP method (GET, PUT, POST, DELETE), URI, Date and Patron Password (if required). The Access Key is the private key assigned by Polaris.

When the routine returns, the caller will be given a hash similar to this example:

8TD4Nfu+cxdUZPwqlQMVBuDOvMw=

This hash is then combined with the PAPI Access Key ID and used in the HTTP header, similar to the following example:

Authorization: PWS SOPAC1:8TD4Nfu+cxdUZPwqlQMVBuDOvMw=

Sample Android-based Java class:

```
package Polaris.CheckMyLibrary;
import java.security.InvalidKeyException;
import java.security.NoSuchAlgorithmException;
import java.security.SignatureException; import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import android.util.Base64;
public class PAPIHash {
    private static final String HMAC_SHA1_ALGORITHM = "HmacSHA1";
    public String GetPAPIHash(
       String strAccessKey, String strHTTPMethod, String strURI, String strHTTPDate,
String strPatronPassword) {
       String result = "";
```

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```
// Get an hmac_sha1 key from the raw key bytes

       byte[] secretBytes = strAccessKey.getBytes();
       SecretKeySpec signingKey = new SecretKeySpec(secretBytes, HMAC_SHA1_
ALGORITHM);

// Get an hmac_sha1 Mac instance and initialize with the signing key

       try { Mac mac; mac = Mac.getInstance(HMAC_SHA1_ALGORITHM);
       mac.init(signingKey);

       String data = "";
       if (strPatronPassword.length() & gt; 0) data = strHTTPMethod + strURI +
strHTTPDate + strPatronPassword;
       else
           data = strHTTPMethod + strURI + strHTTPDate;

// Compute the hmac on input data bytes

byte[] rawHmac = mac.doFinal(data.getBytes());

// Convert raw bytes to Hex result = Base64.encodeToString(rawHmac, 0);

      } catch (NoSuchAlgorithmException e1) {

// TODO Auto-generated catch block

       e1.printStackTrace(); } catch (InvalidKeyException e) {

// TODO Auto-generated catch block

       e.printStackTrace();
       }
  return result;
   }
 }
```

Sample C# Method:

```
public string GetPAPIHash(string strAccessKey, string strHTTPMethod, string strURI,
string strHTTPDate, string strPatronPassword)

{
 byte[] secretBytes = UTF8Encoding.UTF8.GetBytes(strAccessKey);
 HMACSHA1 hmac = new HMACSHA1(secretBytes);

 // Computed hash is based on different elements defined by URI

 byte[] dataBytes = null;
  if (strPatronPassword.Length > 0)
         dataBytes = UTF8Encoding.UTF8.GetBytes(strHTTPMethod +
                     strURI + strHTTPDate + strPatronPassword);
```

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```
      else
         dataBytes = UTF8Encoding.UTF8.GetBytes(strHTTPMethod +
                     strURI + strHTTPDate);
      byte[] computedHash = hmac.ComputeHash(dataBytes);
     string computedHashString = Convert.ToBase64String(computedHash);
  return computedHashString;
}
```

Web.config - AuthenticationLevel

ALL - Require authentication for all API calls (default)

PATRON - Require authentication for Patron related API calls

NONE - Authentication is not required (debug purposes only)

Web.config - appSettings Keys

The following appSettings keys are supported in the web.config file:

Key	Values
ApplicationName	Used to create log folder and filename
LogMessagesLevel	GENERAL - All General and error messages ERROR - Error messages only DEBUG - All general, debug and error messages
LogMessagesPurge	true/false - Automatically delete log files older than 30 days. Default: True
LogMessagesVersionStamp	true/false - Add the version to the log file name. Default: False
LogMessagesDateStamp	true/false - Add a date stamp to the log file name. Default: False
LogMessagesStackMethod	true/false - Record the object and method name in the log file entry. This is automatically done for DEBUG and ERROR settings. Default: True
ERMSNetworkAddress	Override the default ERMS Network Address.
ExrernalHostname	Specify override if the external URI request host name is different than local domain name. Setting this option will affect how the PAPI hash is calculated. Example: Incoming request uses

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Key	Values
	papiserver.mylibrary.org, server's local name is papi.local.org

SSL in Polaris 4.0.676 and later; 4.1.442 and later

All protected method calls require SSL using HTTPS. This is to ensure that all sensitive data such as domain account information is encrypted. If a protected method is called without an HTTPS connection, a "403 - Forbidden" error will be returned. For more information, see "SSL Requirements for Protected Methods" on page 23..

You can configure the PAPIService web.config file to support the following:

- HTTP only - Only public methods are allowed
- HTTPS only - Only protected methods allowed
- HTTP and HTTPS - Both public and protected methods allowed

You can configure the PAPIService appsettings.config file to support the following:

- HTTP only - Only public methods are allowed
- HTTPS only - Only protected methods allowed
- HTTP and HTTPS - Both public and protected methods allowed

By default, the appsettings.config file is set up to support HTTP only. Enabling both HTTP and HTTPS is required if protected methods are used and support for existing PAPI-based applications is required.

To set these options, go to the appsettings.config file located in C:\Program Files\Polaris\[version]\PAPIService\REST and set the Security Mode as follows:

- None = Support HTTP and HTTPS
- Transport = Support HTTPS only

> **Important:**
> Once set to Transport, ALL PAPI method calls (public and protected) must use HTTPS.

Support for XML and JSON Data Exchange Formats

The Polaris API supports both XML and JSON (JavaScript Object Notation) data exchange formats. The caller may choose to use JSON by specifying the content type in the HTTP request header. By default, XML will be used.

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HTTP Request Header

To specify JSON, you may add the following to the HTTP request header:

Content-Type: application/json

Accept: application/json

To specify XML (the default), you may add the following to the HTTP request header:

Content-Type: application/xml

Accept: application/xml

> **Note:**
> The HTTP request header must provide the “Content-Length” when using the request body.

JSON and DateTime Fields

All DateTime fields are nullable. The default is no longer MinValue.

JSON - GetBib

Example HTTP data returned by a call to GetBib using JSON as the content type:

```
HTTP/1.1 200 OK
Cache-Control: private
Content-Length: 1480
Content-Type: application/json; charset=utf-8
Server: Microsoft-IIS/7.5
X-AspNet-Version: 4.0.30319
X-Powered-By: ASP.NET
Date: Fri, 07 Jan 2011 19:06:54 GMT
   "PAPIErrorCode": 0,
   "ErrorMessage": "",
   "BibGetRows": [{
      "ElementID": 35,
      "Occurence": 1,
      "Label": "Title:",
      "Value": "The wind in the willows \/ illustrated by Ernest H. Shepard.",
      "Alternate": false
   }, {
      "ElementID": 18,
      "Occurence": 1,
      "Label": "Author:",
      "Value": "Grahame, Kenneth, 1859-1932.",
```

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```
        "Alternate": false
    }, {
        "ElementID": 2,
        "Occurence": 1,
        "Label": "Publisher, Date:",
        "Value": "New York : Scribner, 1961, c1933.",
        "Alternate": false
    }, {
        "ElementID": 3,
        "Occurence": 1,
        "Label": "Description:",
        "Value": "259 p. : illus. ; 21 cm.",
        "Alternate": false
    }, {
        "ElementID": 17,
        "Occurence": 1,
        "Label": "Format:",
        "Value": "Book",
        "Alternate": false
    }, {
        "ElementID": 21,
        "Occurence": 1,
        "Label": "Other Author:",
        "Value": "Shepard, Ernest H. (Ernest Howard), 1879-1976.",
        "Alternate": false
    }, {
        "ElementID": 28,
        "Occurence": 1,
        "Label": "Notes:",
        "Value": "\"Atheneum Books for Young Readers\"",
        "Alternate": false
    }, {
        "ElementID": 28,
        "Occurence": 2,
        "Label": "Notes:",
        "Value": "The adventures of four amiable animals, Rat, Toad, Mole and Badger,
        along a river in the English countryside.",
        "Alternate": false
    }, {
        "ElementID": 6,
        "Occurence": 1,
        "Label": "ISBN:",
        "Value": "0684128195",
        "Alternate": false
```


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```
    }, {
        "ElementID": 7,
        "Occurence": 1,
        "Label": "System Availability:",
        "Value": "4",
        "Alternate": false
    }, {
        "ElementID": 8,
        "Occurence": 1,
        "Label": "Current Holds:",
        "Value": "0",
        "Alternate": false
    }, {
        "ElementID": 13,
        "Occurence": 1,
        "Label": "Call Number:",
        "Value": "J Fict Gra",
        "Alternate": false
    }, {
        "ElementID": 16,
        "Occurence": 1,
        "Label": "System Items Available:",
        "Value": "3",
        "Alternate": false
        }
    ]
}
```


JSON - HoldRequestCreate

Example HTTP Request Body when using the POST command with JSON:


```
{
    "PatronID": 299377,
    "BibID": "15593",
    "ItemBarcode": "",
    "VolumeNumber": "",
    "Designation": "",
    "PickupOrgID": "74",
    "IsBorrowByMail": "0",
    "PatronNotes": "",
    "ActivationDate": "\/Date(1295352000000)\/",
    "WorkstationID": "1",
    "UserID": "1",
```


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```
    "RequestingOrgID": "74",
    "TargetGUID": ""
}
```

JSON - ItemRenewAllForPatron

Example HTTP Request body when using the PUT command with JSON:

```
{
    "Action":"renew",
    "LogonBranchID":"74",
    "LogonUserID":"1",
    "LogonWorkstationID":"1",
    "RenewData":{"IgnoreOverrideErrors":true}
}
```

JSON - PatronAccountPay

Example HTTP Request body when using the PUT command with JSON:

```
{
    "TxnAmount":"2.95",
    "PaymentMethodID":"11",
    "FreeTextNote":"Paid through Polaris API"
}
```

Date Format when using JSON

Because JSON does not have a standard way of describing dates, the following format must be used:

"\/Date(1295352000000)\/"

The number represents the number of milliseconds since January 1st 1970 UTC.

1295352000000 represents Tuesday, January 18, 2011 7:00:00 AM.

XML Elements

The order of XML elements matters! (You will see reminders throughout this document.)

Examples of SHA1 Encoding

http://msdn.microsoft.com/en-us/library/dd203052.aspx

http://en.wikipedia.org/wiki/Sha1

Example using **http://jssha.sourceforge.net/**

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```
        <script type="text/javascript" src="../src/sha.js"></script>
        <script type="text/javascript">
        function TestHash() {
        var txt =
"GEThttp://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022Wed, 09 Oct 2009
22:23:32 GMT1234";
        var shaObj = new jsSHA(txt, "ASCII");
        alert(shaObj.getHMAC("9573D875-42AC-45b6-B68D-29DABE1E7419", "ASCII", "SHA-1", "B64"));
        }
        </script>
```

PAPI Protected Methods

The PAPI Service supports protected methods. These are functions that might be performed by a staff member and not a patron. The staff member must authenticate with the PAPI service using the AuthenticateStaffUser method (see "AuthenticateStaffUser" on page 34.) over a secure connection. Domain account information will be exchanged and verified only once. If successful, the user will be provided an AccessToken and AccessSecret which will be used for the remainder of their operations. SA_GetValueByOrg, below, is an example of how to use this authentication mechanism. A PAPI Processing job, which runs at 5:30 a.m., deletes expired authentication tokens. The job calls the PAPI_DeleteExpiredAuthTokens database stored procedure which checks the PAPIStaffAuthentication table's AuthenticationExpDate column.

Using Protected Methods

Once you have authenticated using the AuthenticateStaffUser method, you may use the protected methods. The access token and access secret returned by the AuthenticateStaffUser method are required for all protected calls. The access token is valid for 24 hours. All protected methods contain the access token in the URI. When creating the authentication signature, the AccessSecret is appended to the data being hashed.

Example:

[HTTP Method][URI][HTTP Date][Access Secret]

Note that AuthenticateStaffUser does not require the "AccessSecret" when building the signature.

Example calling a protected method:

SA_GetValueByOrg

```
https://[hostname]/PAPIService/REST/protected/v1/1033/100/1/[AccessToken]/
organization/1/sysadmin/attribute/ORGPHONE1
```

HTTP Verb: GET

Authorization Required: Yes

Header:

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```
Date: Sat, 14 May 2011 22:23:32 GMT
Authorization: PWS polarisdev:ZasTURsRdlEHeKgdA1MGXROUxTI=
Content-Type: text/xml
```

Staff and Patron Logon to PAPI

Staff users must be registered staff members in Polaris ILS. Staff logon requires the staff member's Polaris **domain\username** and password.

Patron logon requires the patron's library account barcode and password: **patronbarcode\password**.

Using Public Methods as an Authenticated Staff User

In some scenarios, as an authenticated staff user, you may want to call a public method that requires the patron's password. Instead of looking up the patron's password, you may build the authentication signature using the AccessSecret. Because the public method does not contain the AccessToken in the URI, you simply pass in a custom HTTP header field called X-PAPI-AccessToken. The PAPI Service will look for the X-PAPI-AccessToken header field and act accordingly.

> **Note:** This process may fail to work if a firewall or network device is configured to remove non-standard HTTP header fields.

SSL Requirements for Protected Methods

SSL must be used because domain account information is being passed to perform the initial account authentication.

SSL must be enabled in the PAPI Service by changing the security mode to Transport.

> **Important:** Once set to Transport, ALL PAPI method calls (public and protected) must use HTTPS.

The certificate must be installed in the IIS web site.

PAPI Service must contain binding on port 443 to the web server certificate.

Development Tools - Fiddler2 (Freeware)

http://www.fiddler2.com/fiddler2/

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PAPI Error Codes

The following error codes may be returned from the Polaris RESTAPI.

Code	Reason
General	
Any positive number	Represents either the count of rows returned or the number of rows affected by the procedure. See individual procedure definitions for details.
0	Success
-1	FAILURE - General
-2	Multiple errors. See returned rowset for list of errors.
-3	PARTIAL FAILURE - Multiple errors (but some items succeeded). See returned rowset for list of errors.
-4	FAILURE - ERMS error
-5	Failure. Database error occurred
-6	Failure. Invalid parameter
-9	SQL timeout
-10	Failure. ID does not exist
Bibliographic Errors - [1000-1999]	
-1000	Invalid BibliographicRecordID specified
Item/Holdings Errors - [2000-2999]	
-2000	Invalid ItemRecordID specified
-2001	Invalid barcode specified
-2002	Duplicate barcode specified
Patron Errors - [-201, -221; -501; 3000-3999]	
-201	Failed to insert entry in addresses table
-221	Failed to insert entry in PostalCodes table
-501	Patron personal information change is not allowed
-3000	Patron does not exist
-3001	Failed to insert entry in Patrons table

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Code	Reason
-3400	Failed to insert entry in Patronaddresses table
-3500	Country code does not exist
-3501	Patron branch is not defined
-3502	Patron branch is not a valid branch
-3503	Last name is not defined
-3504	First name is not defined
-3505	Barcode is already used for another patron
-3506	Transaction branch is not defined
-3507	Transaction user is not defined
-3508	Transaction workstation is not defined
-3509	Passwords do not match
-3510	Postal code problems - mismatch city, state, county
-3511	Postal code problems - mismatch city, state
-3512	Postal code problems - mismatch city, county
-3513	Postal code problems - mismatch state, county
-3514	Postal code problems - mismatch county
-3515	Postal code problems - mismatch state
-3516	Postal code problems - mismatch city
-3517	Postal code problems - postal code not found
-3518	Invalid Email address
-3519	Invalid DeliveryMethod Value (No Address for Patron)
-3520	Invalid DeliveryMethod Value (No Email Address for Patron)
-3521	Invalid DeliveryMethod Value (No PhoneVoice1 for Patron)
-3522	Invalid DeliveryMethod Value (No PhoneVoice2 for Patron)
-3523	Invalid DeliveryMethod Value (No PhoneVoice3 for Patron)
-3524	Invalid DeliveryMethod Value (No PhoneFax for Patron)
-3525	Invalid DeliveryMethod Value
-3526	Invalid EmailFormat Value
-3527	Invalid ReadingList Value
-3528	Duplicate name
-3529	Duplicate username

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Code	Reason
-3530	Failed to insert entry in Patron Registration table
-3532	Invalid PhoneVoice1 value
-3533	Invalid password format
-3534	Invalid Password lengh
-3535	Patron password change is not allowed
-3536	Invalid gender value
-3600	Charge transaction does not exist
-3601	Charge transaction for this patron does not exist
-3602	Payment method for payment is invalid
-3603	Invalid amount is being paid
-3604	Invalid transaction type being paid
-3605	General patron account database error
-3606	Payment transaction does not exist
-3607	Payment transaction for this patron does not exist
-3608	Payment transaction cannot be voided because another action taken on payment
-3610	Payment amount is more than the sum of the charges
-3612	Invalid PatronCodeID
-3613	Invalid PhoneVoice2
-3614	Invalid PhoneVoice3
-3615	Invalid Alt Email Address
-3616	Invalid TXTPhoneNumber
-3617	Invalid PhoneCarrier
-3619	Invalid DeliveryMethod No Phone
-3620	Invalid Email Address for EReceipt
-3621	Patron Is Secure
Hold Request Errors - [4000-4999]	
-4000	Invalid application ID supplied
-4001	Invalid patron ID supplied
-4002	Invalid workstation ID supplied
-4003	Invalid request ID supplied

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Code	Reason
-4004	Invalid requesting org ID supplied
-4005	Invalid patron barcode
-4006	Invalid bibliographic record ID supplied
-4007	Invalid pickup org ID supplied
-4016	Cannot change pickup branch for request in statusID
-4100	Invalid request GUID supplied
-4101	Invalid txn group qualifier supplied
-4102	Invalid txn qualifier supplied
-4103	Invalid answer supplied
-4104	Invalid state supplied
-4201	Invalid request ID supplied
-4202	Invalid current org ID supplied
-4203	Cancel prevented for hold requests with status of Held.
-4204	Cancel prevented for hold request with status of Unclaimed.
-4205	Cancel prevented for hold request with a status of Cancelled
-4206	Cancel prevented for hold request with a status of Expired
-4207	Cancel prevented for hold request with a status of Out to Patron
-4208	Cancel prevented for hold request with a status of Shipped
-4300	No requests available to cancel
-4400	Invalid Application date supplied
-4401	Application date must be greater than or equal to today's date
-4402	Application date must be earlier than 2 years from today
-4403	Invalid pickup branch assigned to hold request
-4404	Error occurred loading SA "days to expire"
-4405	Request must have a status of Active, Inactive or Pending
-4406	No requests available to suspend
-4407	Request status invalid for this process
-4408	Invalid request status change requested
-4409	Invalid hold user not supplied reason
-4410	This is the only item available for hold

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Code	Reason
-4411	No other items at other branches are available to fill this hold
Organization Errors - [5000-5999]	
-5000	Invalid OrganizationID specified
Circulation Errors - [6000-6999]	
-6000	Invalid loan unit supplied
-6001	ItemCheckout record does not exist
Course Reserve Errors - [7000-7999]	
-7000	Invalid CourseReserveID specified
PolarisUser Errors - [8000-8999]	
-8000	Invalid PolarisUserID specified
-8001	Polaris user is not permitted
Workstation Errors - [9000-9999]	
-9000	Invalid WorkstationID specified
Record Set Errors - [9000-9999]	
-11000	Supplied recordSetID is not of type patron
-11001	RecordSetID does not exist

Application IDs

Unless otherwise specified, customers and third-party developers should use an ApplicationID value of 100 when making calls to PAPI.

Material Format Types

The following IDs are associated with the FormatID columns in several of the returned rowsets.

ID	Searchcode	Format Description
1	bks	Book
2	mus	Printed or Manuscript Music
3	cmt	Cartographic Material
4	vis	Visual Materials

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ID	Searchcode	Format Description
5	rec	Sound Recording
6	elr	Electronic Resources
7	mix	Archival Mixed Materials
8	ser	Serial
9	pmu	Printed Music
10	mmu	Manuscript Music
11	pmc	Printed Cartographic Material
12	mcm	Manuscript Cartographic Material
13	map	Map
14	glb	Globe
15	mss	Manuscript Material
16	pgr	Projected Medium
17	mot	Motion Picture
18	vid	Video Recording
19	ngr	Two Dimensional Non-projected Graphic
20	art	Three Dimensional Object
21	msr	Musical Sound Recording
22	nsr	Nonmusical Sound Recording
23	kit	Kit
24	per	Periodical
25	new	Newspaper
26	mic	Microform
27	lpt	Large Print
28	brl	Braille
33	dvd	DVD
34	vcr	Videotape
35	mcd	Music CD
36	ebk	eBook
37	abk	Audio Book

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ID	Searchcode	Format Description
38	dmc	Digital Collection
39	abs	Abstract
40	brd	Blu-ray Disc
41	aeb	Eaudiobook
42	bcd	Book + CD
43	bcs	Book + Cassette
44	vgm	Video Game
45	bdv	Blu-ray + DVD
46	bkv	Book + DVD
47	atl	Atlas
48	stm	Streaming Music
49	stv	Streaming Video
50	emg	Emagazine
51	vyl	Vinyl
52	abc	Audio Book on CD
53	abt	Audio Book on Cassette

General URI Parameters

Name	Required	Description/Notes
app-ID	Yes	Calling application (product) ID (see "Application IDs" on page 28.)
org-ID	Yes	Is the organization identifier. This value must be system-level (1) or a branch-level organization identifier.
bib-ID	Yes	Is the record identifier.
lang-ID	Yes	Is the language identifier of the Label. Possible values include: 1033 - English 1042 - Korean 1049 - Russian 1065 - Farsi 1066 - Vietnamese 1141 - Hawaiian

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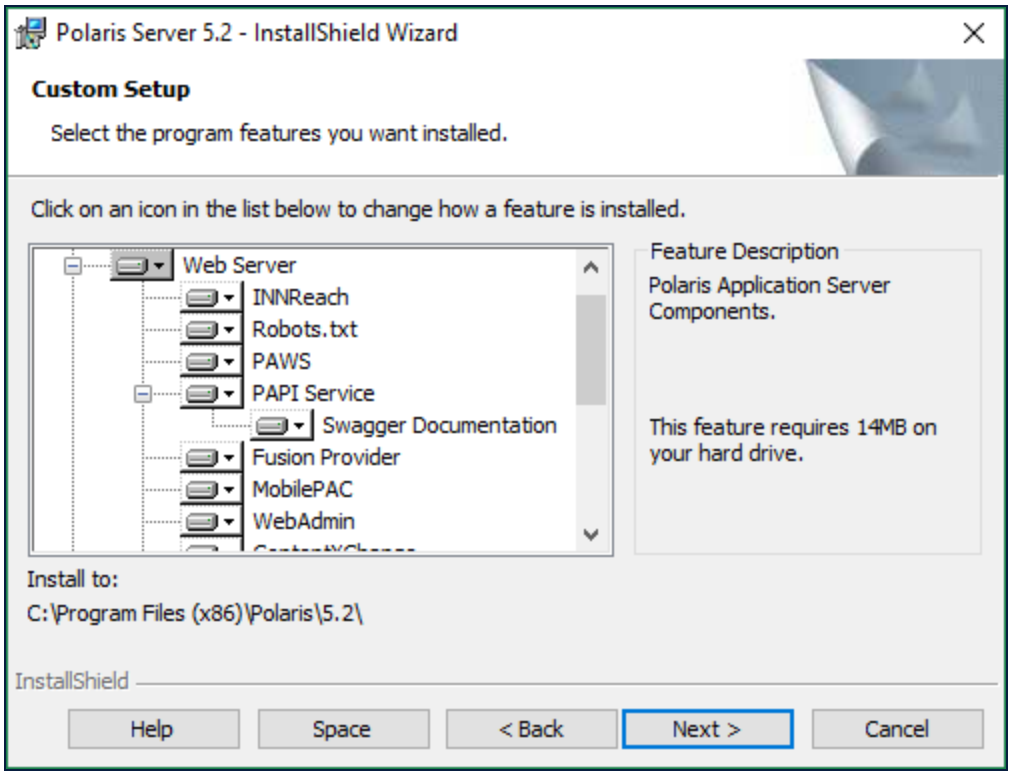
Name	Required	Description/Notes
		2052 - Chinese 3082 - Spanish 3084 - French 12289 - Arabic 15372 - Haitian Creole

PAPI and Swagger

Swagger is an open-source framework for REST APIs. Effective as of Polaris 5.2, the Polaris API has a Swagger endpoint that provides code and documentation to Polaris customers and third-party vendors who use the Polaris API. For more information about Swagger, go to **http://swagger.io/**.

A Polaris Web Server installation option provides access to the Polaris Swagger endpoint.



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AuthenticatePatron

A call to AuthenticatePatron is required before calling any public method that requires a patron's password. Upon success, this method will return an access token. The access token will be used in place of the patron's password when building the hash for secure patron methods.

> **Note:** It is strongly recommended that HTTPS be used with this call. The HTTP body data will contain the patron's barcode and password.

URI

`POST` /public/[1]/authenticator/patron

Authorization Required?

Yes

XML Body Elements

Name	Required	Description/Notes
Barcode	Yes	Barcode or Username
Password	Yes	Password

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
AccessToken	Access token to be used in place of the patron's password when building the hash for patron methods.
PatronID	Patron ID

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
https://[hostname]/PAPIService/REST/public/v1/1033/100/1/authenticator/patron
```

Body

```
<PatronAuthenticationData>
   <Barcode>21756003332060</Barcode>
   <Password>1234</Password>
</PatronAuthenticationData>
```

Return

```
HTTP/1.1 200 OK
<PatronAuthenticationResult>
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <AccessToken>$2a$10$nN4s2fmVtX.9PQnczt5zTOmTKFLrV/vZlDsoqAuaVANcRR14q0F3K
   </AccessToken>
   <PatronID>358255</PatronID>
</PatronAuthenticationResult>
```

Error Code

-3001 Unable to authenticate the patron credentials.

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AuthenticateStaffUser

A call to AuthenticateStaffUser is required before calling any protected methods. Upon success, this method returns an access token and access secret. These are used to create the hash for protected methods. The access token is valid for 24 hours. Subsequent calls to AuthenticateStaffUser with the same domain account information generate a new access token, access secret, and expiration date. For more information about protected methods, see "PAPI Protected Methods" on page 22..

POST /protected/[1]/authenticator/staff

Process Overview

IsAuthorizedPAPIPolarisUser

PAPI_IsAuthorizedPAPIPolarisUser - Verifies the user is in the PolarisUsers table and returns a PolarisUserID

IsStaffAuthenticationLocked

PAPI_IsStaffAuthenticationLocked - Check PAPIStaffAuthenticationFailures database table. If three failed attempts are made in the last five minutes, temporarily lock the account.

Authenticate user against the domain.

If failed:

1. Call **PAPI_StaffAuthenticationFailed**.
2. Update **PAPIStaffAuthenticationFailures** database table.

If success:

1. Call **PAPI_StaffAuthenticationSucceeded**.
2. Return access token and access secret.
3. Set **AuthenticationExpDate** to current time + one day.
4. Reset entry in **PAPIStaffAuthenticationFailure**s database table.

Authorization Required?

Yes

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Body Elements

Name	Required	Description/Notes
Domain	Yes	Domain name
Username	Yes	Username
Password	Yes	Password

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message.
AccessToken	Access token to be used in URI of protected method calls.
AccessSecret	AccessSecret used to create hash when calling protected methods.
PolarisUserID	Polaris User ID
BranchID	Polaris User's Default Branch ID.
AuthExpDate	Expiration date of provided access token.

Example

```
https://[hostname]/PAPIService/REST/protected/v1/1033/100/1/authenticator/staff
```

Body

```
<AuthenticationData>
   <Domain>TestDomain</Domain>
   <Username>StaffUser1</Username>
   <Password>mypassword</Password>
</AuthenticationData>
```

Return

```
HTTP/1.1 200 OK
```

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```
<AuthenticationResult xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <AccessToken>IGYhCPGcutuKmZFcKUystVAkgmi4g1Db</AccessToken>
   <AccessSecret>B8sD7y0CYOhlsIyk</AccessSecret>
   <PolarisUserID>799</PolarisUserID>
   <BranchID>5</BranchID>
   <AuthExpDate>2011-07-26T15:48:39.437</AuthExpDate>
</AuthenticationResult>
```

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BibGet

Returns bibliographic information for a specified record.

URI

`GET` /public/[1]/bib/{BibID}

Authorization Required?

Yes, if authentication level set to ALL

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ElementID	Is the element identifier. Possible values include: 2 - Publisher 3 - Description 5 - Edition 6 - ISBN 7 - System Items Total 8 - Current Holds 9 - Summary 10 - Local Items Total 11 - Control Number 13 - Call Number 15 - Local Items Available 16 - System Items Available

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
	17 - Format 18 - Author 19 - Series 20 - Subject 21 - Added Author 22 - Added Title 23 - LCCN 24 - ISSN 25 - Other Number 27 - Genre 28 - Notes 29 - Contents 30 - Publisher Number 33 - Web Link 34 - Uniform Title 35 - Title 36 - Volume 37 - Frequency 39 - Former Title 40 - Later Title 41 - STRN 42 - GPO Item Number 43 - CODEN 44 - Target Audience 46 - Medium
Occurrence	Is the occurrence of an element. The occurrence of a given element matches the relative order of the underlying data in the MARC record.
Label	Is the label associated with the element in the language specified by the LanguageID input parameter.
Value	Is the value of the element be used for display purposes.
Alternate	Is a flag that indicates whether this row contains an alternate graphic representation associated with closest preceding row where the Alternate value equals zero. If this flag is set to one then the value originated from an 880 tag. Note: If an 880 tag is not linked via $6 to specific data field instance then the Alternate flag will be set to zero.

Remarks

The properties Local Items Total (10) and Local Items Available (15) will not be included in the returned rowset if the organization identifier is set to system (1).

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Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/bib/5000
```

Return - Success

```
HTTP/1.1 200 OK
<BibGetResult xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibGetRows>
      <BibGetRow>
         <ElementID>18</ElementID>
         <Occurence>1</Occurence>
         <Label>Author:</Label>
         <Value>Grahame, Kenneth, 1859-1932.</Value>
         <Alternate>false</Alternate>
      </BibGetRow>
      ...
      <BibGetRow>
         <ElementID>16</ElementID>
         <Occurence>1</Occurence>
         <Label>System Items Available:</Label>
         <Value>3</Value>
         <Alternate>false</Alternate>
      </BibGetRow>
      </BibGetRows>
   </BibGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<BibGetResult xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid BibID</ErrorMessage>
   <BibGetRows i:nil="true"/>
</BibGetResult>
```

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BibBooleanSearch

Returns a list of bibliographic records that match search criteria. For Boolean searches, you may opt to include the SORTBY clause when using the q query string parameter. This returns search results that are sorted in the specified sort order.

GET /public/[1]/search/bibs/Boolean?q={ccl}&sortby={sortby}

Note: The URL query parameter SORTBY should not be supplied if the SORTBY command is in the CCL query. Example:
/public/[1]/search/bib/Boolean?q=frog+sortby+PD/sort.descending

Authorization required?

Yes, if authentication level set to ALL.

{ccl}

Common Command Language snippet. Must be URL encoded.

{sortby}

RELEVANCE|AU|TI|CALL|PD|AU_TI|AU_PD|TI_AU|TI_PD|TI_TOM|PD_AU|PD_TI|CALL_AU|CALL_TI|CALL_PD|

Query Parameters

Name	Values	Required	Description/Notes
q	string	Yes - Keyword without terms and Boolean	Terms. Allows for special characters. Example: Harry%20Potter Auto*
sortby	string (in query string	No	These apply to SORTBY when used in the q string parameter: RELEVANCE - Relevance

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Values	Required	Description/Notes
	parameter)		MP/sort.descending - Most Popular AU - Author TI - Title CALL - Call Number PD/sort.descending - Publication Date Descending AUTI - Author, then Title AUPD - Author, then Publication Date Descending TIAU - Title, then Author TIPD - Title, then Publication Date Descending TITOM - Title , then Type of Material PDAU - Publication Date Descending, then Author PDTI - Publication Date Descending, then Title CALLAU - Call Number, then Author CALLTI - Call Number, then Title CALLPD - Call Number, then Publication Date Descending
sortby	string (in CCL string)	No	These apply to SORTBY when used in the CCL string: RELEVANCE - Relevance AU - Author AU PD/sort.descending - Author, then Publication Date Descending AU PD/sort.descending TI - Author, then Publication Date Descending, then Title AU TI - Author, then Title CALL - Call Number CALL AU - Call Number, then Author CALL AU TI - Call Number, then Author, then Title CALL PD/sort.descending - Call Number, then Publication Date Descending CALL PD/sort.descending TI - Call Number, then Publication Date Descending, then Title CALL PD/sort.descending - Call Number, then Publication Date Descending MP/sort.descending - Most Popular PD/sort.descending - Publication Date Descending PD/sort.descending AU - Publication Date Descending, then Author PD/sort.descending AU TI - Publication Date Descending, then Author, then Title PD/sort.descending TI - Publication Date Descending, then Title

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Name	Values	Required	Description/Notes
			TI - Title TI AU - Title, then Author TI PD/sort.descending - Title, then Publication Date Descending TI TOM - Title, then Type of Material
bibsperpage	>0		Default is 10
page	int		Default is 1, for first page
limit	string		Partial CCL command. Examples: TOM=dvd TOM=dvd AND AB=74 See "LimitFiltersGet" on page 98. for valid options
notran	>0		Do not record search transaction in the Polaris Transactions database.

XML Elements Returned

The following table lists bibliographic record elements returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
WordList	A list of a user's search terms.
TotalRecordsFound	The number of bib records found for the search.
Position	The ordinal position of the record in the returned search results.
ControlNumber	The Polaris record identifier (id).
Title	Primary title of the work.
Author	Primary author of the work.
Publisher	Publisher of the work.
Edition	Edition of the work.
PublicationDate	Year of publication.

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Name	Description/Notes
ISBN	The ISBN number of the work.
Description	Physical description of the work.
WebLink	URL for website related to the work.
Fiction	
TypeOfMaterial	Numeric id of the Polaris-defined Type of Material code for the work.
PrimaryTypeOfMaterial	
CallNumber	Bibliographic call number of the work.
CourseReserveCount	For records that are on course reserve, this is the number of copies available.
LocalItemsIn	Number of items associated with this work at the specified branch with a status of "In".
LocalItemsTotal	Number of items associated with this work at the specified branch.
SystemItemsIn	Number of items associated with this work in the system with a status of "In".
SystemItemsTotal	Number of items associated with this work in the system.
CurrentHoldRequests	Count of hold requests for this work.
KWIC	String showing the keywords used in search in context of where they appear in the MARC record.
RetentionStatement	For serial works, a summary of which issues are retained.
HoldingsStatement	For serials works, summary of issues.
HoldingsNote	
Summary	The summary description of a work.
OCLC	Number assigned by OCLC for this bibliographic work.
UPC	UPC code associated with the work.
TargetAudience	MARC code for target audience of the work.
Medium	
ThumbnailLink	Optional URL for cover image of a work.
VernacularTitle	An alternate graphical representation of the title.
VernacularAuthor	An alternate graphical representation of the author.
VernacularPublisher	An alternate graphical representation of the publisher.

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Name	Description/Notes
LocalControlNumber	Locally assigned id of the work.
Series	
SeriesSuggestedQuery	
VernacularSeries	An alternate graphical representation of the series.

Example

```
/public/{version}/{LangID}/{AppID}/{OrgID}/search/bibs/boolean?q=frog+sortby+PD/
sort.descending

/public/{Version}/{LangID}/{AppID}/{OrgID}/search/bibs/boolean?q=frog&sortby=ti
```

Return - Success

```
HTTP/1.1 200 OK
<BibSearchResult xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>2</PAPIErrorCode>
   <ErrorMessage/>
   <WordList>roald dahl dvd &#x0;</WordList>
   <TotalRecordsFound>9</TotalRecordsFound>
   <BibSearchRows>
      <BibSearchRow>
         <Position>1</Position>
         <ControlNumber>675617</ControlNumber>
         <Title>Roald Dahl's The BFG (Big friendly giant) [DVD]</Title>
         <Author/>
         <Publisher>Arlington, VA : A&E Home Video ; New York : Distributed by New
         Video, [2006]</Publisher>
         <Edition/>
         <PublicationDate>2006</PublicationDate>
         <ISBN>076708988X</ISBN>
         <Description>1 videodisc (DVD) (ca. 88 min.) : sd., col. ; 4 3/4
         in.</Description>
         <WebLink/>
         <Fiction/>
         <TypeOfMaterial>33181604</TypeOfMaterial>
         <PrimaryTypeOfMaterial>33</PrimaryTypeOfMaterial>
         <CallNumber>ROAL</CallNumber>
         <CourseReserveCount>0</CourseReserveCount>
         <LocalItemsIn>0</LocalItemsIn>
         <LocalItemsTotal>0</LocalItemsTotal>
         <SystemItemsIn>8</SystemItemsIn>
```

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```
          <SystemItemsTotal>13</SystemItemsTotal>
          <CurrentHoldRequests>0</CurrentHoldRequests>
          <KWIC>
             <span> <b>...</b> <b>Roald</b> <b>Dahl</b>'s The BFG (Big friendly
             giant) [ <b>DVD</b>] / a Cosgrove Hall Production ; producers, Mark Hall
             and Brian <b>...</b> </span>
          </KWIC>
          <RetentionStatement/>
          <HoldingsStatement/>
          <HoldingsNote/>
          <Summary>One night, Sophie is snatched from her bed at Mrs. Clonkers'
          orphanage by an awesome giant who whisks her away on a magical and funny
          adventure.</Summary>
          <OCLC/>
          <UPC>733961758009</UPC>
          <TargetAudience/>
          <Medium>[DVD]</Medium>
          <ThumbnailLink/>
          <VernacularTitle/>
          <VernacularAuthor/>
          <VernacularPublisher/>
          <LocalControlNumber/>
          <Series/>
          <SeriesSuggestedQuery/>
          <VernacularSeries/>
       </BibSearchRow>
       ...
    </BibSearchRows>
</BibSearchResult>
```

Return - Failed

```
HTTP/1.1 200 OK
```

Notes

Use a boolean search to retrieve titles attached to a headingID.

http://localhost/PAPIService/REST/public/v1/1033/100/1/search/bibs/boolean?q=MAH%3d67282

MAH={AuthorHeadingID}

MSH={SubjectHeadingID}

MTE={TitleEntryID}

MSE={SeriesEntryID}

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HeadingsSearch returns a hex HeadingID. This must be converted to decimal.

Boolean searches may also be used to construct more complex searches. Example:

AU=Dahl AND TI=Charlie

http://localhost/PAPIService/REST/public/v1/1033/100/1/search/bibs/boolean?q=AU%3dDahl%20AND%20TI%3dCharlie

A power search or keyword search transaction is written when the BibSearch method is called.

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BibKeywordSearch

Returns list of bibliographic records that match the search criteria.

GET	/public/[1]/search/bibs/keyword/{QualifierName}?q={terms}
GET	/public/[1]/search/bibs/keyword/{QualifierName}/{terms} [deprecated]

Authorization required?

Yes, if authentication level set to ALL

{ccl}

Common Command Language snippet. Must be URL encoded.

{qualifierName}

KW|TI|AU|SU|NOTE|PUB|GENRE|SE|ISBN|ISSN|LCCN|PN|LC|DD|LOCAL|SUDOC|CODEN|STRN|CN|BC|

{sortby}

RELEVANCE|AU|TI|CALL|PD|AU_TI|AU_PD|TI_AU|TI_PD|TI_TOM|PD_AU|PD_TI|CALL_AU|CALL_TI|CALL_PD|

{terms}

Must be URL encoded.

URI Parameters

Name	Required	Description/Notes
qualifierName	Yes	

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Query Parameters

Name	Values	Required	Description/Notes
q	string Keyword without terms and Boolean	Yes	Terms. Allows for special characters. Example: Harry%20Potter Auto*
sortby	string (in query string parameter)	No	These apply to SORTBY when used in the q string parameter: RELEVANCE - Relevance MP/sort.descending - Most Popular AU - Author TI - Title CALL - Call Number PD/sort.descending - Publication Date Descending AUTI - Author, then Title AUPD - Author, then Publication Date Descending TIAU - Title, then Author TIPD - Title, then Publication Date Descending TITOM - Title , then Type of Material PDAU - Publication Date Descending, then Author PDTI - Publication Date Descending, then Title CALLAU - Call Number, then Author CALLTI - Call Number, then Title CALLPD - Call Number, then Publication Date Descending
sortby	string (in CCL string)	No	These apply to SORTBY when used in the CCL string: RELEVANCE - Relevance AU - Author AU PD/sort.descending - Author, then Publication Date Descending AU PD/sort.descending TI - Author, then Publication Date Descending, then Title AU TI - Author, then Title CALL - Call Number CALL AU - Call Number, then Author CALL AU TI - Call Number, then Author, then Title CALL PD/sort.descending - Call Number, then Publication Date Descending CALL PD/sort.descending TI - Call Number, then Publication Date Descending, then Title

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Name	Values	Required	Description/Notes
			CALL PD/sort.descending - Call Number, then Publication Date Descending MP/sort.descending - Most Popular PD/sort.descending - Publication Date Descending PD/sort.descending AU - Publication Date Descending, then Author PD/sort.descending AU TI - Publication Date Descending, then Author, then Title PD/sort.descending TI - Publication Date Descending, then Title TI - Title TI AU - Title, then Author TI PD/sort.descending - Title, then Publication Date Descending TI TOM - Title, then Type of Material
bibsperpage	>0	No	Default is 10
page	int	No	Default is 1, for first page
limit	string	No	Partial CCL command. Examples: TOM=dvd TOM=dvd AND AB=74 See "LimitFiltersGet" on page 98. for valid options
notran	>0	No	Do not record search transaction in the Polaris Transactions database.

XML Elements Returned

The following table lists bibliographic record elements returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
WordList	A list of a user's search terms.
TotalRecordsFound	The number of bib records found for the search.
Position	The ordinal position of the record in the returned search

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Name	Description/Notes
	results.
ControlNumber	The Polaris record identifier (id).
Title	Primary title of the work.
Author	Primary author of the work.
Publisher	Publisher of the work.
Edition	Edition of the work.
PublicationDate	Year of publication.
ISBN	The ISBN number of the work.
Description	Physical description of the work.
WebLink	URL for website related to the work.
Fiction	
TypeOfMaterial	Numeric id of the Polaris-defined Type of Material code for the work.
PrimaryTypeOfMaterial	
CallNumber	Bibliographic call number of the work.
CourseReserveCount	For records that are on course reserve, this is the number of copies available.
LocalItemsIn	Number of items associated with this work at the specified branch with a status of "In".
LocalItemsTotal	Number of items associated with this work at the specified branch.
SystemItemsIn	Number of items associated with this work in the system with a status of "In".
SystemItemsTotal	Number of items associated with this work in the system.
CurrentHoldRequests	Count of hold requests for this work.
KWIC	String showing the keywords used in search in context of where they appear in the MARC record.
RetentionStatement	For serial works, a summary of which issues are retained.
HoldingsStatement	For serials works, summary of issues.
HoldingsNote	
Summary	The summary description of a work.

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Name	Description/Notes
OCLC	Number assigned by OCLC for this bibliographic work.
UPC	UPC code associated with the work.
TargetAudience	MARC code for target audience of the work.
Medium	
ThumbnailLink	Optional URL for cover image of a work.
VernacularTitle	An alternate graphical representation of the title.
VernacularAuthor	An alternate graphical representation of the author.
VernacularPublisher	An alternate graphical representation of the publisher.
LocalControlNumber	Locally assigned id of the work.
Series	
SeriesSuggestedQuery	
VernacularSeries	An alternate graphical representation of the series.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/search/bibs/keyword/au?q=roald%20dahl&sortby=PDTI&limit=TOM=dvd&bibsperpage=2

http://localhost/PAPIService/REST/public/v1/1033/100/1/search/bibs/keyword/au/roald%20dahl?sort=PDTI&limit=TOM=dvd&bibsperpage=2 [deprecated]
```

Return - Success

```
HTTP/1.1 200 OK
<employees>
   <employee>
      <id>1</id>
      <firstName>Leonardo</firstName>
      <lastName>DiCaprio</lastName>
      <photo>http://1.bp.blogspot.com/-zvS_
      6Q1IzR8/T5l6qvnRmcI/AAAAAAAABcc/HXO7HDEJKo0/s200/Leonardo+Dicaprio7.jpg</phot
      o>
   </employee>
   ...
   <employee>
      <id>3</id>
      <firstName>Hritik</firstName>
      <lastName>Roshan</lastName>
      <photo>http://thewallmachine.com/files/1411921557.jpg</photo>
```

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```
   </employee>
</employees>
```

Return - Failed

```
HTTP/1.1 200 OK
```

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HeadingsSearch

Searches an ordered list of terms and returns headings information relative to a given start point.

`GET` /public/[1]/search/headings/{QualifierName}

Authorization required?

Yes, if authentication level set to ALL

URI Parameters

Name	Required	Description/Notes
Qualifiername	Yes	Is the qualifier name. Possible values include: 'AU' - Author 'SE' - Series 'SU' - Subject 'TI' - Title

Query String Parameters

Name	Values	Required	Description/Notes
startpoint	>0	No	The start point. If there is no matching entry, the first entry with a higher value will be the starting point. Also, if the start point begins with a common leading article (e.g. 'A', 'And' or 'The') and a right-truncated search does not match any entries, then the leading article will be stripped from the start point.
numterms	>0	Yes	The number of terms requested.
preferredpos	int	Yes	The preferred position of the start point within the returned entries. If (nPreferredPositionInResponse = 1) then the first row in the returned rowset corresponds to the start point. If (nPreferredPositionInResponse < 1) then the first row in the returned rowset corresponds to the entry N rows beyond the entry corresponding to the start point where N = (ABS

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Values	Required	Description/Notes
			(nPreferredPositionInResponse) + 1). If (nPreferredPositionInResponse > 1) then the first row in the returned rowset corresponds to the entry N rows prior to the entry corresponding to the start point where N = (nPreferredPositionInResponse - 1).
notran	>0	No	Do not record search transaction in the Polaris Transactions database.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
Position	Is the sequential position of the main heading starting with 1. The first occurrence of a row with a distinct Position value will be the main heading.
DisplayType	Is the heading display type. Possible values include: 0 - Main heading 1 - SEE heading (4xx) 2 - SEE ALSO heading (5xx)
DisplayConstant	Is the display constant associated with the heading. If the heading is a main heading, then this column will be NULL. If the heading is a SEE or SEE ALSO heading, then this column will be non-NULL and the Position column will equal the Position column of the row corresponding to the main heading.
DisplayTerm	Is the display term associated with the heading.
GlobalOccurrences	Is the number of records in which the heading occurs.
HeadingID	Is the heading identifier. The HeadingID is a "Hex String" representation of a 4-byte unsigned integer and corresponds to the HeadingID included in the bibliographic extract file where the Alias name is 999-qualifier_name (e.g. 999-AU, 999-SE, 999-SU, 999-TI).

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Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/search/headings/SU?startpoint=
civil%20war&numterms=10&preferredpos=5
```

Return - Success

```
<HeadingsSearchResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <HeadingsSearchRows>
      <HeadingsSearchRow>
         <Position>3</Position>
         <DisplayType>0</DisplayType>
         <DisplayConstant/>
         <DisplayTerm>Civil society--Russia (Federation)</DisplayTerm>
         <GlobalOccurrences>1</GlobalOccurrences>
         <HeadingID>106D2</HeadingID>
      </HeadingsSearchRow>
      ...
      <HeadingsSearchRow>
         <Position>6</Position>
         <DisplayType>0</DisplayType>
         <DisplayConstant/>
         <DisplayTerm>Civil war--Drama</DisplayTerm>
         <GlobalOccurrences>1</GlobalOccurrences>
         <HeadingID>106DC</HeadingID>
      </HeadingsSearchRow>
   </HeadingsSearchRows>
</HeadingsSearchResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<HeadingsSearchResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Could not execute statement on remote server 'ERMS'.</ErrorMessage>
   <HeadingsSearchRows/>
</HeadingsSearchResult>
```

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CollectionsGet

Returns a list of collections based on the organization ID. Branches utilize a subset of collection information maintained at the system level in Polaris. To retrieve a list of all collections in the system, pass in an organization ID of 1. To retrieve a list of collections for a specific branch, pass in the branch ID.

GET /public/[1]/collections

Authorization required?

Yes

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ID	ID of collection
Name	Display name of collection
Abbreviation	Collection abbreviation

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/collections

http://localhost/PAPIService/REST/public/v1/1033/100/3/collections
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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DatesClosed

This method returns a list of dates closed by organization. If the specified organization ID does not exist, an error is returned (Invalid OrgID supplied, -5000).

GET /public/[1]/datesclosed

Authorization required?

Yes

XML Elements Returned

Dates closed for the specified organization.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
DateClosed	Date closed

Example

```
hairsplitter-
saturn.polarislibrary.com/PAPIService/REST/public//public/v1/1033/100/3/datesclosed
```

Return - Success

```
HTTP/1.1 200 OK
<DatesClosedGetResult xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage i:nil="true" />
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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```
    <DatesClosedRows>
        <DatesClosedRow>
            <DateClosed>2014-08-03T00:00:00</DateClosed>
        </DatesClosedRow>
        ...
        <DatesClosedRow>
            <DateClosed>2015-12-25T00:00:00</DateClosed>
        </DatesClosedRow>
    </DatesClosedRows>
</DatesClosedGetResult>
```

Error Message

If the organization ID does not exist in the database, error code -5000 ("Invalid OrganizationID supplied") is returned.

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BibHoldingsGet

Returns holdings information for a specified bibliographic record.

`GET` /public/[1]/bib/{BibID}/holdings

Authorization required?

Yes, if authentication level set to ALL.

Input Parameters

Name	Required	Description/Notes
BibID	Yes	Is the record identifier.

XML Elements Returned

The result XML contains one node (BibHoldingsGetRow) for each piece (monograph or serial). The nodes are ordered such that all pieces assigned to a given location/collection are grouped together based on the item availability display configuration settings in Polaris System Administration. For a given location and collection, monographic pieces are always sorted before serial pieces. Monographic pieces are sorted by call number and volume (normalized) in ascending order, and serial pieces are sorted by chronology date in descending order.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
LocationID	Location identifier to which this piece is assigned.
LocationName	Location name to which this piece is assigned.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
CollectionID	Collection identifier to which this piece is assigned.
CollectionName	Collection name to which this piece is assigned.
Barcode	Barcode assigned to the piece. If the piece is not associated with an item record then this value will be NULL.
PublicNote	Public note of the piece.
CallNumber	Local call number of the piece.
Designation	Designation assigned to the piece. If the piece is not associated with serial then this value will be NULL.
ShelfLocation	Shelf location assigned to the piece.
CircStatus	Circulation status of the piece. If the piece is checked out then the due date will be appended to the circulation status. Other factors used to determinate the circulation status are outside the scope of this document.
LastCircDate	Last circulation date of the piece. If the piece is not associated with an item record then this value will be NULL.
MaterialType	Material type of the piece. If the piece is not associated with an item record then this value will be NULL.
TextualHoldingsNote	Textual holdings note associated with the assigned location/collection.
RetentionStatement	Retention statement associated with the assigned location.
HoldingsStatement	Holdings statement associated with the assigned location.
HoldingsNote	Holdings note associated with the assigned location.
ItemsTotal	Total number of pieces associated with the assigned location.
ItemsIn	Number of pieces associated with the assigned location and available for check-out.
Holdable	Specifies whether a hold can be placed on the piece.

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Name	Description/Notes
VolumeNumber	Volume number assigned to the piece.
DueDate	Specifies when the item is due back to the library.
IsMaterialTypeChargeable	Indicates whether the patron is charged for placing a hold request on this type of item.
IsElecronicItem	Indicates whether this type of item is an electronic resource (e-book).

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/bib/5000/holdings
```

Return - Success

```
HTTP/1.1 200 OK
<BibHoldingsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibHoldingsGetRows>
          <BibHoldingsGetRow>
             <LocationID>3</LocationID>
             <LocationName>Amsterdam Free Library</LocationName>
             <CollectionID>25</CollectionID>
             <CollectionName>Children's Fiction</CollectionName>
             <Barcode>0004300063676</Barcode>
             <PublicNote/><CallNumber>j Fict Gra</CallNumber>
             <Designation/>
             <ShelfLocation/>
             <CircStatus>In</CircStatus>
             <LastCircDate>Sep 5 2006</LastCircDate>
             <MaterialType>Book</MaterialType>
             <TextualHoldingsNote/>
             <RetentionStatement/>
             <HoldingsStatement/>
             <HoldingsNote/>
             <ItemsTotal>1</ItemsTotal>
             <ItemsIn>1</ItemsIn>
             <Holdable>true</Holdable>
          </BibHoldingsGetRow>
          ...
          <BibHoldingsGetRow>
```

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```
            <LocationID>25</LocationID>
            <LocationName>Community Librar(Cobleskill)</LocationName>
            <CollectionID>25</CollectionID>
            <CollectionName>Children's Fiction</CollectionName>
            <Barcode>0001900057256</Barcode>
            <PublicNote/>
            <CallNumber>j Fict Gra</CallNumber>
            <Designation/>
            <ShelfLocation/>
            <CircStatus>Lost</CircStatus>
            <LastCircDate>Jan 17 2006</LastCircDate>
            <MaterialType>Book</MaterialType>
            <TextualHoldingsNote/>
            <RetentionStatement/>
            <HoldingsStatement/>
            <HoldingsNote/>
            <ItemsTotal>1</ItemsTotal>
            <ItemsIn>0</ItemsIn>
            <Holdable>true</Holdable>
         </BibHoldingsGetRow>
      </BibHoldingsGetRows>
   </BibHoldingsGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<BibHoldingsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid BibID</ErrorMessage>
<BibHoldingsGetRows i:nil="true"/></BibHoldingsGetResult>
```

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HoldRequestCancel

Cancel a single hold request or all hold requests for a specific patron.

The following hold statuses can be cancelled:

- 1 - inactive
- 2 - active
- 4 - pending

If enabled by the library, hold requests with a status of "5-shipped" can also be cancelled.

PUT /public/[1]/patron/{PatronBarcode}/holdrequests/{RequestID}/cancelled

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.
RequestID	Yes	ID of hold request.

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method
userid	>0	Yes	ID of user calling this method (not patron ID)

XML Elements Returned

The following XML elements are returned following the cancel request.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
SysHoldRequestID	ID of the cancelled hold request.
ReturnCode	Return code 0 - Success -1 - Failure
ErrorMessage	Error message if not cancelled.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/holdrequ
ests/803425/cancelled?wsid=1&userid=1
```

Return - Success

```
HTTP/1.1 200 OK
<HoldRequestCancelResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</HoldRequestCancelResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<HoldRequestCancelResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid workstation ID.
</ErrorMessage>
</HoldRequestCancelResult>
```

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HoldRequestCancelAllForPatron

Cancel all local hold requests for a specific patron whose hold requests have a status of :

- 1 - inactive
- 2 - active
- 4 - pending

If enabled by the library, hold requests with a status of "5-shipped" can also be cancelled.

> **Note:** Passing a **0** for the *RequestID* will force a “cancel all” operation.

PUT /public/[1]/patron/{PatronBarcode}/holdrequests/{RequestID}/cancelled

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.
RequestID	Yes	ID of hold request.

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method.
userid	>0	Yes	ID of user calling this method (not patron ID).

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
SysHoldRequestID	ID of cancelled hold request
ReturnCode	Return code 0 - Success -1 - Failure
ErrorMessage	Error message if not cancelled

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/holdrequ
ests/0/cancelled?wsid=1&userid=1
```

Return - Success

```
HTTP/1.1 200 OK
<HoldRequestCancelResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <HoldRequestCancelRows>
      <HoldRequestCancelRow>
         <SysHoldRequestID>803430</SysHoldRequestID>
         <ReturnCode>0</ReturnCode>
         <ErrorMessage/>
      </HoldRequestCancelRow>
      <HoldRequestCancelRow>
         <SysHoldRequestID>803431</SysHoldRequestID>
         <ReturnCode>0</ReturnCode>
         <ErrorMessage/>
      </HoldRequestCancelRow>
   </HoldRequestCancelRows>
</HoldRequestCancelResult>
```

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Return - Failed

```
HTTP/1.1 200 OK
<HoldRequestCancelResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-4300</PAPIErrorCode>
   <ErrorMessage/>
   <HoldRequestCancelRows/>
</HoldRequestCancelResult>
```

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HoldRequestCreate

Start the local hold request process. This process is based on a "messaging" system and will allow a Polaris patron to place a local hold request. After calling the HoldRequestCreate method, one or more calls to the HoldRequestReply method may be required. The message exchange is complete when a StatusType of Error (1) or Answer (2) is returned or if an error is raised by a database exception.

Placing Hold Requests Against Serial Publications

Although a call to BibGet will return a format of **Serial**, Polaris logic that is not exposed in the API determines whether the record is actually a "serial bib." However, if you default to "first available copy," the library member can get a copy quicker. Here are the possibilities:

- **Bib ID and item barcode** - Item-specific request
- **Bib ID, item barcode, and item's volume number** - First available copy of a specific volume or issue
- **Bib ID and item's designation** - First available copy of a specific "serial bib"
- **Bib ID and item's volume number** - First available copy of a specific multi-part set bib

`POST` /public/[1]/holdrequest

Authorization required?

Yes

XML Body Elements

Name	Required	Description/Notes
PatronID	Yes	ID of Patron placing hold request
BibID	Yes	ID of bibliographic record hold is being placed on
ItemBarcode		Barcode of item-specific hold request
VolumeNumber		Volume of hold request

---

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Required	Description/Notes
Designation		Serial designation of hold request
PickupOrgID	Yes	ID of branch where patron would like to pick up item 0 - Use the patron's registered library
IsBorrowByMail		If request is Borrow by Mail request. 0 - no; 1 - yes.
PatronNotes		Notes created by patron
ActivationDate		Date this hold request will become active
WorkstationID	Yes	ID of workstation where this hold request was created
UserID	Yes	ID of Polaris user that created this request
RequestingOrgID	Yes	ID of branch where this hold request was created
TargetGUID		GUID of search target. ONLY USED IF NOT LOCAL.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message.
RequestGUID	Internal hold request GUID
TxnGroupQualifer	Txn group qualifer of this hold message
TxnQualifier	Txn qualifer of this hold message
StatusType	Status type 1 - Error 2 - Answer 3 - Conditional
StatusValue	Status value 1 - Hold request placed 3 - Conditional: Item available locally 4 - Conditional: Accept ILL policy 5 - Conditional: Accept even with existing holds 6 - Conditional: No items attached, still place hold 7 - Conditional: Accept local hold policy

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Name	Description/Notes
	2 - Error: Select pickup location 3 - Error: Login
Message	Display text
QueuePosition	If successfully placed, position in hold queue
QueueTotal	If successfully placed, total holds in queue

Sample Conditional Questions

Status Value	ILL Only	Question
3	Yes	Item is available locally. Would you like to place a local hold request?
4	Yes	Do you accept the ILL policy? [Defined in Polaris SA]
5		There are [12] active requests for this title. Do you still want to place the request?
6		No items are linked to this record. Your request may not be filled. Do you still want to place this request?
7		The library charges for hold requests. Do you still want to place the request?

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/holdrequest
```

Body

```
<HoldRequestCreateData>
   <PatronID>299377</PatronID>
   <BibID>15592</BibID>
   <ItemBarcode/>
   <VolumeNumber/>
   <Designation/>
   <PickupOrgID>74</PickupOrgID>
   <PatronNotes/>
   <ActivationDate>2009-11-17T09:28:00.00</ActivationDate>
   <WorkstationID>1</WorkstationID>
   <UserID>1</UserID>
   <RequestingOrgID>74</RequestingOrgID>
```

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```
    <TargetGUID></TargetGUID>
</HoldRequestCreateData>
```

Return - Success

```
HTTP/1.1 200 OK
<HoldRequestResult
    xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
    <PAPIErrorCode>0</PAPIErrorCode>
    <ErrorMessage/>
    <RequestGUID>7F279D6E-CFDE-4AE3-BE96-EE12305CDF11</RequestGUID>
    <TxnGroupQualifer>BQeK9WLrNew_0BRKISzr2G</TxnGroupQualifer>
    <TxnQualifier>496QYG6MMKss1C6nagTGkG</TxnQualifier>
    <StatusType>3</StatusType>
    <StatusValue>5</StatusValue>
    <Message>There are [1] active requests for this title. Do you still want to place
    the request?</Message>
    <QueuePosition>0</QueuePosition>
    <QueueTotal>0</QueueTotal>
</HoldRequestResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<HoldRequestResult
    xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <PAPIErrorCode>-4006</PAPIErrorCode>
    <ErrorMessage/>
    <RequestGUID/>
    <TxnGroupQualifer/>
    <TxnQualifier/>
    <StatusType>0</StatusType>
    <StatusValue>0</StatusValue>
    <Message/>
    <QueuePosition>0</QueuePosition>
    <QueueTotal>0</QueueTotal>
</HoldRequestResult>
```

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HoldRequestGetList

This protected method will return a list of hold requests that match the criteria specified by the user. The data returned includes the detailed request, patron, item, and title information. This method optionally allows a user to set an expiration date and time for the items on the list, which prevents duplicates of items already returned on previous calls to this method.

> **Important:** A call to AuthenticateStaffUser is required before calling any protected method.

GET /protected/[1]/{AccessToken}/circulation/requests/list?branch={branch_id}&branch-type={branch_type_id}&requeststatus={status_id}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Required	Description/Notes
branch	Yes	The branch ID for the request list
branchtype	Yes	The type of branch specified. Valid values include: 1=patron's branch 2=pickup branch 3=item (fulfilling) branch
requeststatus	Yes	The desired status of requests returned
expirationdate	No	The date and time to expire the list
useexpirationdate	No	Indicates if an expiration date filer of the list is desired for the call

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
RecordCount	The total number of records found that met the search criteria
PickListCreateTime	The date and time the list was created
PickListExpirationTime	The expiration time of the list specified by the user
RequestsPicklistRows	A list of request data
SysHoldRequestID	The Polaris unique request ID
SysHoldStatusID	The request status ID
HoldStatus	The request status description
PickupBranchID	The pickup branch ID of the request
PickupBranch	A description of the pickup branch
ActivationDate	The date the request became active
ExpirationDate	The expiration date and time of the request
StatusDate	The date and time the request last changed
BibliographicRecordID	The bibliographic record ID to which the request is attached
ConstituentBibRecordID	The bibliographic record that is tied to this hold request has another bibliographic record associated with it. The most common use of this is different titles that are "bound together." This is the ID of the associated bibliographic record.
BrowseAuthor	The primary author of the work (if any)
BrowseTitle	The title of the work
PrimaryMARCTOMID	The Polaris primary MARC type of material ID
MarcTypeOfMaterial	The Polaris MARC type of material description
ItemLevelHold	Boolean value indicating if the request was placed for a specific item.

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Name	Description/Notes
BorrowByMail	Boolean value indicating if the request was borrow by mail.
PatronID	The unique ID of the patron who placed the request.
PatronBarcode	The patron's barcode.
PatronBranchID	The patron's branch ID.
PatronBranch	The patron's branch description.
PatronFullName	The full name of the patron who placed the request.
PatronCodeID	The patron's Patron Code ID.
PatronCode	The patron's Patron Code description.
Email address	The patron's email address (if any)
AltEmailAddress	The patron's alternate email address (if any)
PhoneVoice1	The patron's primary phone number (if any)
SMSAddress	The patron's SMS text message (if any)
ItemRecordID	The Polaris item record ID to which the request is bound (if any)
ItemBarcode	The barcode of the item to which the request is bound (if any)
ItemBranchID	The assigned branch ID for the item to which the request is bound (if any)
ItemBranch	The assigned branch description for the item to which the request is bound (if any)
CallNumber	The item's call number (if any)
CopyNumber	The item's copy number (if any)
VolumeNumber	The item's volume number (if any)
Pages	The number of pages for the request (if any)
AssignedCollectionID	The item's assigned collection ID (if any)
CollectionName	The item's assigned collection description (if any)
MaterialTypeID	The item's material type ID(if any)
MaterialType	The item's material type description (if any)
ShelfLocationID	The item's shelf location ID (if any)
ShelfLocation	The item's shelf location description (if any)
PublicationYear	The year the work was published
Publisher	The publisher of the work

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Name	Description/Notes
Designation	The item's serial designation (if any)
Edition	The edition of the work (if any)
StaffDisplayNotes	The request's staff note (if any)
NonPublicNotes	The request's non-public note (if any)
PACDisplayNotes	The request's public note (if any)
SortTitle	The NACO normalized title of the work (if any). Appropriate for sorting the list.
SortAuthor	The NACO normalized author of the work (if any). Appropriate for sorting the list.

Example

```
https://egraham-r2vm.gisinfosystems.com/Plato-R2PAPIService/REST/protected/v1/1033/
100/1/DEsGANrOPNYpnKyaYKJ6fQtg0fKsIonE/circulation/requests/list?branch=17&branchtype
=2&requeststatus=4
```

Return

```
HTTP/1.1 200 OK
<RequestsPicklistGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <RecordCount>1</RecordCount>
   <PickListCreateTime>2013-08-14T12:53:05.0172244-04:00</PickListCreateTime>
   <PickListExpirationTime>0001-01-01T00:00:00</PickListExpirationTime>
   <RequestsPicklistRows>
      <RequestsPicklistGetRow>
         <SysHoldRequestID>811071</SysHoldRequestID>
         <SysHoldStatusID>4</SysHoldStatusID>
         <HoldStatus>Pending</HoldStatus>
         <PickupBranchID>17</PickupBranchID>
         <PickupBranch>Cambridge Public Library</PickupBranch>
         <ActivationDate>2013-07-08T00:00:00</ActivationDate>
         <ExpirationDate>2013-10-06T23:59:59</ExpirationDate>
         <StatusDate>2013-07-08T17:18:07.22</StatusDate>
         <BibliographicRecordID>23792</BibliographicRecordID>
         <BrowseAuthor>Bix, Cynthia Overbeck.</BrowseAuthor>
         <BrowseTitle>Cats</BrowseTitle>
         <PrimaryMARCTOMID>1</PrimaryMARCTOMID>
```

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```
            <MarcTypeOfMaterial>Book</MarcTypeOfMaterial>
            <ItemLevelHold>false</ItemLevelHold>
            <BorrowByMail>false</BorrowByMail>
            <PatronID>52324</PatronID>
            <PatronBarcode>1000500534226</PatronBarcode>
            <PatronBranchID>29</PatronBranchID>
            <PatronBranch>Crandall Public Library (Glens Falls)</PatronBranch>
            <PatronFullName>Batson, Billy</PatronFullName>
            <PatronCodeID>1</PatronCodeID>
            <PatronCode>Regular</PatronCode>
            <EmailAddress/>
            <AltEmailAddress/>
            <PhoneVoice1>315-555-1234</PhoneVoice1>
            <SMSAddress>3156341234@example.net</SMSAddress>
            <ItemRecordID>102167</ItemRecordID>
            <ItemBarcode>0000201430097</ItemBarcode>
            <ItemBranchID>90</ItemBranchID>
            <ItemBranch>Saratoga Springs Public Library</ItemBranch>
            <CallNumber>J 636.8 Ove</CallNumber>
            <CopyNumber/>
            <VolumeNumber/>
            <Pages/>
            <AssignedCollectionID>32</AssignedCollectionID>
            <CollectionName>Children's Nonfiction</CollectionName>
            <MaterialTypeID>1</MaterialTypeID>
            <MaterialType>Book</MaterialType>
            <ShelfLocationID/>
            <ShelfLocation/>
            <PublicationYear>1983</PublicationYear>
            <Publisher>Lerner Publications Co.,</Publisher>
            <Designation/>
            <Edition/>
            <StaffDisplayNotes/>
            <NonPublicNotes/>
            <PACDisplayNotes/>
            <SortTitle>CATS</SortTitle>
            <SortAuthor>BIX CYNTHIA OVERBECK</SortAuthor>
        </RequestsPicklistGetRow>
    </RequestsPicklistRows>
</RequestsPicklistGetResult>
```

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HoldRequestReply

Send a reply message responding to the results of a previous HoldRequestCreate or HoldRequestReply procedure call. The HoldRequestCreate procedure must be called before executing this procedure. The RequestGUID, TxnGroupQualifier and TxnQualifier returned by the HoldRequestCreate procedure will be used as input parameters for this procedure call. These three values connect the messages together to create an ILL conversation. After calling the HoldRequestReply procedure, one or more calls to the HoldRequestReply procedure may be required. The message exchange is complete when a StatusType of Error (1) or Answer (2) is returned or if an error is raised via a database exception.

PUT /public/[1]/holdrequest/{RequestGuid}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
RequestGuid	Yes	GUID of original request message

Request Body XML

Important: XML elements must be in the order shown below.

```
<HoldRequestReplyData>
   <TxnGroupQualifier/>
   <TxnQualifier/>
   <RequestingOrgID/>
   <Answer/>
   <State/>
</HoldRequestReplyData>
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Body Elements

Name	Required	Description/Notes
TxnGroupQualifier	Yes	Txn group qualifier
TxnQualifier	Yes	Txn qualifier
RequestingOrgID	Yes	Org ID of branch processing this request
Answer	Yes	Answer 1 - Yes 0 - No or Cancel
State	Yes	Which conditional will this answer be applied to? 1 - Item available locally 2 - Accept ILL policy 3 - Accept even with existing holds 4 - No items attached, still place hold 5 - Accept local hold policy (charge)

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note**: On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
RequestGUID	When a patron is placing a hold request, they may be asked to confirm details before the request is placed. This field, with TxnGroupQualifier and TxnQualifer, is an internal identifier created by the system to maintain the transaction state while a multistep hold request is being processed.
TxnGroupQualifier	See RequestGUID, above.
TxnQualifier	See RequestGUID, above.
StatusType	Status type 1 - Error 2 - Answer 3 - Conditional
StatusValue	Status value 0 - Hold request not placed

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Name	Description/Notes
	1 - Hold request placed 2 - Error: Select pickup location 3 - Error: Login3 - Conditional: Item available locally 4 - Conditional: Accept ILL policy 5 - Conditional: Accept even with existing holds 6 - Conditional: No items attached, still place hold 7 - Conditional: Accept local hold policy
Message	Display text
QueuePosition	If successfully placed, position in hold queue
QueueTotal	If successfully placed, total holds in queue

Sample Conditional Questions

Status Value	ILL Only	Question
3	Yes	Item is available locally. Would you like to place a local hold request?
4	Yes	Do you accept the ILL policy? [Defined in Polaris SA]
5		There are [12] active requests for this title. Do you still want to place the request?
6		No items are linked to this record. Your request may not be filled. Do you still want to place this request?
7		The library charges for hold requests. Do you still want to place the request?

Example (issue reply to previous create)

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/holdrequest/B9313957-78AD-4633-87CE-40B7391F7862
```

Body

```
<HoldRequestReplyData>
   <TxnGroupQualifier>BQeK9WLrNew_0BRKISzr2G</TxnGroupQualifier>
   <TxnQualifier>496QYG6MMKss1C6nagTGkG</TxnQualifier>
   <RequestingOrgID>74</RequestingOrgID>
   <Answer>1</Answer>
   <State>3</State>
</HoldRequestReplyData>
```

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Return - Success

```
HTTP/1.1 200 OK
    <HoldRequestResult
    xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
    <PAPIErrorCode>0</PAPIErrorCode>
    <ErrorMessage/>
    <RequestGUID/>
    <TxnGroupQualifer/>
    <TxnQualifier/>
    <StatusType>2</StatusType>
    <StatusValue>1</StatusValue>
    <Message>Your request has been placed.</Message>
    <QueuePosition>2</QueuePosition>
    <QueueTotal>2</QueueTotal>
</HoldRequestResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<HoldRequestResult
    xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <PAPIErrorCode>-4006</PAPIErrorCode>
    <ErrorMessage/>
    <RequestGUID/>
    <TxnGroupQualifer/>
    <TxnQualifier/>
    <StatusType>0</StatusType>
    <StatusValue>0</StatusValue>
    <Message/>
    <QueuePosition>0</QueuePosition>
    <QueueTotal>0</QueueTotal>
</HoldRequestResult>
```

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HoldRequestSuspend

Suspend or reactivate a single hold request.

PUT /public/[1]/patron/{PatronBarcode}/holdrequests/{RequestID}/inactive
PUT /public/[1]/patron/{PatronBarcode}/holdrequests/{RequestID}/active

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.
RequestID	Yes	ID of hold request.

Request Body XML

Important: XML elements must be in the order shown below.

```
<HoldRequestActivationData>
   <UserID/>
   <ActivationDate/>
</HoldRequestActivationData>
```

XML Body Elements

Name	Required	Description/Notes
UserID	Yes	ID of user calling this procedure
ActivationDate	Yes	Date this hold request will become active

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
SystemHoldRequestID	ID of suspended/reactivated hold request
ReturnCode	Return code 0 - Success -1 - Failure
NewActivationDate	Date the system set the hold request to become active
NewExpirationDate	Date the system set the hold request to expire
ErrorMessage	Error message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/217560033
32022/holdrequests/803449/inactive
```

Body

```
<HoldRequestActivationData>
   <UserID>1</UserID>
   <ActivationDate>2009-12-31T00:00:00.00</ActivationDate>
</HoldRequestActivationData>
```

Return - Success

```
HTTP/1.1 200 OK
<HoldRequestActivationResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/><HoldRequestActivationRows>
   <HoldRequestActivationRow>
          <SysHoldRequestID>0</SysHoldRequestID>
          <ReturnCode>0</ReturnCode>
          <NewActivationDate>2009-12-31T00:00:00</NewActivationDate>
          <NewExpirationDate>2010-05-01T00:00:00</NewExpirationDate>
          <ErrorMessage/>
      </HoldRequestActivationRow>
   </HoldRequestActivationRows>
</HoldRequestActivationResult>
```

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Request - Failed

```
HTTP/1.1 200 OK
<HoldRequestActivationResult
    xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
    <PAPIErrorCode>-4405</PAPIErrorCode>
    <ErrorMessage/>
    <HoldRequestActivationRows>
        <HoldRequestActivationRow>
            <SysHoldRequestID>0</SysHoldRequestID>
            <ReturnCode>0</ReturnCode>
            <NewActivationDate>0001-01-01T00:00:00</NewActivationDate>
            <NewExpirationDate>0001-01-01T00:00:00</NewExpirationDate>
            <ErrorMessage/>
        </HoldRequestActivationRow>
    </HoldRequestActivationRows>
</HoldRequestActivationResult>
```

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HoldRequestSuspendAllForPatron

Suspend or reactivate all local hold requests for a specific patron whose hold requests have a status of inactive (1), active (2) or pending (4). Uses the same URI as HoldRequestSuspend. Simply passing in a **0** for the RequestID will force a "suspend all" operation.

PUT /public/[1]/patron/{PatronBarcode}/holdrequests/0/inactive
PUT /public/[1]/patron/{PatronBarcode}/holdrequests/0/active

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Request Body XML

Important: XML elements must be in the order shown below.

```
<HoldRequestActivationData>
   <UserID/>
   <ActivationDate/>
</HoldRequestActivationData>
```

XML Body Elements

Name	Required	Description/Notes
UserID	Yes	ID of user calling this procedure.
ActivationDate	Yes	Date this hold request will become active.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
SysHoldRequestID	ID of suspended/reactivated hold request.
ReturnCode	Return code: 0 - Success -1 - Failure -4403 - Invalid pickup branch assigned to hold request -4404 - Error occurred loading SA days to expire
NewActivationDate	Date the system set the hold request to become active.
NewExpirationDate	Date the system set the hold request to expire.
ErrorMessage	Error message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/holdrequests/0/inactive
```

Body

```
<HoldRequestActivationData>
   <UserID>1</UserID>
   <ActivationDate>2009-12-01T00:00:00.00</ActivationDate>
</HoldRequestActivationData>
```

Return - Success

```
HTTP/1.1 200 OK
<HoldRequestActivationResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
```

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```
    <HoldRequestActivationRows>
       <HoldRequestActivationRow>
          <SysHoldRequestID>803449</SysHoldRequestID>
          <ReturnCode>0</ReturnCode>
          <NewActivationDate>2009-12-31T00:00:00</NewActivationDate>
          <NewExpirationDate>2010-05-01T00:00:00</NewExpirationDate>
          <ErrorMessage/>
       </HoldRequestActivationRow>
       <HoldRequestActivationRow>
          <SysHoldRequestID>803531</SysHoldRequestID>
          <ReturnCode>0</ReturnCode>
          <NewActivationDate>2009-12-31T00:00:00</NewActivationDate>
          <NewExpirationDate>2010-05-01T00:00:00</NewExpirationDate>
          <ErrorMessage/>
       </HoldRequestActivationRow>
    </HoldRequestActivationRows>
</HoldRequestActivationResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<HoldRequestActivationResult
    xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <PAPIErrorCode>-1</PAPIErrorCode>
    <ErrorMessage>Failed to convert parameter value from a DateTime to
    Int32.</ErrorMessage>
    <HoldRequestSuspendRows/>
</HoldRequestActivationResult>
```

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ItemRenew

Attempt to renew an item that is already checked out.

PUT /public/[1]/patron/{PatronBarcode}/itemsout/{ID}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.
ID	Yes	The item record to be renewed.

Request Body XML

Important: XML elements must be in the order shown below.

```
<ItemsOutActionData>
   <Action>renew</Action>
   <LogonBranchID/>
   <LogonUserID/>
   <LogonWorkstationID/>
   <RenewData>
      <IgnoreOverrideErrors/>
   </RenewData>
</ItemsOutActionData>
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Body Elements

Name	Required	Description/Notes
Action	Yes	Action to perform on this item checkout record renew - renew item checkout
LogonBranchID	Yes	Current Branch (can default to System [1])
LogonUserID	Yes	Current User (can default to PolarisExec)
LogonWorkstationID	Yes	Current Workstation (can default to OPACDefault)
IgnoreOverrideErrors	Yes	Ignore any errors that can be ignored and if possible, continue processing

XML Elements Returned

If renewals are successful, a “DueDateRows” node will be present. If the patron has any blocks, a “BlockRows” node will be present.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
PAPIErrorType	A PAPI code to tell which 'process' caused the error 1 - Patron block 2 - Item renewal block
PolarisErrorCode	The current error code return via Polaris base processing
ErrorAllowOverride	Does the specific error allow user to override?
ErrorDesc	Block description text.
ItemRecordID	Item Record ID
DueDate	The new due date after item renewal successful

Example

```
http://-
localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/itemsout/372798
```

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Body

```
<ItemsOutActionData>
   <Action>renew</Action>
   <LogonBranchID>74</LogonBranchID>
   <LogonUserID>1</LogonUserID>
   <LogonWorkstationID>1</LogonWorkstationID>
   <RenewData>
      <IgnoreOverrideErrors>true</IgnoreOverrideErrors>
   </RenewData>
</ItemsOutActionData>
```

Return - Success

```
HTTP/1.1 200 OK

<ItemsOutActionResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
<PAPIErrorCode>0</PAPIErrorCode>
<ErrorMessage/>
<ItemRenewResult>
   <BlockRows>
      <ItemRenewBlockRow>
         <PAPIErrorType>2</PAPIErrorType>
         <PolarisErrorCode>9999</PolarisErrorCode>
         <ErrorAllowOverride>true</ErrorAllowOverride>
         <ErrorDesc>This item is overdue. Your account will be charged
         $4.10</ErrorDesc>
         <ItemRecordID>527727</ItemRecordID>
      </ItemRenew>
      <BlockRow>
      </BlockRows>
      <DueDateRows>
         <ItemRenewDueDateRow>
            <ItemRecordID>527727</ItemRecordID>
            <DueDate>2009-12-17T23:59:59</DueDate>
         </ItemRenewDueDateRow>
      </DueDateRows>
   </ItemRenewResult>
</ItemsOutActionResult>
```

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Return - Failed

```
HTTP/1.1 200 OK
<ItemsOutActionResult
    xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <PAPIErrorCode>-2</PAPIErrorCode>
    <ErrorMessage/>
    <ItemRenewResult>
        <BlockRows>
            <ItemRenewBlockRow>
                <PAPIErrorType>2</PAPIErrorType>
                <PolarisErrorCode>16384</PolarisErrorCode>
                <ErrorAllowOverride>false</ErrorAllowOverride>
                <ErrorDesc>Item has exceeded renewal limit, not allowed to
                renew</ErrorDesc>
                <ItemRecordID>372798</ItemRecordID>
            </ItemRenewBlockRow>
            <ItemRenewBlockRow>
                <PAPIErrorType>2</PAPIErrorType>
                <PolarisErrorCode>9999</PolarisErrorCode>
                <ErrorAllowOverride>true</ErrorAllowOverride>
                <ErrorDesc>This item is overdue. Your account will be charged
                $4.20</ErrorDesc>
                <ItemRecordID>372798</ItemRecordID>
            </ItemRenewBlockRow>
        </BlockRows>
        <DueDateRows/>
    </ItemRenewResult>
</ItemsOutActionResult>
```

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ItemRenewAllForPatron

Attempt to renew all items currently out to a patron. Uses the same URI as ItemRenew. Simply passing in a **0** for the ItemID will force a “renew all” operation.

PUT /public/[1]/patron/{PatronBarcode}/itemsout/0

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Request Body XML

Important: XML elements must be in the order shown below.

```
<ItemsOutActionData>
   <Action>renew</Action>
   <LogonBranchID/>
   <LogonUserID/>
   <LogonWorkstationID/>
   <RenewData>
      <IgnoreOverrideErrors/>
   </RenewData>
</ItemsOutActionData>
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Body Elements

Name	Required	Description/Notes
Action	Yes	`Action to perform on this item checkout record` renew - renew item checkout
LogonBranchID	Yes	Current Branch (can default to System [1])
LogonUserID	Yes	Current User (can default to PolarisExec)
LogonWorkstationID	Yes	Current Workstation (can default to OPACDefault)
IgnoreOverrideErrors	Yes	Ignore any errors that can be ignored and if possible, continue processing

XML Elements Returned

If renewals are successful, a “DueDateRows” node will be present. If the patron has any blocks, a “BlockRows” node will be present.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
PAPIErrorType	A PAPI code to tell which 'process' caused the error 1 - Patron block 2 - Item renewal block
PolarisErrorCode	The current error code return via Polaris base processing
ErrorAllowOverride	Does the specific error allow user to override?
ErrorDesc	Block description text.
ItemRecordID	Item Record ID
DueDate	The new due date after item renewal successful.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
itemsout/0
```

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Body

```
<ItemsOutActionData>
   <Action>renew</Action>
   <LogonBranchID>74</LogonBranchID>
   <LogonUserID>1</LogonUserID>
   <LogonWorkstationID>1</LogonWorkstationID>
   <RenewData>
      <IgnoreOverrideErrors>true</IgnoreOverrideErrors>
   </RenewData>
</ItemsOutActionData>
```

Return - Success

```
HTTP/1.1 200 OK
<ItemsOutActionResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-3</PAPIErrorCode>
   <ErrorMessage/>
   <ItemRenewResult>
      <BlockRows>
         <ItemRenewBlockRow>
            <PAPIErrorType>2</PAPIErrorType>
            <PolarisErrorCode>16384</PolarisErrorCode>
            <ErrorAllowOverride>false</ErrorAllowOverride>
            <ErrorDesc>Item has exceeded renewal limit, not allowed to
            renew</ErrorDesc>
            <ItemRecordID>527727</ItemRecordID>
         </ItemRenewBlockRow>
         <ItemRenewBlockRow>
            <PAPIErrorType>2</PAPIErrorType>
            <PolarisErrorCode>8192</PolarisErrorCode>
            <ErrorAllowOverride>false</ErrorAllowOverride>
            <ErrorDesc>Item is long overdue, not allowed to renew</ErrorDesc>
            <ItemRecordID>1223636</ItemRecordID>
         </ItemRenewBlockRow>
         <ItemRenewBlockRow>
            <PAPIErrorType>2</PAPIErrorType>
            <PolarisErrorCode>4096</PolarisErrorCode>
            <ErrorAllowOverride>false</ErrorAllowOverride>
            <ErrorDesc>Item is overdue, not allowed to renew</ErrorDesc>
            <ItemRecordID>2904429</ItemRecordID>
         </ItemRenewBlockRow>
      </BlockRows>
```

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```
      <DueDateRows>
         <ItemRenewDueDateRow>
            <ItemRecordID>34508</ItemRecordID>
            <DueDate>2009-12-17T23:59:59</DueDate>
         </ItemRenewDueDateRow>
         <ItemRenewDueDateRow>
            <ItemRecordID>372798</ItemRecordID>
            <DueDate>2009-12-17T23:59:59</DueDate>
         </ItemRenewDueDateRow>
      </DueDateRows>
   </ItemRenewResult>
</ItemsOutActionResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<ItemsOutActionResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-2</PAPIErrorCode>
   <ErrorMessage/>
   <ItemRenewResult>
      <BlockRows>
         <ItemRenewBlockRow>
            <PAPIErrorType>2</PAPIErrorType>
            <PolarisErrorCode>16384</PolarisErrorCode>
            <ErrorAllowOverride>false</ErrorAllowOverride>
            <ErrorDesc>Item has exceeded renewal limit, not allowed to
            renew</ErrorDesc>
            <ItemRecordID>372798</ItemRecordID>
         </ItemRenewBlockRow>
         <ItemRenewBlockRow>
            <PAPIErrorType>2</PAPIErrorType>
            <PolarisErrorCode>9999</PolarisErrorCode>
            <ErrorAllowOverride>true</ErrorAllowOverride>
            <ErrorDesc>This item is overdue. Your account will be charged
            $4.20</ErrorDesc>
            <ItemRecordID>372798</ItemRecordID>
         </ItemRenewBlockRow>
      </BlockRows>
      <DueDateRows/>
   </ItemRenewResult>
</ItemsOutActionResult>
```

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ItemUpdateBarcode

This protected method allows a user to update the barcode for an existing item record or barcode when a barcode is changed or replaced. It writes a 3009 transaction (item record updated), creates an item record history action, and updates the item's barcode.

> **Important:** A call to AuthenticateStaffUser is required before calling any protected method.

PUT /protected/[1]/{AccessToken}/cataloging/items/{ItemRecordID}/barcode

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
BarcodeOrID	Yes	The item record ID or barcode for the item that will have its barcode updated.

Query String Parameters

Name	Required	Description/Notes
wsid	Yes	ID of the workstation sending this method
isBarcode	No	A nonzero numeric value that indicates whether a barcode is used. If left blank or set to zero, the BarcodeOrID will be treated as an ItemRecordID.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Request Body XML

Important: XML elements must be in the order shown below.

```
<ModyItemData>
   <TransactionBranchID />
   <ItemBarcode/>
</ModyItemData>
```

XML Body Elements

Name	Required	Description/Notes
TransactionBranchID	Yes	The branch that is updating the item record.
ItemBarcode	Yes	The new barcode of the item.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
https://egraham-r2vm.gisinfosystems.com/Plato-
R2PAPIService/REST/protected/v1/1033/100/1/
GgZtGNGWUrsNlNKmMv7hI61jXQIpRJNS/cataloging/items/2384901/barcode
```

Body

```
<ModyItemData>
   <TransactionBranchID>74</TransactionBranchID>
   <ItemBarcode>ECG2384901</ItemBarcode>
</ModyItemData>
```

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Return

```
HTTP/1.1 200 OK
<PAPIResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PAPIResult>
```

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LimitFiltersGet

Returns list of valid bib search limit filters based on the organization's Polaris System Administration values.

GET /public/[1]/limitfilters

Authorization required?

Yes, if authentication level set to ALL

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note**: On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
Description	Limit filter description to display to user
CCLFilter	CCL filter command
DisplayOrder	Order in which to display this limit filter

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/74/limitfilters
```

Return - Success

```
HTTP/1.1 200 OK
<LimitFiltersGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>3</PAPIErrorCode>
```

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```
   <ErrorMessage/>
   <LimitFiltersRows>
      <LimitFiltersRow>
         <Description>All Items - This library only</Description>
         <CCLFilter>AB=74</CCLFilter>
         <DisplayOrder>1</DisplayOrder>
      </LimitFiltersRow>
      <LimitFiltersRow>
         <Description>All Items - All Libraries</Description>
         <CCLFilter>TOM=*</CCLFilter>
         <DisplayOrder>2</DisplayOrder>
      </LimitFiltersRow>
      <LimitFiltersRow>
         <Description>Audiobook - This library only</Description>
         <CCLFilter>TOM=nsr and AB=74</CCLFilter>
         <DisplayOrder>6</DisplayOrder>
      </LimitFiltersRow>
   </LimitFiltersRows>
</LimitFiltersGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<LimitFiltersGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid type specified</ErrorMessage>
   <LimitFiltersRows i:nil="true"/>
</LimitFiltersGetResult>
```

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NotificationUpdate

The NotificationUpdate method will update the Notification Log and remove or update the Notification Queue entry. It is also responsible for updating related ItemCheckout data elements and rolling phone notification into print notification. This method should be called after a patron is contacted.

This method supports telephone notification processing as well as email and text messaging for specific types of notices, and may be used in conjunction with the phone notification export process. Telephone notification rolls to print for 5 failure statuses: 7- No dial tone; 8 - Intercept tones heard; 9 - Probable bad phone number; 10 - Maximum number of retries exceeded; 11 - Undetermined error.

A call to AuthenticateStaffUser is required before calling any protected methods. See "AuthenticateStaffUser" on page 34.. For more information about protected methods, see "PAPI Protected Methods" on page 22.

PUT /protected/[1]/{AccessToken}/notification/{NotificationTypeID}

Authorization Required?

Yes

Protected method?

Yes

Notification Type ID

ID	Notification Type
0	Combined
1	1st Overdue
2	Hold
3	Cancel
4	Recall
5	All
6	Route

[1]{Version}/{LangID}/{AppID}/{OrgID}

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ID	Notification Type
7	Almost overdue reminder
8	Fine
9	Inactive Reminder
10	Expiration Reminder
11	Bill
12	2nd Overdue
13	3rd Overdue
14	Serial Claim
15	Polaris Fusion Access Request
16	Course Reserves
17	Borrow-By-Mail Failure Notice
18	2nd Hold
19	Missing Part
20	Manual Bill

Request Body XML

```
<NotificationUpdateData>
   <LogonBranchID/>
   <LogonUserID/>
   <LogonWorkstationID/>
   <ReportingOrgID/>
   <NotificationStatusID/>
   <NotificationDeliveryDate/>
   <DeliveryOptionID/>
   <DeliveryString/>
   <Details/>
   <PatronID/>
   <PatronLanguageID/>
   <ItemRecordID/>
</NotificationUpdateData>
```

XML Body Elements

Name	Required	Description/Notes
LogonBranchID	Yes	Logon branch ID
LogonUserID	Yes	Logon staff user ID

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Name	Required	Description/Notes
LogonWorkstationID	Yes	Logon workstation ID
ReportingOrgID	See notes	Required for email notification. Not required for telephony notification. System ID is automatically used for telephony due to its centralized processing.
NotificationStatusID	Yes	Notification Status ID 1 - Call completed – Voice 2 - Call completed - Answering machine 3 - Call not completed - Hang up 4 - Call not completed - Busy 5 - Call not completed - No answer 6 - Call not completed - No ring 7 - Call failed - No dial tone (rolls to print) 8 - Call failed - Intercept tones heard (rolls to print) 9 - Call failed - Probable bad phone number (rolls to print) 10 - Call failed - Maximum number of retries exceeded (rolls to print) 11 - Call failed - Undetermined error (rolls to print) 12 - Email Completed 13 - Email Failed - Invalid address (rolls to print) 14 - Email Failed (rolls to print) 15 - Mail Printed
NotificationDeliveryDate	Yes	Notification Delivery Date
DeliveryOptionID	Yes	Delivery Option ID 1 - Mailing Address 2 - Email Address 3 - Telephone 1 4 - Telephone 2 5 - Telephone 3 6 - FAX 7 - EDI 8 - TXT Messaging * Only 2, 3, 4, 5, and 8 currently supported.
DeliveryString	Yes	Phone number or email
Details	No	Status message from notification device. Manual bills require ItemBarcode in the Details tag. Cancellation notices require RequestID in the Details tag

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Name	Required	Description/Notes
PatronID	Yes	ID of patron being notified
PatronLanguageID	See notes	Language ID used to contact patron. If not supplied, the default will be the patron's preferred language. 1033 – English 1042 – Korean 1049 – Russian 1066 – Vietnamese 1141 – Hawaiian 2052 – Chinese 3082 – Spanish 3084 – French 12289 – Arabic
ItemRecordID	See notes	ID of item record attached to notification. Required for overdue, hold and cancel phone notifications. ItemRecordID or ItemBarcode required for hold notices, almost overdue reminders, missing part notices, and bills.
PatronBarcode		Barcode of the patron being notified.
ItemBarcode		Barcode of the item patron is being notified about.

Return Codes

ID	Notification Type
0	Success
-1	Failure general
-5	Failure database
-6	Failure invalid parameter
-2000	Item ID is invalid
-3000	Patron ID is invalid

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error Code
ErrorMessage	Error or information message

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Example

```
http://[hostname]/PAPIService/REST/protected/v1/1033/100/1/HfOzmNFbhglFMOQvFpZ
pjzCdM2Bq1Qcs/notification/1
```

Body

```
<NotificationUpdateData>
   <LogonBranchID>1</LogonBranchID>
   <LogonUserID>1</LogonUserID>
   <LogonWorkstationID>1</LogonWorkstationID>
   <NotificationStatusID>1</NotificationStatusID>
   <NotificationDeliveryDate>2011-08-04</NotificationDeliveryDate>
   <DeliveryOptionID>3</DeliveryOptionID>
   <DeliveryString>3155551212</DeliveryString>
   <Details>Call completed - Voice</Details>
   <PatronID>299377</PatronID>
   <ItemRecordID>2035574</ItemRecordID>
</NotificationUpdateData>
```

Return

```
HTTP/1.1 200 OK
<NotificationUpdateResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>NotificationQueue entry does not exist for this delivery
   option.</ErrorMessage>
</NotificationUpdateResult>
```

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OrganizationsGet

Returns list of system, library and branch level organizations. The list can be filtered by system, library, or branch.

GET	/public/[1]/organizations/all
GET	/public/[1]/organizations/system
GET	/public/[1]/organizations/library
GET	/public/[1]/patron/organizations/branch

Authorization required?

Yes, if authentication level set to ALL

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
OrganizationID	ID of organization
OrganizationCodeID	Organization code ID 1 - System 2- Library 3 -Branch
Name	Internal name
Abbreviation	Abbreviation
DisplayName	Name used to display to end user
ParentOrganizationID	The parent organization ID

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/organizations/branch
```

Return - Success

```
HTTP/1.1 200 OK
<OrganizationsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>2</PAPIErrorCode>
   <ErrorMessage />
   <OrganizationsGetRows>
      <OrganizationsGetRow>
         <OrganizationID>3</OrganizationID>
         <OrganizationCodeID>3</OrganizationCodeID>
         <Name>Branch A</Name>
         <Abbreviation>A</Abbreviation>
         <DisplayName>Library A</DisplayName>
         <ParentOrganizationID>2</ParentOrganizationID>
      </OrganizationsGetRow>
      <OrganizationsGetRow>
         <OrganizationID>4</OrganizationID>
         <OrganizationCodeID>3</OrganizationCodeID>
         <Name>Branch B</Name>
         <Abbreviation>B</Abbreviation>
         <DisplayName>Branch B</DisplayName>
         <ParentOrganizationID>2</ParentOrganizationID>
      </OrganizationsGetRow>
   </OrganizationsGetRows>
</OrganizationsGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<OrganizationsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid type specified</ErrorMessage><OrganizationGetRows
   i:nil="true"/>
</OrganizationsGetResult>
```

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PatronAccountGet

Returns list of fines and fees associated with a specified patron. The list can be filtered by outstanding (current) or reconciled (historical) fines and fees.

GET	/public/[1]/patron/{PatronBarcode}/account/outstanding
GET	/public/[1]/patron/{PatronBarcode}/account/reconciled

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

XML Elements Returned

One or more fines and fees associated with the patron. The list is sorted in ascending order by transaction date.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
TransactionID	Polaris ID of the transaction
TransactionDate	Date and time the transaction was logged
BranchID	Polaris ID of the branch associated with the fine
BranchName	Name of the branch associated with the fine

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
TransactionTypeID	Polaris ID of the type of transaction 1 - Charge 2 - Payment for a Charge 3 - Return from Deposit 4 - Deposit 5 - Waive 6 - Waive Existing Charge 7 - Forfeit from Deposit 8 - Credit from Deposit/Pay 9 - Refund from Payment 10 - Auto-waive
TransactionTypeDescription	Description of the type of transaction
FeeDescription	Detailed description of the fee
TransactionAmount	Amount of transaction in dollar and cents
OutstandingAmount	Outstanding amount
FreeTextNote	Free text note associated with the transaction
ItemID	Polaris ID of the associated item record
Barcode	The item barcode
BibID	The ID of the associated bibliographic record
FormatID	Polaris ID of the type of format (see "Material Format Types" on page 28.)
FormatDescription	Format description
Title	Title of the item
Author	Author of the item
CallNumber	Call Number of the item
CheckOutDate	Date the item associated with the fine was checked out
DueDate	The original due date of the item associated with the fine

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022
/account/outstanding
```

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Return - Success

```
HTTP/1.1 200 OK
<PatronAccountGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <PatronAccountGetRows>
      <PatronAccountGetRow>
         <TransactionID>3605602</TransactionID>
         <TransactionDate>2009-09-09T17:18:31</TransactionDate>
         <BranchID>3</BranchID>
         <BranchName>Amsterdam Free Library</BranchName>
         <TransactionTypeID>1</TransactionTypeID>
         <TransactionTypeDescription>Charge</TransactionTypeDescription>
         <FeeDescription/>
         <TransactionAmount>2.0000</TransactionAmount>
         <OutstandingAmount>2.0000</OutstandingAmount>
         <FreeTextNote/>
         <ItemID>0</ItemID>
         <Barcode/>
         <BibID>0</BibID>
         <FormatID>0</FormatID>
         <FormatDescription/>
         <Title/>
         <Author/>
         <CallNumber/>
         <CheckOutDate>0001-01-01T00:00:00</CheckOutDate>
         <DueDate>0001-01-01T00:00:00</DueDate>
      </PatronAccountGetRow>
      ...
   </PatronAccountGetRows>
</PatronAccountGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid type specified</ErrorMessage>
   <PatronAccountGetRows i:nil="true"/>
</PatronAccountGetResult>
```

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PatronAccountPay

Makes a payment on an existing charge on the Polaris patron account

PUT /protected/[1]/{AccessToken}/patron/{PatronBarcode}/account/{ChargeTransactionID}/pay

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron
ChargeTransactionID	Yes	Polaris charge transaction ID

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method
userid	>0	Yes	ID of user calling this method (not patron ID)

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Required	Description/Notes
TxnAmount	Yes	Valid dollar amount and not greater than balance owed
PaymentMethodID	Yes	Valid values are:

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Required	Description/Notes
		11 - Cash 12 - Credit card 13 - Debit card 14 - Check 15 - Voucher 17 - Smart card
FreeTextNote		Note to attach to payment

XML elements returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
https://[hostname]/PAPIService/REST/protected/v1/1033/100/1/kSUEQM6CuhkFaloIaHPY
dpHJ0U7Neczl/patron/21756003332022/account/680938/pay
```

Body

```
<PatronAccountPayData>
   <TxnAmount >1.25</TxnAmount>
   <PaymentMethodID >11</PaymentMethodID>
   <FreeTextNote>Paid through Polaris API</FreeTextNote>
</PatronAccountPayData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountPayResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronAccountPayResult>
```

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Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountPayResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid workstation ID.</ErrorMessage>
</PatronAccountPayResult>
```

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PatronAccountPayAll

This method takes a payment amount, a note, and a payment method, and applies the payments to all patron charges, paying off the oldest charges first. It allows a partial pay all, but not an overpayment. If the amount is greater than the amount the patron currently owes in charges, a -3610 error is returned.

PUT /protected/[1]/{AccessToken}/patron/{PatronBarcode}/account/lumpsumpayment

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method
userid	>0	Yes	ID of user calling this method (not patron ID)

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Required	Description/Notes
TxnAmount	Yes	Valid dollar amount and not greater than balance owed

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Required	Description/Notes
PaymentMethodID	Yes	Valid values are: 11 - Cash 12 - Credit card 13 - Debit card 14 - Check 15 - Voucher 17 - Smart card
FreeTextNote	Yes	Note to attach to payment

XML elements returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
https://[hostname]/PAPIService/REST/protected/v1/1033/100/1/kSUEQM6CuhkFaloIaHPYdp
HJ0U7Neczl/patron/21756003332022/account/lumpsumpayment
```

Body

```
<PatronAccountPayData>
   <TxnAmount >1.25</TxnAmount>
   <PaymentMethodID >11</PaymentMethodID>
   <FreeTextNote>Paid through Polaris API</FreeTextNote>
</PatronAccountPayData>
```

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Return - Success

```
HTTP/1.1 200 OK
<PatronAccountPayResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronAccountPayResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountPayResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid workstation ID.</ErrorMessage>
</PatronAccountPayResult>
```

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PatronAccountVoid

This delete method voids a patron payment on the Polaris patron account. It restores the paid balance to the associated charge and the associated credit (if it was paid originally with a patron's existing credit). The change has no impact on credit card processing; it simply voids the payment from the PatronAccount table, and a 6042 transaction is logged.

DELETE /protected/[1]/{AccessToken}/patron/{PatronBarcode}/account/{VoidPaymentTransactionID}/void/payment

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron
VoidPaymentTransactonID	Yes	Polaris void payment transaction ID

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method
userid	>0	Yes	ID of user calling this method (not patron ID)

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML elements returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
https://[hostname]/PAPIService/REST/protected/v1/1033/100/1/ kSUEQM6CuhkF
aloIaHPYdpHJ0U7Neczl/patron/21756003332022/account/680938/void/payment
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountVoidPaymentResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronAccountVoidPaymentResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountVoidPaymentResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid workstation ID.</ErrorMessage>
</PatronAccountVoidPaymentResult>
```

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PatronAccountCreateCredit

This method creates a credit on the Polaris patron account.

PUT /protected/[1]/{AccessToken}/patron/{PatronBarcode}/account/createcredit

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Patron barcode

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method
userid	>0	Yes	ID of user calling this method (not patron ID)

XML Body Elements

Important:XML elements must be in the order shown below.

Name	Required	Description/Notes
TxnAmount	Yes	Valid dollar amount and not greater than balance owed
PaymentMethodID	Yes	Valid values are: 11 - Cash 12 - Credit card

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Name	Required	Description/Notes
		13 - Debit card 14 - Check 15 - Voucher 17 - Smart card
FreeTextNote	Yes	Note to attach to payment

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/account/c
reatecredit
```

Body

```
<PatronAccountCreateCreditData>
   <TxnAmount >1.25</TxnAmount>
   <PaymentMethodID >11</PaymentMethodID>
   <FreeTextNote>Credited through Polaris API</FreeTextNote>
</PatronAccountCreateCreditData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountCreateCreditResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronAccountCreateCreditResult>
```

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Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountCreateCreditResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid workstation ID.</ErrorMessage>
</PatronAccountCreateCreditResult>
```

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PatronAccountDepositCredit

This method deposits credits on the Polaris patron account, with the oldest credits processed first.

PUT /protected/{[1]/{AccessToken}/patron/{PatronBarcode}/account/lumpsumdepositcredit

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Patron barcode

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method
userid	>0	Yes	ID of user calling this method (not patron ID)

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Required	Description/Notes
TxnAmount	Yes	Valid dollar amount and not greater than balance owed
FreeTextNote		Note to attach to payment

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XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/account/
lumpsumDepositcredit
```

Body

```
<PatronAccountDepositCreditData>
       <TxnAmount >1.25</TxnAmount>
       <FreeTextNote>Credited through Polaris API</FreeTextNote>
</PatronAccountDepositCreditData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountDepositCreditResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronAccountDepositCreditResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountDepositCreditResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid workstation ID.</ErrorMessage>
</PatronAccountDepositCreditResult>
```

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PatronAccountRefundCredit

This method refunds credits on the Polaris patron account, with the oldest credits processed first.

PUT /protected/[1]/{AccessToken}/patron/{PatronBarcode}/account/lumpsumrefundcredit

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Patron barcode

Query String Parameters

Name	Values	Required	Description/Notes
wsid	>0	Yes	ID of workstation calling this method.
userid	>0	Yes	ID of user calling this method (not patron ID).

XML Body Elements

Name	Required	Description/Notes
TxnAmount	Yes	Valid dollar amount
FreeTextNote	No	Note to attach to payment

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/account/
lumpsumrefundcredit
```

Body

```
<PatronAccountRefundCreditData>
   <TxnAmount >1.25</TxnAmount>
   <FreeTextNote>Credited through Polaris API</FreeTextNote>
</PatronAccountRefundCreditData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountRefundCreditResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
<ErrorMessage/></PatronAccountRefundCreditResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountRefundCreditResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance"><
   PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid workstation ID.</ErrorMessage>
</PatronAccountRefundCreditResult>
```

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PatronAccountCreateTitleList

Creates a named title list in the patron account.

> **Note:** The following characters are not valid in a list name and should not be passed into PAPI: plus, backslash, quotation marks (single or double), and pipe.

POST /public/[1]/patron/{PatronBarcode}/patronaccountcreatetitlelist

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

Request Body XML

```
<PatronAccountCreateTitleListData>
   <RecordStoreName></RecordStoreName>
</PatronAccountCreateTitleListData>
```

XML Body Elements

Name	Required	Description/Notes
RecordStoreName	Yes	Name of record store

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XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
patronaccountcreatetitlelis
```

Body

```
<PatronAccountCreateTitleListData>
   <RecordStoreName>Favorites</RecordStoreName>
</PatronAccountCreateTitleListData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountCreateTitleListResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronAccountCreateTitleListResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountCreateTitleListResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Please enter a name for the title list</ErrorMessage>
</PatronAccountCreateTitleListResult>
```

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PatronAccountGetTitleLists

Returns a list of all title lists in a patron's account.

GET /public/[1]/patron/{PatronBarcode}/patronaccountgettitlelists

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
RecordStoreName	Name of record store
Sorted	Numeric code (0 or 1) indicating how a list is sorted. 0 - The titles in a list are not sorted, they're returned in the order they were added to the list. 1 - The list is sorted in some other way, either by author, title, or publication date.
Count	Numeric designation indicating the sort type.

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Name	Description/Notes
	0 - The titles in list are not sorted. They're returned in the order they were added to the list. 1 - The list is sorted in some other way, either by author, title, or publication date.
RecordStoreID	The number of titles in the given saved title list.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patronac
countgettitlelists
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountGetTitleListsResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <PatronAccountTitleListsRows>
      <PatronAccountTitleListsRow>
         <RecordStoreName>Books to read</RecordStoreName>
         <Sorted>false</Sorted>
         <Count>5</Count>
         <RecordStoreID>779</RecordStoreID>
      </PatronAccountTitleListsRow>
      <PatronAccountTitleListsRow>
         <RecordStoreName>Favorites</RecordStoreName>
         <Sorted>false</Sorted>
         <Count>3</Count>
         <RecordStoreID>780</RecordStoreID>
      </PatronAccountTitleListsRow>
   </PatronAccountTitleListsRows>
</PatronAccountGetTitleListsResult>
```

Return - Failed

```
HTTP/1.1 401 Unauthorized
WWW-Authenticate: PWS realm="Polaris API"
```

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PatronAccountDeleteTitleList

Deletes the specified existing named title list on the patron account.

DELETE /public/[1]/patron/{PatronBarcode}/patronaccountdeletetitlelist?list={list_id}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron
list	Yes	Unique identifier for the list

Query String Parameters

Name	Required	Description/Notes
list	Yes	

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

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Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patronac
countdeletetitlelist?list=700
```

Return - Success

```
HTTP/1.1 200 OK
<PatronAccountDeleteTitleListResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronAccountDeleteTitleListResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronAccountDeleteTitleListResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Record store '999' not found.</ErrorMessage>
</PatronAccountDeleteTitleListResult>
```

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PickupBranchesGet

Returns a list of valid pickup branches based on the organization ID. The passed-in organization ID is typically the registered branch of the patron placing a hold request or changing the pickup location of an existing request. The endpoint returns a list of branch-level organization IDs.

GET /public/[1]/pickupbranches

Authorization required?

Yes

Parameters

Name	Description/Notes
orgID	The organization identifier. This value must be system-level(1) or a branch-level organization identifier.

XML elements returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ID	Pickup branch organization ID.

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Return - Success

```
HTTP/1.1 200 OK
<PickupBranchesGetResult>
   <PAPIErrorCode>5</PAPIErrorCode>
   <ErrorMessage>string</ErrorMessage>
   <PickupBranchesRows>
      <ID>1</ID>
      <ID>3</ID>
      <ID>4</ID>
      <ID>7</ID>
      <ID>8</ID>
   </PickupBranchesRows>
</PickupBranchesGetResult>
```

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PatronCodesGetResult

This method returns a list of valid patron codes. If the specified organization ID does not exist, an error is returned (Invalid OrgID supplied, -5000).

GET /public/[1]/patroncodes

Authorization required?

No

URI Parameters

Name	Required	Description/Notes
org_id	Yes	Organization ID

XML Elements Returned

Valid patron codes for the specified organization.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
PatronCodeID	Patron code ID
Description	Patron code description

Example

```
https://qa-saturn.polarislibrary.com/PAPIService/REST/public//public/v1/1033/
100/3/patroncodes
```

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Return - Success

```
HTTP/1.1 200 OK
<PatronCodesGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage></ErrorMessage>
   <PatronCodesRows>
      <PatronCodesRow>
         <PatronCodeID>1</PatronCodeID>
         <Description>Regular</Description>
      </PatronCodesRow>
      ...
      <PatronCodesRow>
         <PatronCodeID>4</PatronCodeID>
         <Description>Staff / Board</Description>
      </PatronCodesRow>
   </PatronCodesRows>
</PatronCodesGetResult>
```

Error Message

If the organization ID does not exist in the database, error code -5000 ("Invalid OrganizationID supplied") is returned.

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ShelfLocationsGet

Returns a list of shelf locations based on the organization ID. Branches utilize a subset of shelf locations. To retrieve a list of all shelf locations in the system, pass in an organization ID of 1. To retrieve a list of shelf locations for a specific branch, pass in the branch ID.

GET /public/[1]/shelflocations

Authorization required?

Yes

Parameters

Name	Description/Notes
orgID	The organization identifier. This value must be system-level(1) or a branch-level organization identifier.

XML elements returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ID	Pickup branch organization ID.
OrganizationID	Organization ID of the branch for which you're retrieving the list of shelf locations. A value of "1" returns all shelf locations for the system.
Description	Description of the shelf location.

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Return - Success

```
HTTP/1.1 200 OK
<ShelfLocationsGetResult>
   <PAPIErrorCode>1</PAPIErrorCode>
   <ErrorMessage>string</ErrorMessage>
   <ShelfLocationsRows>
      <ID>1</ID>
      <OrganizationID>1</OrganizationID>
      <Description>string</Description>
   </ShelfLocationsRows>
</ShelfLocationsGetResult>
```

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PatronTitleListAddTitle

Adds the specified bibliographic record to the specified list in the patron account.

POST /public/[1]/patron/{PatronBarcode}/patrontitlelistaddtitle

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Request Body XML

```
<PatronTitleListAddTitleData>
   <RecordStoreID></RecordStoreID>
   <RecordName></RecordName>
   <LocalControlNumber></LocalControlNumber>
</PatronTitleListAddTitleData>
```

XML Body Elements

Name	Required	Description/Notes
RecordStoreID	Yes	Unique identifier for the record store
RecordName	No	Title of the item being added to the list. If present, element is ignored.
LocalControlNumber	Yes	Control number of the tile

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
Position	Title position in the list
RecordID	Unique Identifier for the title in the list
LocalControlNumber	Control number of the tile

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patronti
tlelistaddtitle
```

Body

```
<PatronTitleListAddTitleData>
   <RecordStoreID>123</RecordStoreID>
   <RecordName>Polaris 101: Tips and tricks</RecordName>
   <LocalControlNumber>101010</LocalControlNumber>
</PatronTitleListAddTitleData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronTitleListAddTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <Position>1</Position>
   <RecordID>19498</RecordID>
</PatronTitleListAddTitleResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronTitleListAddTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Could not add record 'Polaris 101: Tips and tricks' because it does
   not exist.</ErrorMessage>
   <Position>0</Position>
```

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```
    <RecordID>0</RecordID>
</PatronTitleListAddTitleResult>
```

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PatronTitleListCopyTitle

Copy a title from one list to another in a patron account.

POST /public/[1]/patron/{PatronBarcode}/patrontitlelistcopytitle

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Request Body XML

```
<PatronTitleListCopyTitleData>
   <FromRecordStoreID></FromRecordStoreID>
   <FromPosition></FromPosition>
   <ToRecordStoreID></ToRecordStoreID>
</PatronTitleListCopyTitleData>
```

XML Body Elements

Name	Required	Description/Notes
FromRecordStoreID	Yes	Record store to copy the records from
FromPosition	Yes	Position of the title in the list. Note: A negative RecordID (-990) can be submitted instead of the title's position. The RecordID is a Unique Identifier for a record in the title list from the underlying table IRRecords.RecordID. This is not the Control Number or the Bib Record ID. It can be obtained from the PAPI API call PatronTitleListGetTitles.
ToRecordStoreID	Yes	Record store to add the records to

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patronti
tlelistcopytitle
```

Return - Success

```
<PatronTitleListCopyTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronTitleListCopyTitleResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronTitleListCopyTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance"><
   PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Could not copy record because record-store '9999' does not
   exist.</ErrorMessage>
</PatronTitleListCopyTitleResult>
```

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PatronTitleListCopyAllTitles

Copy all titles from one list to another list in the patron account.

POST /public/[1]/patron/{PatronBarcode}/patrontitlelistcopyalltitles

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Request Body XML

```
<PatronTitleListCopyAllTitlesData>
   <FromRecordStoreID></FromRecordStoreID>
   <ToRecordStoreID></ToRecordStoreID>
</PatronTitleListCopyAllTitlesData>
```

XML Body Elements

Name	Required	Description/Notes
FromRecordStoreID	Yes	Record store to copy the records from.
ToRecordStoreID	Yes	Record store to add the records to.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patronti
tlelistcopyalltitles
```

Body

```
<PatronTitleListCopyAllTitlesData>
   <FromRecordStoreID>123</FromRecordStoreID>
   <ToRecordStoreID>720</ToRecordStoreID>
</PatronTitleListCopyAllTitlesData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronTitleListCopyAllTitlesResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronTitleListCopyAllTitlesResult>
```

Return - Failed

```
HTTP/1.1 200 OK
Content-Type: application/xml; charset=utf-8
<PatronTitleListCopyAllTitlesResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Could not copy record because record-store '999' does not
   exist.</ErrorMessage>
</PatronTitleListCopyAllTitlesResult>
```

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PatronTitleListGetTitles

Returns all titles, or a range of titles by position in the list, for a specified title list in the patron account.

GET /public/[1]/patron/{PatronBarcode}/patrontitlelistgettitles?list={list_id}&start Position={StartPosition}&endPosition={EndPosition}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.
list	Yes	Record ID of the list
StartPosition	No	Position in the list of the first title to return
EndPosition	No	Position in the list of the last title to return

Note: If you find that a very large title list is not returned in its entirety, use the **start_ position** and **end_position** parameters to have the list returned in smaller "chunks."

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Examples

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
patrontitlelistgettitles?list=3

http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
patrontitlelistgettitles?list=3&startPosition=3&endPosition=8
```

Return - Success

```
HTTP/1.1 200 OK
<PatronTitleListGetTitlesResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <PatronTitleListTitleRows>
      <PatronTitleListTitleRow>
         <Position>1</Position>
         <RecordID>9378</RecordID>
         <Name>Quick &amp;amp; Easy Cooking for One [electronic resource]</Name>
         <LocalControlNumber>995136</LocalControlNumber>
      </PatronTitleListTitleRow>
      <PatronTitleListTitleRow>
         <Position>2</Position>
         <RecordID>9379</RecordID>
         <Name>Quick &amp;amp; Easy Cooking for One [electronic resource]</Name>
         <LocalControlNumber>995136</LocalControlNumber>
      </PatronTitleListTitleRow>
   </PatronTitleListTitleRows>
</PatronTitleListGetTitlesResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronTitleListGetTitlesResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Could not retrieve records because record-store '999' does not
   exist.</ErrorMessage>
   <PatronTitleListTitleRows/>
</PatronTitleListGetTitlesResult>
```

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PatronTitleListMoveTitle

Moves a specified bibliographic record from one title list to another. Both title lists are in the same patron account.

POST /public/[1]/patron/{PatronBarcode}/patrontitlelistcopytitle

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Request Body XML

```
<PatronTitleListMoveTitleData>
   <FromRecordStoreID></FromRecordStoreID>
   <FromPosition></FromPosition>
   <ToRecordStoreID></ToRecordStoreID>
</PatronTitleListMoveTitleData>
```

XML Body Elements

Name	Required	Description/Notes
FromRecordStoreID	Yes	Record store to move (remove) the record from.
FromPosition	Yes	Position of the title in the list.
ToRecordStoreID	Yes	Record store to add the record to.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Examples

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patronti
tlelistmovetitle
```

Body

```
<PatronTitleListMoveTitleData>
   <FromRecordStoreID>123</FromRecordStoreID>
   <FromPosition>3</FromPosition>
   <ToRecordStoreID>720</ToRecordStoreID>
</PatronTitleListMoveTitleData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronTitleListMoveTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronTitleListMoveTitleResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronTitleListMoveTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Could not move record because record-store '9999' does not
   exist.</ErrorMessage>
</PatronTitleLisMoveTitleResult>
```

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PatronTitleListDeleteTitle

Deletes a single specified bibliographic record from the specified list in the patron account.

DELETE /public/[1]/patron/{PatronBarcode}/patrontitlelistdeletetitle?list={list_id}&position={position_id}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron
list_id	Yes	Unique identifier for the list
position_id	Yes	ID of the position in the list

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patrontitlelistdeletetitle?list=700&position=4
```

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Return - Success

```
HTTP/1.1 200 OK
<PatronTitleListDeleteTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance"><
   PAPIErrorCode>1</PAPIErrorCode>
   <ErrorMessage/>
</PatronTitleListDeleteTitleResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronTitleListDeleteTitleResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance"><
   PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Could not remove record because the record store does not
   exist.</ErrorMessage>
</PatronTitleListDeleteTitleResult>
```

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PatronTitleListDeleteAllTitles

Removes all the records from a given list, but leaves the empty list in the patron account.

DELETE /public/[1]/patron/{PatronBarcode}/patrontitlelistdeletealltitles?list={list_id}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Query parameters

Name	Required	Description/Notes
list	Yes	Unique identifier for the list.

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/patronti
tlelistdeletealltitles?list=700
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Return - Success

```
HTTP/1.1 200 OK
<PatronTitleListDeleteAllTitlesResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronTitleListDeleteAllTitlesResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronTitleListDeleteAllTitlesResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance"><
   PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Could not truncate record-store '999' because it does not
   exist.</ErrorMessage>
</PatronTitleListDeleteAllTitlesResult>
```

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PatronBasicDataGet

Returns basic name, address, circulation counts, and account balances for a patron.

GET /public/[1]/patron/{PatronBarcode}/basicdata

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
Patron ID	Unique identifier for the patron.
Barcode	Patron barcode
NameFirst	Patron's first name
NameLast	Patron's last name
NameMiddle	Patron’s middle name.
PhoneNumber	Patron's primary phone number
EmailAddress	Patron email address

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
ItemsOutCount	Number of items checked out to the patron
ItemsOverdueCount	Number of overdue items checked out to the patron
ItemsOutLostCount	Number of items in lost status for the patron
HoldRequestsTotalCount	Number of Polaris and ILL hold requests for this patron
HoldRequestsCurrentCount	Number of Polaris and ILL hold requests in the following statuses: ACTIVE, PENDING, INACTIVE, SHIPPED.
HoldRequestsShippedCount	Number of Polaris hold requests in SHIPPED status (sent to library for pickup) for this patron.
HoldRequestsHeldCount	Number of Polaris hold requests in HELD status (available for pickup) for this patron
HoldRequestsUnclaimedCount	Number of Polaris hold requests in UNCLAIMED status (available for pickup but never picked up) for this patron.
ChargeBalance	The charge balance of the patron's account
CreditBalance	The credit balance of the patron's account
DepositBalance	The deposit balance of the patron's account
NameTitle	Patron’s title
NameSuffix	Parton’s suffix
PhoneNumber2	Patron’s phone number 2
PhoneNumber3	Patron’s phone number 23
Phone1CarrierID	Phone 1 carrier ID.
Phone2CarrierID	Phone 2 carrier ID.
Phone3CarrierID	Phone 3 carrier ID.
CellPhone	This field has been deprecated in 4.1. For backwards compatibility, 4.1 will populate this field using the TXT #.
CellPhoneCarrieriD	This field has been deprecated in 4.1. For

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Name	Description/Notes
	backwards compatibility, 4.1 will populate this field using the TXT #.
AltEmailAddress	Patron's alternate email address
BirthDate	Patron's date of birth
RegistrationDate	Original date of registration
LastActivityDate	Date of last activity
AddrCheckDate	Date of next address check
MessageNewCount	Count of new messages
MessageReadCount	Count of unread messages
PatronOrgID	The branch ID where the patron is registered.
DeliveryOptionID	ID representing how notices should be delivered to the patron. 1 - Mail 2 - Email 3 - Phone 1 4 - Phone 2 5 - Phone 3 6 - Fax 8 - Text Message
ExcludeFromAlmostOverdueAutoRenew	Patron does not have automatic renewals of checked-out items enabled.
ExcludeFromPatronRecExpiration	Exclude patron from report on expired patrons.
ExcludeFromInactivePatron	Exclude patron from report on inactive patrons.
EReceiptOptionID	ID representing how electronic receipts should be delivered to the patron. 2 - Email 3 - Phone 1 4 - Phone 2 5 - Phone 3 8 - Text Message 100 - Email and Text Message
TxtPhoneNumber	Of the three phone numbers on a patron account, indicates which should be used

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Name	Description/Notes
	for text messages of receipts.
EmailFormatID	Format of notices and receipts sent by email. 1 - Plain text 2 - HTML
LegalNameFirst	Patron's legal first name
LegalNameLast	Patron's legal last name
LegalNameMiddle	Patron's legal middle name
UseLegalNameOnNotices	Indicates whether the legal name is used on library print and phone notices. true - Legal name used false - Legal name not used
LegalFullName	Patron's legal full name
PatronAddresses	List of patron's addresses. Only available if the addresses query string value is supplied in the URL as a non-zero value. Ex: **/basicdata?addresses=1** Address fields: AddressID FreeTextLabel StreetOne StreetTwo StreetThree City State County PostalCode ZipPlusFour Country CountryID AddressTypeID **Note:** If the country does not require a state, the *state* field may be empty.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
basicdata
```

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Return - Success

```
HTTP/1.1 200 OK
<PatronBasicDataGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <PatronBasicData>
      <PatronID>299377</PatronID>
      <Barcode>21756003332022</Barcode>
      <NameFirst>John</NameFirst>
      <NameLast>Smith</NameLast>
      <PhoneNumber>315-555-3188</PhoneNumber>
      <EmailAddress>dude@hotmail.com</EmailAddress>
      <ItemsOutCount>5</ItemsOutCount>
      <ItemsOverdueCount>2</ItemsOverdueCount>
      <ItemsOutLostCount>0</ItemsOutLostCount>
      <HoldRequestsTotalCount>13</HoldRequestsTotalCount>
      <HoldRequestsCurrentCount>0</HoldRequestsCurrentCount>
      <HoldRequestsShippedCount>0</HoldRequestsShippedCount>
      <HoldRequestsHeldCount>1</HoldRequestsHeldCount>
      <HoldRequestsUnclaimedCount>0</HoldRequestsUnclaimedCount>
      <ChargeBalance>8.3000</ChargeBalance>
      <CreditBalance>0</CreditBalance>
      <DepositBalance>0</DepositBalance>
      <LegalNameFirst>Johnathan</LegalNameFirst>
      <LegalNameLast>Smith</LegalNameLast>
      <LegalNameMiddle>Edward</LegalNameMiddle>
      <UseLegalNameOnNotices>true</UseLegalNameOnNotices>
      <LegalFullName>Johnathan Edward Smith</LegalFullName>
   </PatronBasicData>
</PatronBasicDataGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronBasicDataGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>An error occurred example</ErrorMessage>
   <PatronBasicData i:nil="true"/>
</PatronBasicDataGetResult >
```

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PatronCirculateBlocksGet

Validate that a patron is part of the Polaris database, and return blocks and status telling the caller if the given patron is allowed to perform a circulation activity (checkout).

GET /public/[1]/patron/{PatronBarcode}/circulationblocks

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

Query String Parameters

Name	Values	Required	Description/Notes
vendorID	varchar	No	Ebook vendor ID'
vendorContractID	varchar	No	Ebook vendor contract ID
usernameSupported	Boolean	No	Can barcode be validated as username

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

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Name	Description/Notes
Barcode	The item barcode
ValidPatron	Does patron exist in the Polaris database? false - No true - Yes
PatronID	Patron's record ID
PatronCodeID	Patron's patron code ID
AssignedBranchID	ID of the branch to which the patron is assigned
PatronBarcode	Patron's barcode
AssignedBranchName	Name of the branch to which the patron is assigned
ExpirationDate	Patron's registration expiration date
OverridePasswordUsed	Was password used the staff override password. (Set only if nValidationTypeID = 3)
Blocks	List of Blocks as follows: PatronID PatronName BlockDescription
CanPatronCirculate	T/F value
EmailAddress	Patron email address
NameFirst	Patron's first name
NameLast	Patron's last name
NameMiddle	Patron's middle name

Example

```
http://[HOSTNAME]/PAPIService/REST/public/v1/1033/100/1/patron/{patron_barcode}/
circulationblocks
```

Return - Success

```
HTTP/1.1 200 OK
<PatronCirculateBlocksResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <Barcode>21234000000166</Barcode>
```

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```
    <ValidPatron>true</ValidPatron>
    <PatronID>356971</PatronID>
    <PatronCodeID>1</PatronCodeID>
    <AssignedBranchID>3</AssignedBranchID>
    <PatronBarcode>21234000000166</PatronBarcode>
    <AssignedBranchName>Amsterdam Free Library</AssignedBranchName>
    <ExpirationDate>2014-11-05T00:00:00</ExpirationDate>
    <OverridePasswordUsed>false</OverridePasswordUsed>
    <Blocks>
       <Block>
          <PatronID>356971</PatronID>
          <PatronName>Tester, Otto </PatronName>
          <BlockDescription>Patron is not allowed to access this vendor
          account.</BlockDescription>
       </Block>
    </Blocks>
    <CanPatronCirculate>false</CanPatronCirculate>
</PatronCirculateBlocksResult>
```

Return - Failed

```
HTTP/1.1 401 Unauthorized
WWW-Authenticate: PWS realm="Polaris API"
```

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CreatePatronBlocks

This protected method creates a block on a patron record. A call to AuthenticateStaffUser is required before calling any protected method. See below for a list of valid block types for patron records. Blocks are de-duplicated on creation. Duplicate blocks are not allowed.

POST /protected/[1]/{AccessToken}/patron/{PatronBarcode}/blocks

Authorization required?

Yes

Protected?

Yes

String Query Values

Name	Values	Required	Description/Notes
PatronBarcode	string	Yes	The patron's username or barcode
wsid	>0	Yes	ID of the workstation sending this method

PAPI Error Codes Unique to This Method

PAPI Error Code	Description
-3506	Invalid block value
-3507	Duplicate block value

Request Body XML

```
<CreatePatronBlocksData>
   <BlockTypeID />
   <BlockValue />
</CreatePatronBlocksData>
```

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XML Body Elements

Name	Description
CreatePatronBlocksData	A container for the block data
BlockTypeID	The type of block: 1 = Free text block 2 = Library assigned block 3 = System block
BlockValue	The Block value When a free text block is created - a string no more than 255 characters in length When a library assigned block is created - an integer representing a valid patron stop ID When a system block is created - the following integer values are allowed: 64 - Self-Registration from PAC Block 128 - Address update from PAC Block 256 - Express Registration Block 512 - Offline Registration Block

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code
ErrorMessage	Error or information message

Example

```
http://egraham-r2.gisinfosystems.com/PlatoPAPIService/REST/protected/v1/1033/100/1/
aj3TJCD4CeYB8bNFeV5tdiNd1ME37wZt/patron/eric1234/blocks
```

Body

```
<CreatePatronBlocksData>
   <BlockTypeID>1</BlockTypeID>
   <BlockValue>A textual block</BlockValue>
</CreatePatronBlocksData>
```

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Return

```
HTTP/1.1 200 OK
<CreatePatronBlocksResult xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</CreatePatronBlocksResult>
```

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PatronHoldRequestsGet

Returns a list of hold requests placed by the specified patron. The list can be filtered by all hold requests or by the request status. This API requires authorization.

GET /public/[1]/patron/{PatronBarcode}/holdrequests/{RequestID}/{endpoint}

The URI supports the following endpoints:

Endpoint	Description
all	Returns all hold requests.
inactive	Returns inactive hold requests.
active	Returns active hold requests.
pending	Returns pending hold requests.
shipped	Returns shipped hold requests.
held	Returns hold requests that have been held.
notsupplied	Returns hold requests that have not been supplied.
unclaimed	Returns unclaimed hold requests.
expired	Returns expired hold requests.
cancelled	Returns cancelled hold requests.

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

The list is sorted in ascending order by activation date.

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Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
HoldRequestID	Polaris ID of the Hold Request
BibID	The ID of the associated bibliographic record
ConstituentBibID	The bibliographic record that's tied to this hold request has another bibliographic record associated with it. The is commonly used when different titles are "bound together." This is the id of that associated bibliographic record.
StatusID	Polaris ID of the status of the hold request 1 - Inactive 3 - Active 4 - Pending 5 - Shipped 6 - Held 7 - Not Supplied 8 - Unclaimed 9 - Expired 16 - Cancelled
StatusDescription	Description of the status of the hold request.
Title	Title of the item.
Author	Author of the item.
CallNumber	Call Number of the item.
FormatID	Polaris ID of the type of format (see "Material Format Types" on page 28.).
FormatDescription	Format description
PickupBranchID	ID of branch at which the item should be picked up.
PickupBranchName	Name of branch at which the item should be pickup up.
PickupByDate	Date that the item will be held until.
QueuePosition	Indicates the position where this hold request is in the queue for this bibliographic record. This may be null depending on the status of the hold request.
QueueTotal	Total number of hold requests for this bibliographic record.
ActivationDate	Date the hold request was activated. An activation date in the future means the request is currently inactive.

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Name	Description/Notes
ExpirationDate	Expiration date of the hold request
GroupName	Name used to identify a group of titles that can satisfy this hold request
ItemLevelHold	Is the request an item level hold, or will any item associated with this title satisfy the request.
BorrowByMail	Is the request a Borrow by Mail type of request.
HasConstituentBib	Does the bibliographic record that's tied to this hold request have constituent (associated) bibliographic records.
NewPickupBranchID	After placing a hold request, patrons can change which branch they want the item to be sent to. This is the ID of that new branch.
NewPickupBranch	After placing a hold request, patrons can change which branch they want the item to be sent to. This is the name of that new branch.
InnReachType	Whether or not this hold request is an INN-Reach request (0 or 1).
Designation	Designation, when present
VolumeNumber	Volume, when present
PACDisplayNotes	PAC Display Note field (maximum 255 characters)
CanSuspend	A Boolean that indicates whether the patron's hold request can be suspended.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/holdrequests/all
```

Return - Success

```
HTTP/1.1 200 OK
<PatronHoldRequestsGetResult xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
      <ErrorMessage><ErrorMessage/>
      <PatronHoldRequestsGetRows>
         <PatronHoldRequestsGetRow>
            <HoldRequestID>801604</HoldRequestID>
            <BibID>620893</BibID>
            <StatusID>8</StatusID>
            <StatusDescription>Unclaimed</StatusDescription>
            <Title>Moose's big idea</Title>
            <Author>Greene, Stephanie.</Author>
            <CallNumber>J Fict Gre</CallNumber>
            <FormatID>1</FormatID>
```

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```
            <FormatDescription>Book</FormatDescription>
            <PickupBranchID>90</PickupBranchID>
            <PickupBranchName>Saratoga Springs Public Library</PickupBranchName>
            <PickupByDate>2008-12-13T23:59:00</PickupByDate>
            <QueuePosition>0</QueuePosition>
            <QueueTotal>0</QueueTotal>
            <ActivationDate>2008-12-03T00:00:00</ActivationDate>
            <ExpirationDate>2009-04-02T23:59:00</ExpirationDate>
            <GroupName/>
            <ItemLevelHold>false</ItemLevelHold>
         </PatronHoldRequestsGetRow>
         ...
      </PatronHoldRequestsGetRows>
   <PatronHoldRequestsGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronHoldRequestsGetResult xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid Status ID Filter</ErrorMessage>
   <PatronHoldRequestsGetRows i:nil="true"/>
</PatronHoldRequestsGetResult>
```

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PatronILLRequestsGet

This method returns a list of ILL requests placed by the specified patron. The list can be filtered by the status of the request.

GET	/public/[1]/patron/{PatronBarcode}/illrequests/all
GET	/public/[1]/patron/{PatronBarcode}/illrequests/ReceivedTransferred
GET	/public/[1]/patron/{PatronBarcode}/illrequests/cancelled

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

One or more ILL requests placed by the patron. The list is sorted in ascending order by activation date.

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ILLRequestID	Polaris ID of the Hold Request
ILLStatusID	Status code of an inter-library loan (ILL) request. 1 - Inactive 3 - Active 5 - Shipped

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
	10 - Received-Held 11 - Received-Transferred 12 - Received-Satisfied 13 - Received-Used 14 - Received-Unused 15 - Returned 16 - Cancelled
PatronID	Internal patron record ID.
ItemRecordID	Internal item record ID.
BibRecordID	Internal bibliographic record ID.
PickupBranchID	ID of branch at which the item should be picked up
Author	Author of the item
Title	Title of the item
Format	Format (TOM - Type of Material) for the ILL request title.
CreationDate	Date ILL request was created.
ActivationDate	Date and ILL request becomes active.
Status	Status description label that corresponds with the ILLStatusID field.
Item	Item status description.
NeedByDate	Provided by patron as the date the request is needed
PickupBranch	Name of the branch the item should be picked up at.
FormatID	Polaris ID of the type of material (TOM)
LastStatusTransitionDate	The date that the ILL request status was last changed.
OpacNotes	Note in public access catalog
CallNumber	Call Number of the item (populated after item is "received")
VolumeAndIssue	Volume and issue number if applicable
PickupByDate	Date that the item will be held until
InnReachTrackingID	If the ILL request is associated with INN-Reach, this is the internal ID of the record containing related INN-Reach field data for the request.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/3/patron/21234000002105/
```

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```
illrequests/all

http://localhost/PAPIService/REST/public/v1/1033/100/3/patron/21234000002105/
illrequests/ReceivedTransferred
```

Return - Success

```
HTTP/1.1 200 OK
<PatronILLRequestsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage></ErrorMessage>
   <PatronILLRequestsGetRows>
          <PatronILLRequestsGetRow>
             <ILLRequestID>6</ILLRequestID>
             <ILLStatusID>11</ILLStatusID>
             <PatronID>71128</PatronID>
             <ItemRecordID>9475571</ItemRecordID>
             <BibRecordID>806821</BibRecordID>
             <PickupBranchID>107</PickupBranchID>
             <Author i:nil="true" />
             <Title>HARRY POTTER AND THE GOBLET OF FIRE BOO</Title>
             <Format>Sound Recording</Format>
             <CreationDate>2008-03-05T10:08:54.857</CreationDate>
             <ActivationDate>2011-11-18T09:06:06.86</ActivationDate>
             <Status>Received</Status>
             <Item>Transferred</Item>
             <NeedByDate>2009-03-05T00:00:00</NeedByDate>
             <PickupBranch>Waterford Public Library</PickupBranch>
             <FormatID>5</FormatID>
             <LastStatusTransitionDate>2011-12-
             06T16:21:12.857</LastStatusTransitionDate>
             <OpacNotes i:nil="true" />
             <CallNumber>ILL</CallNumber>
             <VolumeAndIssue i:nil="true" />
             <PickupByDate i:nil="true" />
          </PatronILLRequestsGetRow>
       </PatronILLRequestsGetRows>
</PatronILLRequestsGetResult>
```

Error Message

If the organization ID does not exist in the database, error code -5000 ("Invalid OrganizationID supplied") is returned.

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PatronItemsOutGet

Returns list of items out to the specified patron. The list can be filtered by ALL items out, OVERDUE items only, or LOST items only.

GET	/public/[1]}/patron/{PatronBarcode}/itemsout/all
GET	/public/[1]/patron/{PatronBarcode}//itemsout/overdue
GET	/public/[1]/patron/{PatronBarcode}/itemsout/lost

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron
ID	Yes	Filter the list of patron's items out by status. Enter one of the following values: "ALL" - All items out "OVERDUE" - Only overdue items "LOST" - Only lost items For entire list of patron's items out, don't include this field.

XML Elements Returned

One or more items checked out to or lost by the patron. The list is sorted in ascending order by due date.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.

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Name	Description/Notes
ErrorMessage	Error or information message
ItemID	Polaris ID of the item record
Barcode	The item barcode
BibID	The ID of the associated bibliographic record
FormatID	Polaris ID of the type of format (see "Material Format Types" on page 28.)
FormatDescription	Format description
Title	Title of the item
Author	Author of the item
CallNumber	Call Number of the item
CheckOutDate	Check Out Date of the item
DueDate	Due Date of the item
RenewalCount	Number of times item has been renewed by this patron. (For LOST items, this value will always be '0').
RenewalLimit	Maximum number of times this item can be renewed by this patron. (For LOST items, this value will always be '0').
AssignedBranchID	Polaris ID of the branch to which the item is assigned.
AssignedBranchName	Name of the branch to which the item is assigned.
LoaningBranchID	Polaris ID of the branch from which the item was checked out.
LoaningBranchName	Name of the branch from which the item was checked out.
BillingNoticeSent	(Boolean value) Was a billing notice sent for this item?
ReplacementChargeTxnID	(Integer value) Patron account transaction ID for a replacement charge (Can be used for accrued fines)
ProcessingChargeTxnID	(Integer value) Patron account transaction ID for a processing charge (Can be used for accrued fines)
OverdueChargeTxnID	(Integer value) Patron account transaction ID for an overdue charge (Can be used for accrued fines)
DisplayInPAC	(Boolean value) Is this item displayable to the public?
ElectronicItem	(Boolean value) Is this an electronic item?

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Name	Description/Notes
VendorName	The vendor name associated with the electronic item
VendorAccountName	The vendor account name associated with the electronic item
VendorObjectIdentifier	The unique ID of the electronic item in the vendor's repository
ISBN	The ISBNs of the associated bibliographic records
ISSN	The ISSN of the associated bibliographic records
OCLCNumber	The OCLC number of the associated bibliographic records
UPCNumber	The UPC number of the associated bibliographic records
CanItemBeRenewed	Indicates whether item is renewable
Designation	Designation, when present.
VolumeNumber	Volume, when present.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
itemsout/all
```

Return - Success

```
HTTP/1.1 200 OK
<PatronItemsOutGetResult
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
      <PatronItemsOutGetRows>
      <PatronItemsOutGetRow>
             <ItemID>2859638</ItemID>
             <Barcode>0000204137301</Barcode>
             <BibID>740185</BibID>
             <FormatID>1</FormatID>
             <FormatDescription>New / Popular Book</FormatDescription>
             <Title>iPhone for dummies</Title>
             <Author>Baig, Edward.</Author>
             <CallNumber>384.53 Bai</CallNumber>
             <CheckOutDate>2013-07-01T16:18:55.4</CheckOutDate>
             <DueDate>2013-06-03T23:59:00</DueDate>
```

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```
            <RenewalCount>0</RenewalCount>
            <RenewalLimit>1</RenewalLimit>
            <AssignedBranchID>90</AssignedBranchID>
            <AssignedBranchName>Saratoga Springs Public Library</AssignedBranchName>
            <LoaningBranchID>3</LoaningBranchID>
            <LoaningBranchName>Amsterdam Free Library</LoaningBranchName>
            <BillingNoticeSent>false</BillingNoticeSent>
            <ReplacementChargeTxnID>0</ReplacementChargeTxnID>
            <ProcessingChargeTxnID>0</ProcessingChargeTxnID>
            <OverdueChargeTxnID>0</OverdueChargeTxnID>
            <DisplayInPAC>true</DisplayInPAC>
            <ElectronicItem>false</ElectronicItem>
            <VendorName/>
            <VendorAccountName/>
            <VendorObjectIdentifier/>
            <ISBN>9780470174692</ISBN>
            <ISSN/>
            <OCLCNumber/>
            <UPCNumber/>
        </PatronItemsOutGetRow>
    </PatronItemsOutGetRows>
</PatronItemsOutGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronItemsOutGetResult
    xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
    <PAPIErrorCode>-1</PAPIErrorCode>
    <ErrorMessage>Invalid Status ID Filter</ErrorMessage>
    <PatronItemsOutGetRows i:nil="true"/>
</PatronItemsOutGetResult>
```

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PatronMessagesGet

Retrieves a list of new and read patron messages.

GET /public/[1]/patron/{PatronBarcode}/messages

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

Query String Parameters

Name	Required	Description/Notes
unreadonly		Set to 1 to return only new messages.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
Type	0 = Freetext message 1 = Library defined
ID	Message ID

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Name	Description/Notes
OrgName	Name of organization that created the message
Date	Date message was created
Value	Message text
isRead	Has the message been marked as read

Examples

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/messages

http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/217560033
32022/messages?unreadonly=1
```

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PatronMessageUpdateStatus

Marks a message as read.

PUT /public/[1]/patron/{PatronBarcode}/messages/{MessageType}/{MessageID}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron
MessageType	Yes	Type of message. Valid values: freetext librarydefined
MessageID	Yes	ID of patron message

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Examples

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/messages/freetext/80

http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/messages/librarydefined/2
```

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PatronMessageDelete

Delete a specific patron message

DELETE /public/{[1]/patron/{PatronBarcode}/messages/{MessageType}/{MessageID}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
MessageType	Yes	Type of message. Valid values are: *freetext* and *librarydefined*.
MessageID	Yes	ID of patron message
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Examples

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
messages/freetext/80

http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
messages/librarydefined/2
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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PatronPreferencesGet

Return preferences for a patron including reading list, email format, and notification type.

GET /public/[1]/patron/{PatronBarcode}/preferences

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
PatronID	ID of patron
Barcode	Patron barcode

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Name	Description/Notes
ReadingListEnabled	Should Polaris maintain a reading list of items previously checked out to the patron.
DeliveryMethodID	ID of how notifications should be delivered 1 - Mailing Address 2 - Email Address 3 - Telephone 1 4 - Telephone 2 5 - Telephone 3 6 - FAX 7 - EDI
DeliveryMethodDescription	Description of how notifications should be delivered. When a patron does not have a delivery method, PAPI returns a description of “null” rather than “none”.
DeliveryEmailFormatID	ID of the type of format of Polaris-generated email messages 1 - Plain text 2 - HTML
DeliveryEmailFormatDescription	Description of the type of format of Polaris-generated email messages

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
preferences
```

Return - Success

```
HTTP/1.1 200 OK
<PatronPreferencesGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <PatronPreferences>
      <PatronID>299377</PatronID>
      <Barcode>21756003332022</Barcode>
      <ReadingListEnabled>true</ReadingListEnabled>
      <DeliveryMethodID>3</DeliveryMethodID>
      <DeliveryMethodDescription>Telephone 1</DeliveryMethodDescription>
      <DeliveryEmailFormatID>2</DeliveryEmailFormatID>
      <DeliveryEmailFormatDescription>HTML</DeliveryEmailFormatDescription>
   </PatronPreferences>
</PatronPreferencesGetResult>
```

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Return - Failed

```
HTTP/1.1 200 OK
<PatronPreferencesGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage>Example error message</ErrorMessage>
   <PatronPreferences/>
</PatronPreferencesGetResult>
```

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PatronReadingHistoryClear

Clears the historical list of items a patron has checked out. Supplying a list of reading history IDs will remove only the specified historical entries.

DELETE	/public/[1]/patron/{PatronBarcode}/readinghistory
DELETE	/public/[1]/patron/{PatronBarcode}/readinghistory?ids={ids}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron.

Query String Parameters

Name	Required	Description/Notes
ids	No	Comma delimited list of reading history IDs. <int>,<int>,<int> Maxiumum of 50 IDs allowed.

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
readinghistory
```

Return - Success

```
HTTP/1.1 200 OK
<PatronReadingHistoryClearResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>9</PAPIErrorCode>
   <ErrorMessage/>
</PatronReadingHistoryClearResult>
```

Return - Failed

```
HTTP/1.1 200 OK
```

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PatronRegistrationCreate

Create a new patron registration record. Basic patron duplicate detection (name, username, barcode) is performed.

> **Note:** Incoming phone number formats are validated against customer-defined rules in Polaris System Administration.

POST /public/[1]/patron

Authorization required?

Yes

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
Barcode	Patron barcode (can be input also if known ahead of time)
PatronID	Polaris Patron ID for newly created Patron
StatisticalClassID	Statistical classes are defined by the library as a way of collecting statistics according to whatever categories they'd like to track. Quite often they're used for geographic areas like counties, towns, or school districts.

XML Body Elements

> **Important:** XML elements must be in the order shown below.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Required	Description/Notes
LogonBranchID	Yes	Transaction processing field
LogonUserID	Yes	Transaction processing field
LogonWorkstationID	Yes	Transaction processing field
PatronBranchID	Yes	Patron's registering branch
PostalCode	No	Patron postal code
ZipPlusFour	No	Patron zip+4 code
City	No	Patron city
State	No	Patron state **Note:** If a *State* field is not required for your county, it can be left undefined. This requires "StateRequired" to be set to *no* in the System Administration "Countries" table.
County	No	Patron county
CountryID	No	Patron country
StreetOne	No	Patron street one
StreetTwo	No	Patron street two
StreetThree	No	Patron street three
NameFirst	Yes	Patron first name
NameLast	Yes	Patron last name
NameMiddle	No	Patron middle name
User1	No	System defined field for patron data
User2	No	System defined field for patron data
User3	No	System defined field for patron data
User4	No	System defined field for patron data
User5	No	System defined field for patron data
Gender	No	Use M, F, or N (not applicable)
Birthdate	No	Patron birth date
PhoneVoice1	No	Patron phone
PhoneVoice2	No	Patron phone
PhoneVoice3	No	Patron phone
Phone1CarrierID	No	Mobile carrier for Telephone 1 A value of -2 indicates the carrier is unspecified.

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Name	Required	Description/Notes
		Note: The -2 value is supported if the patron's branch has "Notice: Export text message" enabled in System Administration. Sample list from SA_Mobilephonecarriers table: 1 - AT&T 2 - Bell Canada 8 - Sprint 9 - T_Mobile 10 - Tracfone 11 - Verizon 17 - Boost Mobile 22 - Rogers Canada
Phone2CarrierID	No	Mobile carrier for Telephone 2 A value of -2 indicates the carrier is unspecified. **Note:** The -2 value is supported if the patron's branch has "Notice: Export text message" enabled in System Administration.
Phone3CarrierID	No	Mobile carrier for Telephone 3 A value of -2 indicates the carrier is unspecified. **Note:** The -2 value is supported if the patron's branch has "Notice: Export text message" enabled in System Administration.
EmailAddress	No	Patron email
AltEmailAddress	No	Patron alternate email
LanguageID	No	Patron language iD - From Languages table 1 - English 2 - Spanish 3 - German 4 - French
UserName	No	Online user name
Password	No	Patron password

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Name	Required	Description/Notes
Password2	No	Patron password duplicate (for verification)
DeliveryOptionID	No	1 Mail 2 Email 3 Telephone 1 4 Telephone 2 5 Telephone 3 6 FAX 7 EDI 8 TXT messaging
EnableSMS	No	Enable additional text messages 0 or False - Do not send additional text notice 1 or True - Send additional text notice
TxtPhoneNumber	No	Phone number for TXT messaging 1 - PhoneVoice1 2 - PhoneVoice2 3 - PhoneVoice3 Unspecified - Indicates no phone number is specified.
Barcode	No	Patron barcode (if not auto-assigning)
EReceiptOptionID	No	Ereceipt option ID [4.1 only] 2 - Email Address 8 - TXT Messaging 100 - All
PatronCode	No	ID of patron code assigned to patron. Default used when ID not provided.
ExpirationDate	No	Patron card expiration date. Default used when date not provided.
AddrCheckDate	No	Patron card address check date. Default used when date not provided.
GenderID	No	Unique code identifying the patron's gender. 1- None (NULL) 2 - Female 3 - Male If an invalid gender is assigned, PAPI error code -3536 will be returned.

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Name	Required	Description/Notes
LegalNameFirst	No	Patron's legal first name
LegalNameLast	No	Patron's legal last name
LegalNameMiddle	No	Patron's legal middle name
UseLegalNameOnNotices	No	Indicates whether the legal name is used on library print and phone notices. true - Legal name used false - Legal name not used

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron
```

Body

```
<PatronRegistrationCreateData>
    <LogonBranchID>1</LogonBranchID>
    <LogonUserID>1</LogonUserID>
    <LogonWorkstationID>1</LogonWorkstationID>
    <PatronBranchID>74</PatronBranchID>
    <PostalCode>13090</PostalCode>
    <City>Liverpool</City>
    <State>NY</State>
    <StreetOne>100 Main Street</StreetOne>
    <NameFirst>John</NameFirst>
    <NameLast>Smith</NameLast>
    <PhoneVoice1>555-1212</PhoneVoice1>
    <EmailAddress>dude@hotmail.com</EmailAddress>
    <UserName>PolarisDude</UserName>
    <Password>1234</Password>
    <Password2>1234</Password2>
    <LegalNameFirst>Johnathan</LegalNameFirst>
    <LegalNameLast>Smith</LegalNameLast>
    <LegalNameMiddle>Edward</LegalNameMiddle>
    <UseLegalNameOnNotices>true</UseLegalNameOnNotices>
    <LegalFullName>Johnathan Edward Smith</LegalFullName>
</PatronRegistrationCreateData>
```

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Return - Success

```
HTTP/1.1 200 OK
<PatronRegistrationCreateResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode><ErrorMessage/>
   <Barcode>PACREG357166</Barcode>
   <PatronID>357166</PatronID>
</PatronRegistrationCreateResult>
```

Return - Failed

```
<PatronRegistrationCreateResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Procedure or function 'PAPI_PatronRegistrationCreate' expects
   parameter '@nPatronBranchID', which was not supplied.</ErrorMessage>
   <Barcode/>
   <PatronID>0</PatronID>
</PatronRegistrationCreateResult>
```

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PatronRenewBlocksGet

This method takes in a Patron ID and returns patron renewal blocks (if any). It also indicates whether the patron is allowed to renew (the blocks may be informational or actual blocks). It is a protected method and staff must authenticate before calling this method.

GET /protected/[1]/{AccessToken}/circulation/patron/{PatronID}/renewblocks

Authorization required?

Yes

Protected?

Yes

URI Parameters

Name	Required	Description/Notes
PatronID	Yes	ID of patron.

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
PatronID	ID of patron
PatronName	Name of patron

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Name	Description/Notes
BlockDescription	A description of why a patron may not be allowed to renew an item.
CanPatronRenew	A boolean value indicating whether the patron can renew an item.

Result - Example 1

```
HTTP/1.1 200 OK
<RenewBlocksResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <Blocks>
      <Block>
         <PatronID>137096</PatronID>
         <PatronName>Joseph, Sarah </PatronName>
         <BlockDescription>This action is not permitted. Please contact the library
         regarding your account.</BlockDescription>
      </Block>
   </Blocks>
   <CanPatronRenew>false</CanPatronRenew>
</RenewBlocksResult>
```

Result - Example 2

```
HTTP/1.1 200 OK
<CanPatronRenewResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <Blocks />
   <CanPatronRenew >true</ CanPatronRenew>
</CanPatronRenewResult>
```

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PatronSavedSearchesGet

Returns list of saved searches to the specified patron.

GET /public/[1]/patron/{PatronBarcode}/savedsearches

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

One or more searches saved by the patron. The list is sorted in ascending order by last run date.

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code indicates a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
SDISearchID	Polaris ID of the search record
SDIName	Name of search for identification
SearchCriteria	The search string
SearchPeriod	The search period
LastRunDate	Date the saved search was last run by PolSDIServer
NotifyOnNoResults	Indicates the patron wants notification when a search is run with no results found, contrary is that no email is sent.
EmailResultsTo	The email address to send search results to.
ResultsCount	Number of search results (Bibliographic Records found) for saved searches

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
savedsearches
```

Return - Success

```
HTTP/1.1 200 OK
<PatronSavedSearchesGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <PatronSavedSearchesGetRows>
      <PatronSavedSearchesGetRow>
         <SDISearchID>1498</SDISearchID>
         <SDIName>Roosevelt</SDIName>
         <SearchCriteria>FIND KW={freetext}roosevelt{/freetext} AND
         AB=3</SearchCriteria>
         <SearchPeriod>Monthly</SearchPeriod>
         <LastRunDate>2009-02-18T05:11:04</LastRunDate>
         <NotifyOnNoResults>true</NotifyOnNoResults>
         <EmailResultsTo>dude@polarislibrary.com</EmailResultsTo>
         <ResultsCount>10</ResultsCount>
      </PatronSavedSearchesGetRow>
      ...
   </PatronSavedSearchesGetRows>
</PatronSavedSearchesGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronSavedSearchesGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Specified cast is not valid.</ErrorMessage>
   <PatronSavedSearchesGetRows/>
</PatronSavedSearchesGetResult>
```

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PatronReadingHistoryGet

Returns a historical list of items the patron has checked out. The procedure is capable of returning a count of the total number of titles in the patron's check-out history, a list of all titles in the history, or a specific page of titles of a specified length.

GET /public/[1]/patron/{PatronBarcode}/readinghistory

HTTP Verb

GET

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

Query String Parameters

Name	Values	Required	Description/Notes
page	-1, 0, >0*	Yes	-1 = Return count only 0 = Return ALL rows > 0 =Start page
rowsperpage	>0	Yes	Number of rows to return on a page

To retrieve the patron's entire reading history, pass in the query string: **?rowsperpage=5&page=0**

To retrieve the count of total reading history rows for this patron, use **page=-1**. The entire reading history will not returned. If you want to retrieve the patron's last ten items without pulling in the entire list, for example, you can use this count to calculate the actual page number needed.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

One or more items checked out to the patron. The list is sorted in ascending order by check-out date.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. Note: On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemID	Polaris ID of the item record
Barcode	The item barcode
BibID	The ID of the associated bibliographic record
FormatID	Polaris ID of the type of format (see "Material Format Types" on page 28.)
FormatDescription	Format description
Title	Title of the item
Author	Author of the item
CallNumber	Call Number of the item
CheckOutDate	Check Out Date of the item
LoaningBranchID	Polaris ID of the branch from which the item was checked out.
LoaningBranchName	Name of the branch from which the item was checked out.
PatronReadingHistoryID	ID of patron reading history entry

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022/
readinghistory?page=1&rowsperpage=5
```

Return - Success

```
HTTP/1.1 200 OK
<PatronReadingHistoryGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>5</PAPIErrorCode>
```

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```
   <ErrorMessage/>
   <PatronReadingHistoryGetRows>
      <PatronReadingHistoryGetRow>
         <ItemID>2254290</ItemID>
         <Barcode>123</Barcode>
         <BibID>373330</BibID>
         <FormatID>34</FormatID>
         <FormatDescription>Videotape</FormatDescription>
         <Title>My girl 2 [videorecording]</Title>
         <Author/>
         <CallNumber>VC Fict My</CallNumber>
         <CheckOutDate>2008-10-01T14:14:37</CheckOutDate>
         <LoaningBranchID>3</LoaningBranchID>
         <LoaningBranchName>Amsterdam Free Library</LoaningBranchName>
         <PatronReadingHistoryID>56399</PatronReadingHistoryID>
      </PatronReadingHistoryGetRow>
      ...
      <PatronReadingHistoryGetRow>
         <ItemID>203302</ItemID>
         <Barcode>0000203068887</Barcode>
         <BibID>308725</BibID>
         <FormatID>1</FormatID>
         <FormatDescription>Book</FormatDescription>
         <Title>Junie B. Jones has a monster under her bed</Title>
         <Author>Park, Barbara.</Author>
         <CallNumber>J Fict Par</CallNumber>
         <CheckOutDate>2009-02-25T11:22:26</CheckOutDate>
         <LoaningBranchID>90</LoaningBranchID>
         <LoaningBranchName>Saratoga Springs Public Library</LoaningBranchName>
         <PatronReadingHistoryID>56625</PatronReadingHistoryID>
      </PatronReadingHistoryGetRow>
   </PatronReadingHistoryGetRows>
</PatronReadingHistoryGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<PatronReadingHistoryGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid page supplied</ErrorMessage>
   <PatronReadingHistoryGetRows i:nil="true"/>
</PatronReadingHistoryGetResult>
```

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PatronSearch

This protected method returns a list of patrons that match the search criteria specified in the CCL submitted by the user. Data returned includes the patron's name, barcode, Polaris Patron ID, and Polaris Organization ID. This method offers query parameters that allow the user to specify the number of patrons, the sort order, and page of data to retrieve.

A call to AuthenticateStaffUser is required before calling any protected method.

See below for a list of valid CCL access points and sort keys for patron records.

GET /protected/[1]/{AccessToken}/search/patrons/boolean?q={ccl}

Authorization required?

Yes

Protected?

Yes

String Query Values

Name	Values	Required	Description/Notes
q	string	Yes	Common Command Language (CCL) snippet. Must be URL encoded.
patronsperpage	>0	No	Maximum number of patrons to return default is 10.
page	>0	No	Page number Default is 1.
sort	string	No	CCL specifying the sort order of the return values.

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
WordList	A list of the keywords included in the CCL statement.
TotalRecordsFound	The total number of records found that met the search criteria.
PatronSearchRows	A list of patron data
PatronSearchRow	Container for the data row
PatronID	The patron's ID
Barcode	The patron's barcode
OrganizationID	The patron's organization
PatronFirstLastName	The patron's first and last name

Example

```
http://egraham-r2.gisinfosystems.com/PlatoPAPIService/REST/protected/v1/1033/100/1/
aj3TJCD4CeYB8bNFeV5tdiNd1ME37wZt/search/patrons/Boolean?q=EM%3Deric.graham%40polaris
library.com
```

Return

```
HTTP/1.1 200 OK
<PatronSearchResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>1</PAPIErrorCode>
   <ErrorMessage/>
   <WordList>eric.graham@polarislibrary.com</WordList>
   <TotalRecordsFound>1</TotalRecordsFound>
   <PatronSearchRows>
      <PatronSearchRow>
         <PatronID>356956</PatronID>
         <Barcode>eric1234</Barcode>
         <OrganizationID>3</OrganizationID>
```

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```
          <PatronFirstLastName>Shaw, Eric C</PatronFirstLastName>
       </PatronSearchRow>
    </PatronSearchRows>
 </PatronSearchResult>
```

Patron Access Points

Access Point	Description
ADCK	Address check date
BD	Birth date
BILL	Billed
BLOCKFT	Free text block
BLOCKLIB	Library-assigned block
EM	Email address
EXD	Expiration date
FAX	Fax
LA	Language
LAD	Last activity date
NOTE	Notes
PATAD	Address
PATB	Barcode
PATC	Patron code
PATL	Patron's registered library
PATN	Name
PATNF	Name (First Middle Last)
PATNL	Name (Last, First Middle)
PHONE	Phone
PREB	Former barcode
PRID	Record ID
REGD	Registration date
STAC	Statistical class
X1	Library defined field #1
X2	Library defined field #2
X3	Library defined field #3

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Access Point	Description
X4	Library defined field #4
X5	Library defined field #5
ZIP	Postal code

Patron Sort Keys

Access Point	Description
CITY	City
ORG	Patron's Organization
PATB	Barcode
PATN	Name
PATNL	Name (Last, First Middle)
STATE	State
ZIP	Postal code

Additional CCL Examples

EM=*polarislibrar* AND PATL=3 AND PATNF=shaw

```
EM%3D*polarislibrar*%20AND%20PATL%3D3%20AND%20PATNF%3Dshaw
```

EM=eric.graham@polarislibrary.com

```
EM%3Deric.graham%40polarislibrary.com
```

PHONE=315*652*

```
PHONE%3D315*652*
```

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PatronRegistrationUpdate

Update Patron Registration information.

This method supports patron requests to change address. If this option is set in the Polaris Administration PAC profile **Patron Access Options - Contact info**, **Patron can request address change** and the patron requests a change, an email message confirming the request is sent to the patron if this option is set in the **Patron Access Options** profile, a Verify Patron block is placed on the patron record, and an email message is sent to a staff member. An error message (Address changerequest not permitted, -501) is sent if the **Patron can request address change** option is not set.

You can remove an email address by sending a blank EmailAddress or Altemail address in the request body; for example: **<EmailAddress><\EmailAddress>** would remove whatever was in the record.

> **Note:** Incoming phone number formats are validated against customer-defined rules in Polaris System Administration.

PUT /public/[1]/patron/{PatronBarcode}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

Query String Parameters

Name	Required	Description/Notes
Ignoresa	No	Indicates whether or not to validate patron update against policies set up in System Administration. true - Don't check policies, just save the updated information, regardless. false - Only save patron registration update if data meets system validation checks.

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Request Body XML

Important: XML elements must be in the order shown below.

```
<PatronUpdateData>
    <LogonBranchID/>
    <LogonUserID/>
    <LogonWorkstationID/>
    <ReadingListFlag/>
    <EmailFormat/>
    <DeliveryOptionID/>
    <EmailAddress/>
    <PhoneVoice1/>
    <Password/>
</PatronUpdateData>
```

XML Body Elements

Name	Required	Description/Notes
LogonBranchID	Yes	Current Branch (can default to System [1])
LogonUserID	Yes	Current User (can default to PolarisExec)
LogonWorkstationID	Yes	Current Workstation (can default to OPACDefault)
ReadingListFlag	No	Enable or disable reading list
EmailFormat	No	Format of email: 1 - Plain Text 2 - HTML
DeliveryOptionID	No	Delivery options: 0 - None 1 - Mailing address 2 - Email address 3 - Telephone 1 4 - Telephone 2 5 - Telephone 3 6 - FAX 7 - EDI 8 - TXT Messaging
DeliveryOption	No	ID of how notification should be delivered: 1 - Mailing Address 2 - Email Address

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Name	Required	Description/Notes
		3 - Phone 1 4 - Phone 2 5 - Phone 3 6 - FAX 7 - EDI 8 - TXT Messaging
Email Address	No	Email address
AltEmail address	No	Alternate email address
EnableSMS		Enable additional text messages 0 or False - Do not send additional text notice 1 or True - Send additional text notice
PhoneVoice1	No	Primary phone number
PhoneVoice2	No	Telephone 2 number
PhoneVoice3	No	Telephone 3 number
Phone1CarrierID	No	Mobile carrier for Telephone 1 A value of -2 indicates the carrier is unspecified. **Note:** The -2 value is supported if the patron's branch has "Notice: Export text message" enabled in System Administration. Sample list from SA_Mobilephonecarriers table: 1 - AT&T 2 - Bell Canada 8 - Sprint 9 - T_Mobile 10 - Tracfone 11 - Verizon 17 - Boost Mobile 22 - Rogers Canada

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Name	Required	Description/Notes
Phone2CarrierID	No	Mobile carrier for Telephone 2 A value of -2 indicates the carrier is unspecified. **Note:** The -2 value is supported if the patron's branch has "Notice: Export text message" enabled in System Administration.
Phone3CarrierID	No	Mobile carrier for Telephone 3 A value of -2 indicates the carrier is unspecified. **Note:** The -2 value is supported if the patron's branch has "Notice: Export text message" enabled in System Administration.
TxtPhoneNumber	No	Mobile number for text messaging 1 - PhoneVoice1 2 - PhoneVoice2 3 - PhoneVoice3 Unspecified - Indicates no phone number is specified.
EReceiptOptionID	No	0 - None 2 - Email receipt 8 - Text message receipt
Password	No	Patron’s password
PatronCode	No	Patron code assigned to patron
ExpirationDate	No	Patron card expiration date
AddrCheckDate	No	Patron's address check date
ExcludeFromAlmostOverdueAutoRenew	No	Exclude patron from almost overdue/auto-renew reminder notices
ExcludeFromPatronRecExpiration	No	Exclude patron from patron record expiration reminder notices
ExcludeFromInactivePatron	No	Exclude from inactive patron reminder notices
AddressID	No	Address ID of requested patron address change
FreeTextLabel	No	Address type label (for example, Home ot School) of requested patron address change
StreetOne	No	Patron street one
StreetTwo	No	Patron street two

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Name	Required	Description/Notes
StreetThree	No	Patron street three
City	No	City of patron address change
State	No	State of requested patron address change **Note:** If a *State* field is not required for your country, it can be left unidentified. This requires "StateRequired" to be set to *no* in the System Administration "Countries" table.
County	No	County of requested patron address change
PostalCode	No	Postal code of requested patron address change
ZipPlusFour	No	Four digit code added to end of Zip code.
Country	No	Country of the requested patron address change.
CountryID	No	The country ID of the requested patron address change.
AddressTypeID	No	Address type of requested patron address change 1 - Generic 2 - Notices

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XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022
```

Body

```
<PatronUpdateData>
   <LogonBranchID>1</LogonBranchID>
   <LogonUserID>1</LogonUserID>
   <LogonWorkstationID>1</LogonWorkstationID>
   <ReadingListFlag>1</ReadingListFlag>
   <EmailFormat>2</EmailFormat>
   <DeliveryOptionID>3</DeliveryOptionID>
   <EmailAddress>dude@hotmail.com</EmailAddress>
   <PhoneVoice1>315-555-3188</PhoneVoice1>
   <Password>12345</Password>
</PatronUpdateData>
```

Return - Success

```
HTTP/1.1 200 OK
<PatronUpdateResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PatronUpdateResult>
```

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Return - Failed

```
HTTP/1.1 401 Unauthorized
WWW-Authenticate: PWS realm="Polaris API"
```

Error Messages

Code	Description
-501	Patron personal information change is not allowed
-3000	Invalid PatronID specified
-3518	Invalid Email address
-3519	Invalid DeliveryMethod Value (No Address for Patron)
-3520	Invalid delivery method value (no email address for patron).
-3521	Invalid DeliveryMethod Value (No PhoneVoice1 for Patron)
-3522	Invalid DeliveryMethod Value (No PhoneVoice2 for Patron)
-3523	Invalid DeliveryMethod Value (No PhoneVoice3 for Patron)
-3524	Invalid DeliveryMethod Value (No PhoneFax for Patron)
-3525	Invalid DeliveryMethod Value
-3526	Invalid EmailFormat Value
-3527	Invalid ReadingList Value
-3532	Invalid PhoneVoice1
-3533	Invalid Patron Password format
-3534	Invalid Password Length
-3535	Patron password change is not allowed
-3612	Invalid PatronCodeID
-3613	Invalid PhoneVoice2
-3614	Invalid PhoneVoice3
-3615	Invalid Alt Email Address
-3616	Invalid TXTPhoneNumber
-3617	Invalid PhoneCarrier
-3619	Invalid DeliveryMethod No Phone
-3620	Invalid Email Address for EReceipt

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PatronUpdateUserName

This method allows a third party to add/update a patron's username.

PUT /public/[1]/patron/{PatronBarcode}/username/{NewUsername}

Authorization required?

Yes (use patron's PIN in password/secret)

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	The patron's username or barcode
NewUsername	Yes	The new username associated with the patron

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI error code
ErrorMessage	Error or information message

Example

```
https://egraham-r2vm.gisinfosystems.com/Plato-R2PAPIService/REST/public/v1/1033/100/
1/patron/eric1234/username/egraham
```

Return - Success

```
HTTP/1.1 200 OK
<PatronUpdateResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
```

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```
    <ErrorMessage/>
</PatronUpdateResult>
```

PAPI Error Codes Unique to This Method

PAPI Error Code	Description
-3606	The username must be at least 4 characters but not longer than 50 characters
-3607	The Username you entered is unavailable. Please try another Username.
-3608	All usernames must begin with a letter. Usernames can contain letters, numbers, and special characters. Spaces are not allowed, and special characters cannot be contiguous.
-3609	Username and barcode may not be the same.
-3610	The username you entered is identical to your previous username.

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PatronValidate

Validate that a patron is part of the Polaris database.

GET /public/[1]/patron/{PatronBarcode}

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
PatronBarcode	Yes	Barcode of patron

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
Barcode	Patron's barcode
ValidPatron	Does patron exist in the Polaris database? false - No true - Yes
PatronID	Patron's record ID
PatronCodeID	Patron’s patron code ID
AssignedBranchID	ID of the branch to which the patron is assigned
PatronBarcode	Barcode of patron.

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Name	Description/Notes
AssignedBranchName	Name of the branch to which the patron is assigned
ExpirationDate	Patron's registration expiration date
OverridePasswordUsed	Was the staff override passwordused. Set only if nValidationTypeID = 3.

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/1/patron/21756003332022
```

Return - Success

```
HTTP/1.1 200 OK
<PatronValidateResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <Barcode>21756003332022</Barcode>
   <ValidPatron>true</ValidPatron>
   <PatronID>299377</PatronID>
   <AssignedBranchID>90</AssignedBranchID>
   <AssignedBranchName>Saratoga Springs Public Library</AssignedBranchName>
   <ExpirationDate>2010-04-08T00:00:00</ExpirationDate>
</PatronValidateResult>
```

Return - Failed

```
HTTP/1.1 401 Unauthorized
WWW-Authenticate: PWS realm="Polaris API"
```

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RecordSetContentPut

This method adds or removes records from a patron record set.

PUT	/protected/[1]/{AccessToken}/recordsets/{RecordSetID}?userid={user_id}&wsid={workstation_id}&action=add
PUT	/protected/[1]/{AccessToken}/recordsets/{RecordSetID}?userid={user_id}&wsid={workstation_id}&action=remove

URI Parameters

Name	Required	Description/Notes
RecordSetID	Yes	Patron record set ID

Query String Parameters

Name	Required	Description/Notes
user_id	Yes	Staff user ID
wsid	Yes	Workstation ID
action	Yes	Options: **add** or **remove**

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Required	Description/Notes
Records	Yes	A comma separated list of internal patron IDs that should be added or removed from a record set.

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Error Messages

Code	Description
-8000	Invalid PolarisUserID supplied
-8001	Polaris user is not permitted
-9000	Invalid WorkstationID supplied
-11000	Supplied recordSetID is not of type patron
-11001	RecordSetID does not exist

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RecordSetRecordsGet

This method returns a list of record IDs in a specified patron record set.

GET /protected/[1]/{AccessToken}/recordsets/{RecordSetID}/records

Authorization required?

Yes

URI Parameters

Name	Required	Description/Notes
RecordSetID	Yes	Patron record set ID

Query String Parameters

Name	Required	Description/Notes
userid	Yes	User ID (not patron ID)
wsid	Yes	Workstation ID
startIndex	Yes	The starting index position of a page of internal patron IDs from a patron record set.
numRecords	Yes	The number of patron IDs to return in the page from a patron record set. This allows for the use of multiple calls to get all patron IDs from a record set.

XML Elements Returned

List of patron records in the specified record set.

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.

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Name	Description/Notes
PatronID	Patron record ID
ErrorMessage	Error or information message

Return - Success

```
HTTP/1.1 200 OK
<RecordSetRecordsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage i:nil="true" />
   <RecordSetRecordsGetRows>
      <RecordSetRecordsGetRow>
         <PatronID>33343</PatronID>
      </RecordSetRecordsGetRow>
      <RecordSetRecordsGetRow>
         <PatronID>33959</PatronID>
      </RecordSetRecordsGetRow>
      <RecordSetRecordsGetRow>
         <PatronID>73953</PatronID>
      </RecordSetRecordsGetRow>
      <RecordSetRecordsGetRow>
         <PatronID>132277</PatronID>
      </RecordSetRecordsGetRow>
   </RecordSetRecordsGetRows>
</RecordSetRecordsGetResult>
```

Error Messages

Code	Description
-8000	Invalid PolarisUserID supplied
-8001	Polaris user is not permitted
-9000	Invalid WorkstationID supplied
-11000	Supplied recordSetID is not of type patron
-11001	RecordSetID does not exist

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RemoteStorageItemsGet

This protected method returns a list of items that match the criteria specified by the user. The data returned includes the detailed item information designed to update remote storage repositories for new, updated, and deleted items. The list may be paged using the **startitemrecordid** parameter.

> **Important:** A call to AuthenticateStaffUser is required before calling any protected method.

GET /protected/[1]/{AccessToken}/cataloging/remotestorage/items?branch={branch_id}&startdate={start_date}&enddate={end_date}&maxitems={max_items}&listtype={list_type}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Required	Description/Notes
branch	Yes	The branch ID for the request list
startdate	Yes	The starting date for the delta
enddate	Yes	The ending date for the delta
maxitems	Yes	The number of items returned for the call
listtype	Yes	The list type: 1= newly created items 2= items that were modified 3= items that were deleted
startitemrecordid	No	The item record ID after which to start the list

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
RecordCount	The total number of records found that met the search criteria
RowCount	The number of items returned in the current result set
RemoteStorageItemsGetRows	A list of item data
RemoteStorageItemsGetRow	Container for the data row
ItemRecordID	The Polaris item record ID
BibliographicRecordID	The bibliographic record ID with which the item is associated
Barcode	The barcode of the item to which the request is bound (if any)
BrowseTitle	The title of the work
BrowseAuthor	The primary author of the work (if any)
MaterialTypeID	The item's material type ID
MaterialType	The item's material type description
CollectionID	The item's collection ID (if any)
Collection	The item's collection description (if any)
ShelfLocationID	The item's shelf location ID (if any)
ShelfLocation	The item's shelf location description (if any)
CallNumber	The item's call number (if any)
CopyNumber	The item's copy number (if any)
VolumeNumber	The item's volume number (if any)

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Example

```
HTTP/1.1 200 OK
https://egraham-r2vm.gisinfosystems.com/Plato-R2PAPIService/REST/protected/v1/1033/
100/1/DEsGANrOPNYpnKyaYKJ6fQtg0fKsIonE/cataloging/remotestorage/items?branch=92&startd
ate=8-1-2013&enddate=8-24-2013&maxitems=100&listtype=1
```

Body

N/A

Return

```
<RecordCount>1</RecordCount>
<RowCount>1</RowCount>
<RemoteStorageItemsGetRows>
   <RemoteStoragesItemsGettRow>
      <ItemRecordID>9942528</ItemRecordID>
      <BibliographicRecordID>8577</BibliographicRecordID>
      <Barcode>0003658451</Barcode>
      <BrowseTitle>Salted lemons</BrowseTitle>
      <BrowseAuthor>Smith, Doris Buchanan.</BrowseAuthor>
      <MaterialTypeID>1</MaterialTypeID>
      <MaterialType>Book</MaterialType>
      <CollectionID>87</CollectionID>
      <Collection>Reference</Collection>
      <ShelfLocationID/>
      <ShelfLocation/>
      <CallNumber>R</CallNumber>
      <CopyNumber/>
      <VolumeNumber/>
   </RemoteStoragesItemsGettRow>
</RemoteStorageItemsGetRows>undefined</RemoteStoragesItemsGetResult>
```

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SAMobilePhoneCarriersGetResult

This method returns content from the SA_MobilePhoneCarriers table for a specified organization, which specifies the mobile phone carrier selections available for patron record phone fields.

GET /protected/[1]/{AccessToken}/sysadmin/mobilephonecarriers

Authorization required?

Yes

XML Elements Returned

One or more hold requests placed by the patron. The list is sorted in ascending order by activation date.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
CarrierID	ID of mobile phone carrier
CarrierName	Name of mobile phone carrier
Email2SMSEmailAddress	SMS address
NumberOfDigits	Specifies number of digits in phone number; always 10
Display	Display flag

Example

```
https://qa-saturn.polarislibrary.com/PAPIService/REST/protected/v1/1033/100/3/
OwrTPOlnpRtHYILu4vjKj2cmoGLZQ5zh/sysadmin/mobilephonecarriers
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Return - Success

```
HTTP/1.1 200 OK
<SAMobilePhoneCarriersGetResult
    xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <PAPIErrorCode>26</PAPIErrorCode>
    <ErrorMessage></ErrorMessage>
    <SAMobilePhoneCarriersGetRows>
        <SAMobilePhoneCarriersGetRow>
            <CarrierID>1</CarrierID>
            <CarrierName>AT&amp;amp;T</CarrierName>
            <Email2SMSEmailAddress>@txt.att.net</Email2SMSEmailAddress>
            <NumberOfDigits>10</NumberOfDigits>
            <Display>true</Display>
        </SAMobilePhoneCarriersGetRow>
        <SAMobilePhoneCarriersGetRow>
            <CarrierID>2</CarrierID>
            <CarrierName>Bell Canada</CarrierName>
            <Email2SMSEmailAddress>@txt.bellmobility.ca</Email2SMSEmailAddress>
            <NumberOfDigits>10</NumberOfDigits>
            <Display>false</Display>
        </SAMobilePhoneCarriersGetRow>
    </SAMobilePhoneCarriersGetRows>
</SAMobilePhoneCarriersGetResult>
```

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SortOptionsGet

Returns list of valid sort options.

GET /public/[1]/sortoptions

Authorization required?

Yes, if authentication level set to ALL

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
Code	Sort code
Description	Description used to display to user
Options	Sort option used to build CCL

Example

```
http://localhost/PAPIService/REST/public/v1/1033/100/74/sortoptions
```

Return - Success

```
HTTP/1.1 200 OK
<SortOptionsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>16</PAPIErrorCode>
   <ErrorMessage/>
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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```
   <SortOptionsRows>
      <SortOptionsRow>
         <Code>RELEVANCE</Code>
         <Description>Relevance</Description>
         <Options>RELEVANCE</Options>
      </SortOptionsRow>
      ...
      <SortOptionsRow>
         <Code>CALL_PD</Code>
         <Description>Call number, then Publication Date</Description>
         <Options>CALL, PD DESC</Options>
      </SortOptionsRow>
   </SortOptionsRows>
</SortOptionsGetResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<SortOptionsGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Invalid type specified</ErrorMessage>
   <SortOptionsRows i:nil="true"/>
</SortOptionsGetResult>
```

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UpdatePickupBranchID

This method updates the pickup branch for a hold request when the patron requests the change. The hold request status must be one that is allowed for change requests according to the system-level Polaris Administration setting for the Request parameter **Holds Options - Pickup**. Possible allowed statuses include Active, Held, Inactive, Located, Pending, and Shipped.

PUT /public/[1]/patron/{PatronBarcode}/holdrequests/{RequestID}/pickupbranch?userid={user_id}&wsid={workstation_id}&pickupbranchid={pickupbranch_id}

URI Parameters

Name	Required	Description/Notes
RequestID	Yes	ID of the hold request.
PatronBarcode	Yes	Barcode of patron.

Query String Parameters

Name	Required	Description/Notes
wsid	Yes	ID of the workstation making the endpoint call. This is used in checking if the caller has permission to update the pickup branch.
userid	Yes	ID of the Polaris user making the endpoint call. This is used in checking if the caller has permission to update the pickup branch.
pickupbranchid	Yes	Internal branch ID that the existing hold request should be change to.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML elements returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Example

```
https://qa-saturn.polarislibrary.com/PAPIService/REST/public/v1/1033/100/1/patron/
12345678/holdrequests/123/pickupbranch?userid=1&wsid=1&pickupbranchid=3
```

Return - Success

```
HTTP/1.1 200 OK
<PAPIResult
    xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <PAPIErrorCode>0</PAPIErrorCode>
    <ErrorMessage/>
</PAPIResult>
```

Error Message

An invalid request status ID returns the error message **Cannot change pickup branch for request in statusID** (-4016). In addition to any request statuses not allowed due to system administration settings, invalid status IDs include the following:

Invalid StatusID	Description
7	Not supplied
8	Unclaimed
9	Expired
16	Cancelled
17	Out to patron

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RequestsUpdateStatus

This protected method will update the request status.

> **Important:** A call to AuthenticateStaffUser is required before calling any protected method. Patron blocks are de-duplicated on creation. Duplicate blocks are not allowed.

PUT /protected/[1]/{access_token}/circulation/requests/{request_id}/status?action={status_action}

PAPI Error Codes Unique to This Method

PAPI Error Codes	Description
-4003	Invalid request ID specified
-4407	Request status invalid for this process
-4408	Invalid request status change requested
-4409	Invalid hold user not supplied reason
-4410	This is the only item available for the hold
-4411	No other items are available to fill the hold

Authorization required?

Yes

Protected method

Yes

URI Parameters

Name	Required	Description/Notes
RequestID	Yes	The request being acted upon

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Query String Parameters

Name	Required	Description/Notes
action	Yes	Valid actions include: deny = Deny request locate = Sets the request status to located. return = Sets the request status to pending if the request has been set to located in error. askmelater = Submits the hold request to the askmelater process.
itemid	Conditionally	The ItemRecordID of the item bound to the request. The value is required for the following actions: locate, return, askmelater
denyreason	Conditionally	The ReasonID from the table HoldUser-NotSuppliedReasons. This value is required for the "deny" action.

XML Elements Returned

The following XML elements are returned.

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

Body

N/A

Locate Example

```
http://egraham-r2.gisinfosystems.com/PlatoPAPIService/REST/protected/v1/1033/100/1/
aj3TJCD4CeYB8bNFeV5tdiNd1ME37wZt/circulation/requests/12345/status?action=locate&
itemid=4527
```

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Return Example

```
http://egraham-r2.gisinfosystems.com/PlatoPAPIService/REST/protected/v1/1033/100/1/
aj3TJCD4CeYB8bNFeV5tdiNd1ME37wZt/ circulation/requests/12345/status?action=return&
itemid=4527
```

Ask Me Later Example

```
http://egraham-r2.gisinfosystems.com/PlatoPAPIService/REST/protected/v1/1033/100/1/
aj3TJCD4CeYB8bNFeV5tdiNd1ME37wZt/ circulation/requests/12345/status?action=
askmelater&itemid=4527
```

Deny Example

```
http://egraham-r2.gisinfosystems.com/PlatoPAPIService/REST/protected/v1/1033/100/1/
aj3TJCD4CeYB8bNFeV5tdiNd1ME37wZt/ circulation/requests/12345/ status?action=deny&
denyreason =4527
```

Return

```
<PAPIResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</PAPIResult>
```

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Synch Methods for 3rd Party Discovery Interfaces

These protected methods have been developed for use in synchronizing third-party discovery interfaces with the Polaris database.

See Also:

- "Patron_GetBarcodeFromID" on the next page.
- "Synch_AuthsByIDGet" on page 231.
- "Synch_BibsByIDGet" on page 234.
- "Synch_BibsPagedGet" on page 237.
- "Synch_BibReplacementIDGet" on page 240.
- "Synch_GetAuthIDList" on page 243.
- "Synch_GetBibIDList" on page 245.
- "Synch_GetDeletedAuths" on page 247.
- "Synch_GetDeletedAuthsPaged" on page 249.
- "Synch_GetDeletedBibs" on page 251.
- "Synch_GetDeletedBibsPaged" on page 253.
- "Synch_GetDeletedItems" on page 255.
- "Synch_GetDeletedItemsPaged" on page 257.
- "Synch_GetDeletedPatrons" on page 259.
- "Synch_GetDeletedPatronsPaged" on page 261.
- "Synch_GetItemIDList" on page 263.
- "Synch_GetMaxAuthID" on page 265.
- "Synch_GetMaxBibID" on page 267.
- "Synch_GetMaxItemID" on page 269.
- "Synch_GetSubscriptionsByID" on page 271.
- "Synch_Get UpdatedAuths" on page 279.
- "Synch_GetUpdatedAuthsPaged" on page 281.
- "Synch_GetUpdatedBibs" on page 283.
- "Synch_GetUpdatedBibsPaged" on page 285.
- "Synch_GetUpdatedItems" on page 287.
- "Synch_GetUpdatedItemsPaged" on page 290.
- "Synch_ItemsByBibIDGet" on page 293.
- "Synch_ItemByIDGet" on page 297.

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Patron_GetBarcodeFromID

This method derives a patron barcode from a patron ID. The return value includes both the patron ID and barcode.

> **Important:** The barcode node of the return XML document may be empty. This may indicate one of the following conditions:
>
> - The patron record has been deleted.
> - The patron ID does not exist in the Polaris Database.
> - The patron does not have a barcode assigned.
> - This method accepts only one patron ID at a time.
> - This method returns a generic GetBarcodeAndPatronIDResult XML structure (see below).
>
> A call to AuthenticateStaffUser is required before calling any protected methods.

`GET` /protected/[1]/{AccessToken}/patron/barcode?patronid={PatronID}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
PatronID	Integer	Yes	ID of patron

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BarcodeAndPatronIDRows	List of Patron ID's and barcodes
BarcodeAndPatronIDRow	Container for data
PatronID	The PatronID passed in by the user
Barcode	The patrons barcode (if any)

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6T
QHPGsy1tlZPr/patron/barcode?patronid=15
```

Return

```
<GetBarcodeAndPatronIDResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BarcodeAndPatronIDRows>
      <BarcodeAndPatronIDRow>
         <PatronID>15</PatronID>
         <Barcode>1000200000395</Barcode>
      </BarcodeAndPatronIDRow>
   </BarcodeAndPatronIDRows>
</GetBarcodeAndPatronIDResult>
```

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Synch_AuthsByIDGet

This method returns a list of authority record IDs and a MARC XML representation of the authority record (s) requested by the user. The specific authorities returned by this method may be specified using a comma-delimited list of authority record IDs.

Documentation for the MARC XML schema may be found at the Library of Congress at: **http://www.loc.gov/standards/marcxml/**

> **Important:** No more than 50 authority records may be requested at a time. Authority record IDs must be numeric. If an authority record requested does not exist, a row will not be returned.

A call to AuthenticateStaffUser is required before calling any protected methods.

URI

`GET` /protected/[1]/{AccessToken}/synch/auths/MARCXML?authids={AuthIDList}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
AuthIDList	Integer	Yes	Authority record IDs

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
GetAuthsByIDRows	List of authority record IDs and MARCXML records
GetAuthsByIDRow	Container for data
AuthorityRecordID	Authority record ID of the record
AuthorityRecordXML	An HTML Encoded representation of MARCXML data. Important: The character coding scheme is Unicode.

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6T
QHPGsy1tlZPr/synch/auths/ MARCXML?authids=1,5,7,9,11
```

Return

```
HTTP/1.1 200 OK
<GetAuthsByIDResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <GetAuthsByIDRows>
      <GetAuthsByIDRow>
         <AuthorityRecordID>1</AuthorityRecordID >
         <AuthorityRecordXML>
            <marc:collection
            xsi:schemaLocation="http://www.loc.gov/standards/marcxml/schema/MARC21s
            lim.xsd"
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xmlns:marc="http://www.loc.gov/MARC21/slim">
               <marc:record>
                  <marc:leader>|||||nza22|||||n 4500</marc:leader>
                  <marc:controlfield tag="005">20120404203605.0</marc:controlfield>
```

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```
                    <marc:controlfield tag="008">000104n| acannaabn |n
                    aaa</marc:controlfield>
                    <marc:datafield tag="010" ind1=" " ind2=" ">
                       <marc:subfield code="a">n 00000050</marc:subfield>
                    </marc:datafield>
                    <marc:datafield tag="040" ind1=" " ind2=" ">
                       <marc:subfield code="a">DLC</marc:subfield>
                       <marc:subfield code="b">eng</marc:subfield>
                       <marc:subfield code="c">DLC</marc:subfield>
                    </marc:datafield>
                    <marc:datafield tag="100" ind1="1" ind2=" ">
                       <marc:subfield code="a">Pember, Ann,</marc:subfield>
                       <marc:subfield code="d">1946-</marc:subfield>
                    </marc:datafield>
                    <marc:datafield tag="670" ind1=" "ind2=" ">
                       <marc:subfield code="a">Pember, Ann. Painting close-focus
                       flowers in watercolor, 2000:</marc:subfield>
                       <marc:subfield code="b">CIP t.p. (Ann Pember) data sheet (b.
                       04-26-46)</marc:subfield>
                    </marc:datafield>
                </marc:record>
             </marc:collection>
          </AuthorityRecordXML>
       </GetAuthsByIDRow>
    </GetAuthsByIDRows>
</GeAuthsByIDResult>
```

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Synch_BibsByIDGet

This method returns a list of bibliographic record IDs and a MARC XML representation of the bibliographic record(s) requested by the user. The specific bibliographic records returned by this method may be queried using a single bibliographic record ID, a comma-delimited list of IDs, or by specifying a range. For example:

- Individual bibliographic record query: **?bibids=243**
- Comma-delimited query: **?bibids=243,253,657,2980,32,35**
- Ranged query: **?bibids=243-280**

> **Note:** Query types cannot be combined in a single query. An individual or comma-delimited query must be made separate from a ranged query.

Documentation for the MARC XML schema may be found at the Library of Congress: **http://www.loc.gov/standards/marcxml/**

> **Important:** No more than 50 bibliographic records may be requested at a time. Bibliographic record IDs must be numeric. If a bibliographic record requested does not exist, a row will not be returned. A call to AuthenticateStaffUser is required before calling any protected methods.

`GET` /protected/[1]/{AccessToken}/synch/bibs/MARCXML?bibids={BibIDList}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
bibids	Integer	Yes	Bibliographic record IDs
includeItems		No	When retrieving records, include an 852 tag for each item record linked to the bibliographic record.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
GetBibsByIDRows	List of bibliographic record IDs and MARCXML records.
GetBibsByIDRow	Container for data.
BibliographicRecordID	Bib record ID of the record.
BibliographicRecordXML	An HTML Encoded representation of MARCXML data. Important: The character coding scheme is Unicode.
IsDisplayInPAC	Boolean true or false. Indicates if the library wishes the record to display in PAC.
CreationDate	The date and time that the record was created in the system.
FirstAvailableDate	The first available date for the bib is the first day the first item linked to the bib becomes available for circulation. This data can be NULL.
ModificationDate	The date and time of last record modification. This data may be NULL.

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7
MXZuJYREw6TQHPGsy1tlZPr/synch/bibs/ MARCXML?bibids=1,5,7,9,11
```

Return

```
HTTP/1.1 200 OK
<GetBibsByIDResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <GetBibsByIDRows>
      <GetBibsByIDRow>
```

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```
         <BibliographicRecordID>1</BibliographicRecordID>
         <BibliographicRecordXML>
            <marc:collection xsi:schemaLocation="http://www.loc.gov/MARC21/slim
               http://www.loc.gov/standards/marcxml/schema/MARC21slim.xsd"
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xmlns:marc="http://www.loc.gov/MARC21/slim">
               <marc:record>
                  <marc:leader>|||||cama22||||| a 4500</marc:leader>
                  <marc:controlfield tag="001">16</marc:controlfield>
                  <marc:controlfieldtag="005">20091119153925.0 </marc:controlfield>
                   <marc:controlfieldtag="008">770331s1977 nyua j 000 1 eng
                  u</marc:controlfield>
                  <marc:datafield tag="010" ind1=" " ind2=" ">
                     <marc:subfield code="a"> 77005747</marc:subfield>
                     <marc:subfield code="z">02894080</marc:subfield>
                  </marc:datafield>
                  ...
                  <marc:datafield tag="999" ind1=" " ind2=" ">
                     <marc:subfield code="b">JP Fict Cha</marc:subfield>
                     <marc:subfield code="c">0</marc:subfield>
                     <marc:subfield code="g">0</marc:subfield>
                     <marc:subfield code="h">0</marc:subfield>
                     <marc:subfield code="i">2</marc:subfield>
                     <marc:subfield code="j">15</marc:subfield>
                     <marc:subfield code="k">0</marc:subfield>
                     <marc:subfield code="x">JP Fict Cha</marc:subfield>
                  </marc:datafield>
               </marc:record>
            </marc:collection>
         </BibliographicRecordXML>
         <IsDisplayInPAC>true</IsDisplayInPAC>
         <CreationDate>2009-07-28T11:57:09.347</CreationDate>
         <FirstAvailableDate>2009-07-28T11:57:09.347</FirstAvailableDate>
         <ModificationDate>2009-07-28T11:57:09.347</ModificationDate>
      </GetBibsByIDRow>
   </GetBibsByIDRows>
</GetBibsByIDResult>
```

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Synch_BibsPagedGet

This method returns a list of bibliographic records in MARC XML representation. The specific bibliographic records returned are in order of bibliographic record id starting with the id after the "lastid" parameter. The number of records returned is specified by the "nrecs" parameter. Documentation for the MARC XML schema is found at the Library of Congress: http://www.loc.gov/standards/marcxml/

The date range specifiers are optional. Both created and modified date ranges may be provided in the same call. A bibliographic record will be included if it matches either of the date ranges.

> **Important:** No more than 100 bibliographic records may be requested at a time. Bibliographic record ID specified must be numeric. If a bibliographic record requested does not exist, a row will not be returned.

GET /protected/[1]/{AccessToken}/synch/bibs/MARCXML/paged

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
lastID	Use 0 when starting the retrieval process, otherwise, use the last retrieved ID	No	The highest Bibliographic Record ID of the last "page" of bibliographic records retrieved. This allows for the current page of records returned to follow sequentially from the previous page retrieved.
nrecs		No	The number of records returned.
startdatecreated		No	Start date and time of the range of bibliographic records to retrieve by creation date. This is optional. If no date specified, it is assumed to be the beginning of time.
enddatecreated		No	End date and time of the range of bibliographic records to retrieve by creation date. This is

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Name	Value	Required	Description/Notes
			optional. If no date specified, it is assumed to be the current date and time.
startdatemodified		No	Start date and time of the range of bibliographic records to retrieve by modification date. This is optional. If no date specified, it is assumed to be beginning of time.
enddatemodified		No	End date and time of the range of bibliographic records to retrieve by creation date. This is optional. If no date specified, it is assumed to be the current date and time.
includeItems		No	When retrieving records, include an 852 tag for each item record linked to the bibliographic record.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
LastID	The highest Bibliographic Record ID of the current "page" of bibliographic records retrieved. This is typically used to pass into the next call to this endpoint to retrieve sequential groups of bibliographic records.
BibliographicRecordID	Internal Polaris numeric identifier of the bibliographic record.
IsDisplayInPAC	Does this bibliographic record show in public searches in the PAC.
CreationDate	Date that the bibliographic record was initially cataloged into the Polaris system.
FirstAvailableDate	The date that at least one item attached to the bibliographic record first becomes available for circulation.
ModificationDate	The most recent date the bibliographic record was modified.
BibliographicRecordXML	XML-formatted MARC version of the bibliographic record.

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Example

The following example queries a page of 25 records beginning with bib records after bib id of 19782 that were created after 1/1/2019.

```
protected/{Version}/{LangID}/{AppID}/{OrgID}/{AccessToken}/synch/bibs/MARCXML/paged?
nrecs=25&lastid=19782&startdatecreated=2019-01-01
```

Return

```
HTTP/1.1 200 OK

<GetBibsPagedResult>
   <PAPIErrorCode>1</PAPIErrorCode>
   <ErrorMessage>string</ErrorMessage>
   <LastID>1</LastID>
   <GetBibsPagedRows>
      <BibliographicRecordID>1</BibliographicRecordID>
      <IsDisplayInPAC>true</IsDisplayInPAC>
      <CreationDate>1970-01-01T00:00:00.001Z</CreationDate>
      <FirstAvailableDate>1970-01-01T00:00:00.001Z</FirstAvailableDate>
      <ModificationDate>1970-01-01T00:00:00.001Z</ModificationDate>
      <BibliographicRecordXML>string</BibliographicRecordXML>
   </GetBibsPagedRows>
</GetBibsPagedResult>
```

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Synch_BibReplacementIDGet

This method returns a list of bibliographic record ID replacements based on a specified start date. It will return up to 60 days of change data. If internal Polaris bibliographic record IDs are stored outside of the Polaris database, this method will help keep external data synchronized with the Polaris database when bibliographic record IDs change.

Bibliographic record IDs may be replaced in several circumstances. For example, a brief MARC record may be created for a title that does not exist in the catalog. Later, a more descriptive record may be imported. The old record is overlaid with the new record and the underlying internal bibliographic record ID is changed. As another example, when new items are received for an existing bibliographic record, the process may overlay the existing bibliographic record and change the underlying bibliographic record ID if new MARC data is supplied.

> **Important:** This method builds a data set based on Polaris transactions data. The transactions **Bibliographic record deleted**, **Bibliographic record created**, and **Bibliographic Record marked for deletion** must be logged. In Polaris Administration, open the system-level database table **Transaction Logging** to verify that these transactions are set to be logged.

A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/AccessToken}/synch/bibs/replacementids?startdate={startdate}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
startdate	YYYY-mm-dd	Yes	Start date of bibliographic record ID replacements

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BibReplacementIDRows	List of replacement ID rows
BibReplacementIDRow	Container for replacement data
OriginalBibRecordID	Bib record ID that has been replaced
NewBibliographicRecordID	Bib record ID that replaced the original ID
ReplacementDate	Date the overlay occurred

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQ
HPGsy1tlZPr/synch/bibs/replacementids?startdate=2012-02-01
```

Return

```
HTTP/1.1 200 OK
<BibReplacementIDGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibReplacementIDRows>
      <BibReplacementIDRow>
         <OriginalBibRecordID>20790</OriginalBibRecordID>
         <NewBibliographicRecordID>793031</NewBibliographicRecordID>
         <ReplacementDate>2012-02-13T12:10:10</ReplacementDate>
      </BibReplacementIDRow>
      <BibReplacementIDRow>
         <OriginalBibRecordID>601531</OriginalBibRecordID>
         <NewBibliographicRecordID>793032</NewBibliographicRecordID>
         <ReplacementDate>2012-02-13T12:14:10</ReplacementDate>
      </BibReplacementIDRow>
      <BibReplacementIDRow>
```

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```
          <OriginalBibRecordID>793031</OriginalBibRecordID>
          <NewBibliographicRecordID>793032</NewBibliographicRecordID>
          <ReplacementDate>2012-02-13T12:14:11</ReplacementDate>
       </BibReplacementIDRow>
    </BibReplacementIDRows>
</BibReplacementIDGetResult>
```

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Synch_GetAuthIDList

This method gets a list of authority record IDs from a specified record ID. An optional parameter is available to allow the user to specify the number of record IDs to retrieve. A maximum 1,000 record IDs are returned for each call to this method.

> **Important:** This method provides information for item records that have a "final" status and are set to display in PAC. The items must be attached to a bibliographic record that has a status of final and displays in PAC. An optional parameter "nrecs" may be specified. The parameter allows the user to return a particular number of records. This method returns a generic AuthIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]}/{AccessToken}/synch/auths/idlist?startid={startid}&nrecs={numberofrecords}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
startid	Integer	Yes	Starting record ID
numberofrecords	Integer	No	Number of record IDs to retrieve

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.

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Name	Description/Notes
ErrorMessage	Error or information message
AuthIDListRows	List of item record IDs
AuthIDListRow	Container for data
AuthorityRecordID	The authority Record ID

Examples

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/auths/idlist?startid=60000

https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/auths/idlist?startid=60000&nrecs=150
```

Return

```
HTTP/1.1 200 OK
<AuthIDListGetResult
    xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <PAPIErrorCode>0</PAPIErrorCode>
    <ErrorMessage/>
    <AuthIDListRows>
        <AuthIDListRow>
            <AuthorityRecordID>807343</AuthorityRecordID>
        </AuthIDListRow>
    </AuthIDListRows>
</AuthIDListGetResult>
```

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Synch_GetBibIDList

This method gets a list of bibliographic record IDs from a specified record ID. An optional parameter is available to allow the user to specify the number of record IDs to retrieve. A maximum 1,000 record IDs are returned for each call to this method.

> **Important:** This method provides information for bibliographic records that have a "final" status.
>
> An optional parameter "nrecs" may be specified. The parameter allows the user to return a particular number of records. This method returns a generic BibIDListGetResult XML structure (see below).
>
> A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/bibs/idlist?startid={startid}&nrecs={numberofrecords}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
startid	integer	Yes	Starting record ID
numberofrecords	integer	No	Number of record IDs to retrieve

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BibIDListRows	List of bibliographic record IDs
BibIDListRow	Container for data
BibliographicRecordID	The Bibliographic Record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQ
HPGsy1tlZPr/synch/bibs/idlist?startid=60000

https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQ
HPGsy1tlZPr/synch/bibs/idlist?startid=60000&nrecs=150
```

Return

```
HTTP/1.1 200 OK
<BibIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibIDListRows>
      <BibIDListRow>
         <BibliographicRecordID>600000</BibliographicRecordID>
      </BibIDListRow>
   </BibIDListRows>
</BibIDListGetResult>
```

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Synch_GetDeletedAuths

This method returns a list of authority record IDs for records that have been deleted since a specified date and time.

> **Important:** This method provides information for authority records that have been deleted in the Polaris ILS.This method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed.This method returns a generic AuthIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/auths/delete

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time)

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
AuthIDListRows	List of item record IDs

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Name	Description/Notes
AuthIDListRow	Container for data
AuthorityRecordID	The Authority Record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQ
HPGsy1tlZPr/synch/auths/deleted?deletedate=12/2/2011 13:00:00
```

Return

```
HTTP/1.1 200 OK
<AuthIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <AuthIDListRows>
      <AuthIDListRow>
         <AuthorityRecordID>807343</AuthorityRecordID>
      </AuthIDListRow>
   </AuthIDListRows>
</AuthIDListGetResult>
```

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Synch_GetDeletedAuthsPaged

This method returns a list of authority record IDs for records that have been deleted since a specified date and time. The paged method allows the retrieval of the ID list in smaller packets.

A date, last record ID, and number of records to return must be specified. When retrieving the first set of records, the "lastid" of 0 forces the process to start at the beginning of the list. Then, when retrieving subsequent records, the "lastid" is used as the starting ID for the next request.

> **Important:** This method provides information for authority records that have been deleted in the Polaris ILS. This method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed. This method returns a generic AuthIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/auths/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time)
lastid	Use 0 when starting the retrieval process. Otherwise, use the last retrieved ID	No	
nrecs	Number of records to return	Yes	

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
AuthIDListRows	List of item record IDs
AuthIDListRow	Container for data
AuthorityRecordID	The Authority Record ID

Example

```
https://[HOSTNAME]/PAPISevice/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/auths/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10
```

Return

```
HTTP/1.1 200 OK
<AuthIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <AuthIDListRows>
      <AuthIDListRow>
         <AuthorityRecordID>807343</AuthorityRecordID>
      </AuthIDListRow>
   </AuthIDListRows>
</AuthIDListGetResult>
```

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Synch_GetDeletedBibs

This method returns a list of bibliographic record IDs for records that have been deleted since a specified date and time.

> **Important:** This method provides a list of bibliographic records that have been deleted in the Polaris ILS. The method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed. The returned data contains a generic BibIDListGetResult XML structure (see below).

GET /protected/[1]/{AccessToken}/synch/bibs/deleted?deletedate={deletedate}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time).

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BibIDListRows	List of Bibliographic record IDs
BibIDListRow	Container for data
BibliographicRecordID	The Bibliographic Record ID

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Example

```
https:/[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZu
JYREw6TQHPGsy1tlZPr/synch/bibs/deleted?deletedate=12/2/2011 13:00:00
```

Return

```
HTTP/1.1 200 OK
<BibIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibIDListRows>
      <BibIDListRow>
         <BibliographicRecordID>803851</BibliographicRecordID>
      </BibIDListRow>
   </BibIDListRows>
</BibIDListGetResult>
```

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Synch_GetDeletedBibsPaged

This method returns a list of bibliographic record IDs for records that have been deleted since a specified date and time. The paged method allows the retrieval of the ID list in smaller packets.

A date, last record ID, and number of records to return must be specified. When retrieving the first set of records, the "lastid" of 0 forces the process to start at the beginning of the list. When retrieving subsequent records, the "lastid" value is set to the last retrieved record ID.

> **Important:** This method provides a list of bibliographic records that have been deleted in the Polaris ILS. The method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed. Use the lastid parameter to specify the starting point in the 'paged' list. Use 0 to start at the beginning. Use the nrecs parameter to specify the number of records to return. This method returns a generic BibIDListGetResult XML structure (see below).

GET /protected/[1]/{AccessToken}/synch/bibs/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time)
lastid	Use 0 when starting the retrieval process. Otherwise, use the last retrieved ID	No	
nrecs	Number of records to return	Yes	

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BibIDListRows	List of Bibliographic record IDs
BibIDListRow	Container for data
BibliographicRecordID	The Bibliographic Record ID

Example

```
https://[HOSTNAME]/PAPISevice/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQ
HPGsy1tlZPr/synch/bibs/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10
```

Return

```
HTTP/1.1 200 OK
<BibIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibIDListRows>
      <BibIDListRow>
         <BibliographicRecordID>803851</BibliographicRecordID>
      </BibIDListRow>
   </BibIDListRows>
</BibIDListGetResult>
```

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Synch_GetDeletedItems

This method returns a list of item record IDs for records that have been deleted since a specified date and time.

> **Important:** This method provides a list of item records that have been deleted in the Polaris ILS. The method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed.This method returns a generic ItemIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected methods.

`GET` /protected/[1]/{AccessToken}/synch/items/deleted?deletedate={deletedate}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time)

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemIDListRows	List of Item record IDs
ItemIDListRow	Container for data
ItemRecordID	The Item Record ID

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Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZ
uJYREw6TQHPGsy1tlZPr/synch/items/deleted?deletedate=12/2/2011 13:00:00
```

Return

```
HTTP/1.1 200 OK
<ItemIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode><ErrorMessage/>
   <ItemIDListRows>
      <ItemIDListRow>
         <ItemRecordID>9367071</ItemRecordID>
      </ItemIDListRow>
   </ItemIDListRows>
</ItemIDListGetResult>
```

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Synch_GetDeletedItemsPaged

This method returns a list of item record IDs for records that have been deleted since a specified date and time. The paged method allows the retrieval of the ID list in smaller packets.

A date, last record ID, and number of records to return must be specified. When retrieving the first set of records, the "lastid" of 0 forces the process to start at the beginning of the list. When retrieving subsequent records, the "lastid" value is set to the last retrieved record ID.

> **Important:** This method provides a list of bibliographic records that have been deleted in the Polaris ILS. The method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed.
>
> Use the lastid parameter to specify the starting point in the 'paged' list. Use 0 to start at the beginning. Use the nrecs parameter to specify the number of records to return.
>
> This method returns a generic ItemIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/bibs/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time)
lastid	Use 0 when starting the retrieval process, otherwise, use the last retrieved ID	No	
nrecs	Number of records to return	Yes	

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemIDListRows	List of Item record IDs
ItemIDListRow	Container for data
ItemRecordID	The Item Record ID

Example

```
https://[HOSTNAME]/PAPISevice/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/items/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10
```

Return

```
HTTP/1.1 200 OK
<ItemIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode><ErrorMessage/>
   <ItemIDListRows>
      <ItemIDListRow>
         <ItemRecordID>9367071</ItemRecordID>
      </ItemIDListRow>
   </ItemIDListRows>
</ItemIDListGetResult>
```

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Synch_GetDeletedPatrons

This method returns a list of patron records that have been deleted since a specified date and time. The return value includes both the patron ID and barcode.

> **Important:** This method provides a list of patron records that have been deleted in the Polaris ILS. The method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed. It returns a generic GetBarcodeAndPatronIDResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected method.

GET /protected/[1]/{AccessToken}/synch/patrons/deleted?deletedate={deletedate}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time)

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
PatronAndBarcodeIDRows	List of patron record IDs and barcodes

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Name	Description/Notes
PatronAndBarcodeIDRow	Container for data
PatronID	The PatronID passed in by the user
Barcode	The patron's barcode (if any)

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/patrons/deleted?deletedate=12/2/2011 13:00:00
```

Return

```
HTTP/1.1 200 OK
<GetBarcodeAndPatronIDResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BarcodeAndPatronIDRows>
      <BarcodeAndPatronIDRow>
         <PatronID>15</PatronID>
         <Barcode>1000200000395</Barcode>
      </BarcodeAndPatronIDRow>
      </BarcodeAndPatronIDRows>
</GetBarcodeAndPatronIDResult>
```

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Synch_GetDeletedPatronsPaged

This method returns a list of patron record IDs for records that have been deleted since a specified date and time. The paged method allows the retrieval of the ID list in smaller packets.

A date, last record ID, and number of records to return must be specified. When retrieving the first set of records, the "lastid" of 0 forces the process to start at the beginning of the list. When retrieving subsequent records, the "lastid" value is set to the last retrieved record ID.

> **Important:** This method provides a list of patron records that have been deleted in the Polaris ILS. The method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed. It returns a generic GetBarcodeAndPatronIDResult XML structure (see below).
>
> Use the lastid parameter to specify the starting point in the 'paged' list. Use 0 to start at the beginning. Use the nrecs parameter to specify the number of records to return.
>
> A call to AuthenticateStaffUser is required before calling any protected method.

GET /protected/[1]/{AccessToken}/synch/patrons/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
deletedate	MM/DD/YYYY HH:MM:SS	Yes	Start date and time (records that have been deleted since this date/time)
lastid	Use 0 when starting the retrieval process, otherwise, use the last retrieved ID	No	
nrecs	Number of records to return	Yes	

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
PatronAndBarcodeIDRows	List of patron record IDs and barcodes
PatronAndBarcodeIDRow	Container for data
PatronID	The PatronID passed in by the user
Barcode	The patron's barcode (if any)

Example

```
https://[HOSTNAME]/PAPISevice/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/patrons/deleted/paged?deletedate=1/1/2017&lastid=0&nrecs=10
```

Return

```
HTTP/1.1 200 OK
<GetBarcodeAndPatronIDResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BarcodeAndPatronIDRows>
      <BarcodeAndPatronIDRow>
         <PatronID>15</PatronID>
         <Barcode>1000200000395</Barcode>
      </BarcodeAndPatronIDRow>
   </BarcodeAndPatronIDRows>
</GetBarcodeAndPatronIDResult>
```

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Synch_GetItemIDList

This method gets a list of item record IDs from a specified record ID. An optional parameter is available to allow the user to specify the number of record IDs to retrieve. A maximum 1,000 record IDs are returned for each call to this method.

> **Important:** This method provides information for item records that have a "final" status and are attached to a bibliographic record that has a status of final. An optional parameter "nrecs" may be specified. The parameter allows the user to return a particular number of records. This method returns a generic ItemIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/items/idlist?startid={startid}&nrecs={numberofrecords}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
startid	Integer	Yes	Starting record ID
numberofrecords	Integer	No	Number of record IDs to retrieve

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

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Name	Description/Notes
ItemIDListRows	List of item record IDs
ItemIDListRow	Container for data
ItemRecordID	The item record ID

Examples

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPGsy1tlZPr/synch/items/idlist?startid=60000

https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPGsy1tlZPr/synch/items/idlist?startid=60000&nrecs=150
```

Return

```
HTTP/1.1 200 OK
<ItemIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode><ErrorMessage/>
   <ItemIDListRows>
      <ItemIDListRow>
         <ItemRecordID>9367071</ItemRecordID>
      </ItemIDListRow>
   </ItemIDListRows>
</ItemIDListGetResult>
```

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Synch_GetMaxAuthID

This method returns the maximum authority record ID.

> **Important:** This method provides information for item records that have a "final" status. It returns a generic AuthIDListGetResult XML structure (see below).
>
> A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/auths/maxid

Authorization required?

Yes

Protected method?

Yes

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
AuthIDListRows	List of item record IDs
AuthIDListRow	Container for data
AuthorityRecordID	The authority record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/items/maxid
```

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Return

```
HTTP/1.1 200 OK
<AuthIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <AuthIDListRows>
      <AuthIDListRow>
         <AuthorityRecordID>807343</AuthorityRecordID>
      </AuthIDListRow>
   </AuthIDListRows>
</AuthIDListGetResult>
```

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Synch_GetMaxBibID

This method returns the maximum bibliographic record ID.

> **Important:** This method provides information for bibliographic records that have a "final" status. It returns a generic BibIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected method.

GET /protected/[1]/{AccessToken}/synch/bibs/maxid

Authorization required?

Yes

Protected method?

Yes

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BibIDListRows	List of bibliographic record IDs
BibIDListRow	Container for data
BibliographicRecordID	The bibliographic record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/bibs/maxid
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Return

```
HTTP/1.1 200 OK
<BibIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibIDListRows>
      <BibIDListRow>
         <BibliographicRecordID> 852993 </BibliographicRecordID>
      </BibIDListRow>
   </BibIDListRows>
</BibIDListGetResult>
```

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Synch_GetMaxItemID

This method returns the maximum item record ID.

> **Important:** This method provides information for item records that have a "final" status and are attached to a bibliographic record that has a status of final. It returns a generic ItemIDListGetResult XML structure (see below). A call to AuthenticateStaffUser is required before calling any protected method.

GET /protected/[1]/{AccessToken}/synch/items/maxid

Authorization required?

Yes

Protected method?

Yes

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemIDListRows	List of item record IDs
ItemIDListRow	Container for data
ItemRecordID	The item record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/items/maxid
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Return

```
HTTP/1.1 200 OK
<ItemIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode><ErrorMessage/>
   <ItemIDListRows>
      <ItemIDListRow>
         <ItemRecordID>9367071</ItemRecordID>
      </ItemIDListRow>
   </ItemIDListRows>
</ItemIDListGetResult>
```

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Synch_GetSubscriptionsByID

This method returns a list of serial bibliographic record IDs and an XML representation of the serials subscription information associated with the bibliographic record(s) requested by the user. The information returned by this method may be specified using a comma delimited list of bibliographic record IDs. Data returned may include SHR (Serial Holdings Record) Copy information, Compressed Holdings information, SHR Copy shared public notes, Publication Pattern information, textual holdings information, and Issue/Linked Item information. A third-party discovery interface may use this method to return data when a user clicks a Subscription Information button in the discovery interface.

> **Important:** No more than 50 bibliographic records may be requested at a time. Bibliographic record IDs must be numeric. If a bibliographic record requested does not exist, a row will not be returned. If serials subscription information does not exist for the record, serials information will not be returned by this method.
>
> A call to AuthenticateStaffUser (see "AuthenticateStaffUser" on page 34.) is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/subscriptions/SubscriptionXML?bibids={BibIDList}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Required	Description/Notes
BibIDList	Yes	Comma separated list of bibliographic record IDs for which to return subscription information.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
GetSubscriptionsByIDRows	List of bibliographic record IDs and Subscription XML records
GetSubscriptionsByIDRow	Container for data
BibliographicRecordID	Bib record ID of the record
SubscriptionXMLRecord	An HTML Encoded representation subscription XML Data. **Important:** The character coding scheme is Unicode.

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/subscriptions/SubscriptionXML?bibids=1,5,7,9,11
```

Return

```
HTTP/1.1 200 OK
<GetSubscriptionsByIDResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <GetSubscriptionsByIDRows>
      <GetSubscriptionsByIDRow>
         <BibliographicRecordID>597046</BibliographicRecordID>
         <SubscriptionXMLRecord>
            <Record>
               <BibliographicRecordID>597046</BibliographicRecordID>
               <CopyRecords>
                  <CopyRecord>
                     <CopyID>33</CopyID>
                     <CollectionID>75</CollectionID>
```

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```
<CollectionName>Magazines</CollectionName>
<CompletenessCode>Incomplete</CompletenessCode>
<OrganizationID>101</OrganizationID>
<OrganizationName>Southern Adirondack Library
System</OrganizationName>
<CopyNumber>1</CopyNumber>
<DisplayInPAC>1</DisplayInPAC>
<RetentionDescription>Other general retention
policy</RetentionDescription>
<HoldingsStatement/>
<HoldingsNote/>
<RetentionNote/>
<Notes>
   <Note>
      <Ordinal>1</Ordinal>
      <PublicNote>This is a serials holdings record
      publicnote></PublicNote>
   </Note>
   <Note>
      <Ordinal>2</Ordinal>
      <PublicNote>This is a second Serials holdings record
      public note</PublicNote>
   </Note>
</Notes>
<PubPatterns>
   <PubPattern>
      <PubPatternID>967</PubPatternID>
      <CategoryID>1</CategoryID>
      <Category>Basic Bibliographic Unit</Category>
      <EncodLevelH/>
      <TextualHoldings>Textual Holdings
      note</TextualHoldings>
      <Issues>
         <Issue>
            <IssueID>399</IssueID>
            <IssuePublicNote>Issue Public
            Note</IssuePublicNote>
            <TitleOfSupIndex/>
            <IssueStatusId>1</IssueStatusId>
            <IssueStatus>Received</IssueStatus>
            <Retained>1</Retained>
            <ItemRecordID>0</ItemRecordID>
            <Barcode/>
            <AssignedBranchID>;0</AssignedBranchID>
            <AssignedBranch/>
            <AssignedCollectionID>0</AssignedCollectionID>
```

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```
                                    <Collection/>
                                    <Designation>(Apr. 22 2009)</Designation>
                                    <CallNumber/>
                                    <VolumeNumber/>
                                    <ItemStatusID>0</ItemStatusID>
                                    <ItemStatus/>
                                    <ShelfLocationID>0</ShelfLocationID>
                                    <ShelfLocation/>
                                    <ItemPublicNote/>
                                </Issue>
                                ...
                                <Issue>
                                    <IssueID>407</IssueID>
                                    <IssuePublicNote/>
                                    <TitleOfSupIndex/>
                                    <IssueStatusId>2</IssueStatusId>
                                    <IssueStatus>Expected</IssueStatus>
                                    <ItemRecordID>0</ItemRecordID>
                                    <Barcode/>
                                    <AssignedBranchID>0</AssignedBranchID>
                                    <AssignedBranch/>
                                    <AssignedCollectionID>0</AssignedCollectionID>
                                    <Collection/>
                                    <Designation>(Apr. 22 2017)</Designation>
                                    <CallNumber/>
                                    <VolumeNumber/>
                                    <ItemStatusID>0</ItemStatusID>
                                    <ItemStatus/>
                                    <ShelfLocationID>0</ShelfLocationID>
                                    <ShelfLocation/>
                                    <ItemPublicNote/>
                                </Issue>
                            </Issues>
                        </PubPattern>
                    </PubPatterns>
                </CopyRecord>
            </CopyRecords>
        </Record>
    </SubscriptionXMLRecord>
</GetSubscriptionsByIDRow>
</GetSubscriptionsByIDRows>
</GetSubscriptionsByIDResult>
```

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XML Elements in the Subscription Data

Data Element	Description
Record	Top Level Node
BibliographicRecordID	The Bibliographic Record requested
CopyRecords	A list of copy records (if any) Associated with the Bibliographic Record
CopyID	The Unique ID of the copy record
CollectionID	The collection (if any) assigned to the copy record (0 indicates no collection)
CollectionName	The name of the collection (if any)
CompletenessCode	The completeness code (if any) associated with the copy record
OrganizationID	The organization associated with the copy record
OrganizationName	The organization name associated with the copy record
CopyNumber	The copy number assigned by the library (if any) to the copy record
DisplayInPAC	Indicates if the copy record displays in PAC
RetentionDescription	Describes the library's retention policy
HoldingsStatement	Describes the library's holdings, built by the Polaris ILS
HoldingsNote	A free text description of the library's holdings entered by the library
RetentionNote	A free text description of the library's retention policy
Notes	A list public notes created by the library (if any)
Note	A note associated with the copy record
Ordinal	Indicates the order of the note in the record
PublicNote	The Note
PubPatterns	A list of publication patterns (if any associated with the copy record)
PubPattern	A publication pattern
PubPatternID	A unique ID for the publication pattern
CategoryID	A publication pattern category ID
Category	A description of the publication pattern
EncodLevelH	Indicates the holdings level of textual holdings Indicator Level
TextualHoldings	A free text description of the library's holdings
Issues	A list of the issues associated with a publication pattern (if any)
Issue	An Issue record
IssueID	The unique ID of the issue

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Data Element	Description
IssuePublicNote	A public note entered by the library for the issue (if any)
TitleOfSupIndex	The title of a supplement or index (if any)
IssueStatusId	The Issue Status ID
IssueStatus	A description of the issue status
Retained	Indicates if the library has retained this issue
ItemRecordID	The Item Record associated with the issue (if any) (0 = there is not item record attached)
Barcode	The barcode of the item associated with the issue (if any)
AssignedBranchID	The Polaris Organization that holds the item record (if any)
AssignedBranch	The name of the Polaris organization that holds the item record (if any)
AssignedCollectionID	The collection assigned to the item record (if any)
Collection	The name of the collection assigned to the item record (if any)
Designation	Issue/Part's designation. This string is converted from chronology and enumeration values, formats and captions by Polaris. This is usually the string appears on the publication's face and displays in PAC.
CallNumber	The call number associated with the item (if any)
VolumeNumber	The volume number associated with the item (if any)
ItemStatusID	The ID of the items status (if any)
ItemStatus	A textual description of the items status (if any)
ShelfLocationID	The ID of the items shelf location (if any)
ShelfLocation	A textual description of the item's shelf location (if any)
ItemPublicNote	A public note assigned by the library to the item (if any)

Example: Subscription XML After HTML Decoding

```
<Record>
   <BibliographicRecordID>597046</BibliographicRecordID>
   <CopyRecords>
      <CopyRecord>
         <CopyID>33</CopyID>
         <CollectionID>75</CollectionID>
         <CollectionName>Magazines</CollectionName>
         <CompletenessCode>Incomplete</CompletenessCode>
         <OrganizationID>101</OrganizationID>
         <OrganizationName>Southern Adirondack Library System</OrganizationName>
         <CopyNumber>1</CopyNumber>
```

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```
<DisplayInPAC>1</DisplayInPAC>
<RetentionDescription>Other general retention policy</RetentionDescription>
<HoldingsStatement/>
<HoldingsNote/>
<RetentionNote/>
<Notes>
   <Note>
      <Ordinal>1</Ordinal>
      <PublicNote>This is a serials holdings record public
      note</PublicNote>
   </Note>
   <Note>
      <Ordinal>2</Ordinal>
      <PublicNote>This is a second Serials holdings record
      public</PublicNote>
   </Note>
</Notes>
<PubPatterns>
   <PubPattern>
      <PubPatternID>967</PubPatternID>
      <CategoryID>1</CategoryID>
      <Category>Basic Bibliographic Unit</Category>
      <EncodLevelH/>
      <TextualHoldings>Textual Holdings note</TextualHoldings>
      <Issues>
         <Issue>
            <IssueID>399</IssueID>
            <IssuePublicNote>Issue Public Note</IssuePublicNote>
            <TitleOfSupIndex/>
            <IssueStatusId>1</IssueStatusId>
            <IssueStatus>Received</IssueStatus>
            <Retained>1</Retained>
            <ItemRecordID>0</ItemRecordID>
            <Barcode/>
            <AssignedBranchID>0</AssignedBranchID>
            <AssignedBranch/>
            <AssignedCollectionID>0</AssignedCollectionID>
            <Collection/>
            <Designation>(Apr. 22 2009)</Designation>
            <CallNumber/>
            <VolumeNumber/>
            <ItemStatusID>0</ItemStatusID>
            <ItemStatus/>
            <ShelfLocationID>0</ShelfLocationID>
            <ShelfLocation/>
```

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```
                        <ItemPublicNote/>
                    </Issue>
                    ...
                    <Issue>
                        <IssueID>407</IssueID>
                        <IssuePublicNote/>
                        <TitleOfSupIndex/>
                        <IssueStatusId>2</IssueStatusId>
                        <IssueStatus>Expected</IssueStatus>
                        <ItemRecordID>0</ItemRecordID>
                        <Barcode/>
                        <AssignedBranchID>0</AssignedBranchID>
                        <AssignedBranch/>
                        <AssignedCollectionID>0</AssignedCollectionID>
                        <Collection/>
                        <Designation>(Apr. 22 2017)</Designation>
                        <CallNumber/>
                        <VolumeNumber/>
                        <ItemStatusID>0</ItemStatusID>
                        <ItemStatus/>
                        <ShelfLocationID>0</ShelfLocationID>
                        <ShelfLocation/>
                        <ItemPublicNote/>
                    </Issue>
                </Issues>
            </PubPattern>
        </PubPatterns>
    </CopyRecord>
  </CopyRecords>
</Record>
```

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Synch_Get UpdatedAuths

This method returns a list of authority record IDs for records that have been updated since a specified date and time.

> **Important:** This method provides information for authority records that have been added or updated in the Polaris ILS. The authority record must have a status of "final." Updates to the following dates will cause records to appear on this list: Creation date, imported date, modified date, first use date, or record status date.
>
> This method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed.
>
> This method returns a generic AuthIDListGetResult XML structure (see below).

GET /protected/[1]/{AccessToken}/synch/auths/updated?updatedate={updatedate}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
updatedate	MM/DD/YYYY HH:MM:SS	Yes	Start date for record updates

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
AuthIDListRows	List of item record IDs
AuthIDListRow	Container for data
AuthorityRecordID	The authority record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/auths/updated?updatedate=12/2/2011 13:00:00
```

Return

```
HTTP/1.1 200 OK
<AuthIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <AuthIDListRows>
      <AuthIDListRow>
         <AuthorityRecordID>807343</AuthorityRecordID>
      </AuthIDListRow>
   </AuthIDListRows>
</AuthIDListGetResult>
```

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Synch_GetUpdatedAuthsPaged

This method returns a list of authority record IDs for records that have been updated since a specified date and time using a paging mechanism. The paged method allows the retrieval of the ID list in smaller packets.

A date, last record ID, and number of records to return must be specified. When retrieving the first set of records, the "lastid" of 0 forces the process to start at the beginning of the list. Then, when retrieving subsequent records, the "lastid" is used as the starting ID for the next request.

> **Important:** This method provides information for authority records that have been added or updated in the Polaris ILS. The authority record must have a status of “final.” Updates to the following dates will cause records to appear on this list: Creation date, imported date, modified date, first use date, or record status date.
>
> This method has a date and time parameter. If the time element is not specified, midnight of the day specified is assumed.
>
> This method returns a generic AuthIDListGetResult XML structure (see below).

GET /protected/[1]/{AccessToken}/synch/auths/updated/paged?updatedate=6/5/2017&lastid=0&nrecs=10

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
updatedate	MM/DD/YYYY HH:MM:SS	Yes	Start date for record updates
lastid	Use 0 when starting the retrieval process, otherwise, use the last retrieved ID.	No	
nrecs	Number of records to return	Yes	

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
AuthIDListRows	List of item record IDs
AuthIDListRow	Container for data
AuthorityRecordID	The authority record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/auths/updated/paged?updatedate=6/5/2017&lastid=0&nrecs=10
```

Return

```
HTTP/1.1 200 OK
<AuthIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <AuthIDListRows>
      <AuthIDListRow>
         <AuthorityRecordID>807343</AuthorityRecordID>
      </AuthIDListRow>
   </AuthIDListRows>
</AuthIDListGetResult>
```

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Synch_GetUpdatedBibs

This method returns a list of bibliographic record IDs for records that have been updated since a specified date and time.

> **Important:** This method provides information for bibliographic records with a "final" status. Updates to the following dates will cause records to appear on this list: Creation date, imported date, modified date, first available date, or record status date.
>
> If the time element is not specified, the date and time parameter will assume midnight of the day specified.
>
> This method returns a generic BibIDListGetResult XML structure (see below).
>
> A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/bibs/updated?updatedate={updatedate}

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
updatedate	MM/DD/YYYY HH:MM:SS	Yes	Start date for record updates

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BibIDListRows	List of bibliographic record IDs
BibIDListRow	Container for data
BibliographicRecordID	The bibliographic record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/bibs/updated?updatedate=12/2/2011 13:00:00
```

Return

```
HTTP/1.1 200 OK
<BibIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibIDListRows>
      <BibIDListRow>
         <BibliographicRecordID>803851</BibliographicRecordID>
      </BibIDListRow>
   </BibIDListRows>
</BibIDListGetResult>
```

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Synch_GetUpdatedBibsPaged

This method returns a list of bibliographic record IDs for records that have been updated since a specified date and time.The paged method allows the retrieval of the ID list in smaller packets.

A date, last record ID, and number of records to return must be specified. When retrieving the first set of records, the "lastid" of 0 forces the process to start at the beginning of the list. Then, when retrieving subsequent records, the "lastid" is used as the starting ID for the next request.

> **Important:** This method provides information for bibliographic records with a “final” status. Updates to the following dates will cause records to appear on this list: Creation date, imported date, modified date, first available date, or record status date.
>
> If the time element is not specified, the date and time parameter will assume midnight of the day specified.
>
> This method returns a generic BibIDListGetResult XML structure (see below).
>
> A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/bibs/updated/paged?updatedate=6/5/2017&lastid=0&nrecs=10

Authorization required?

Yes

Protected method?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
updatedate	MM/DD/YYYY HH:MM:SS	Yes	Start date for record updates
lastid	Use 0 when starting the retrieval process, otherwise, use the last retrieved ID	Yes	
nrecs	Number of records to return	Yes	

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
BibIDListRows	List of bibliographic record IDs
BibIDListRow	Container for data
BibliographicRecordID	The bibliographic record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/bibs/updated/paged?updatedate=6/5/2017&lastid=0&nrecs=10
```

Return

```
HTTP/1.1 200 OK
<BibIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <BibIDListRows>
      <BibIDListRow>
         <BibliographicRecordID>803851</BibliographicRecordID>
      </BibIDListRow>
   </BibIDListRows>
</BibIDListGetResult>
```

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Synch_GetUpdatedItems

This method returns a list of item record IDs for records that have been added or updated since a specified date and time.

> **Important:** This method provides information for item records that have a “final” status.
>
> If the time element is not specified, the date and time parameter will assume midnight of the day specified.
>
> This method returns a generic ItemIDListGetResult XML structure (see below).
>
> A call to AuthenticateStaffUser is required before calling any protected methods.

The following events and actions will cause an item to appear in the list of updated items:

- Created via Acquisitions PO Line Item processing
- Created via Acquisitions Invoice processing
- Modified via PO Line Item Receive processing
- Modified via PO Line Item Segment Undo Receipt processing
- Created via Cataloging
- Modified via Item Bulk Change
- Modified via Cataloging
- Checked in
- Checked in (item was lost)
- Checked out
- Declared lost
- Claim was deleted
- Claim was made (returned or never had)
- Circulation status modified via Manage Item dialog from Check In
- Shelf location modified via Manage Item dialog from Check In
- Returned via ILL processing
- Sent in transit via Removing from Course Reserve
- Modified via PO Line Item Segment Receive processing
- Automatic status change from Check In
- Modified by automatic billed to lost processing
- Circulation status modified because item was held and request pickup branch was modified
- Circulation status modified to Routed by creation of linked route list piece

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- Circulation status modified by modification of linked route list piece
- Modified via Floating Collections processing
- Renewal
- Transferred due to hold request
- Transferred due to ILL request
- Created via Acquisitions
- Created via Serials
- Marked for deletion
- Undeleted
- Barcode replaced via Check In
- Non public note modified via Manage Item dialog from Check In
- Free text block modified via Manage Item dialog from Check In
- Library assigned block modified via Manage Item dialog from Check In
- Assigned collection modified via Manage Item dialog from Check In
- Material type modified via Manage Item dialog from Check In
- Bulk checked out via Outreach Services
- Bulk checked out via Borrow by Mail
- Modified via Receive Shipment
- Linked to new bib
- Linked to new bib via Serials
- Due date reset

GET /protected/[1]/{AccessToken}/synch/items/updated?updatedate={updatedate

Authorization required?

Yes

Protected method?

Yes

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Query String Parameters

Name	Value	Required	Description/Notes
updatedate	MM/DD/YYYY HH:MM:SS	Yes	Start date for record updates
enddate	MM/DD/YYYY HH:MM:SS	No	End date for record updates. Limits data set returned to mitigate performance and retrieval issues. If not used, thecurrent date and time are used.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemIDListRows	List of Item record IDs
ItemIDListRow	Container for data
ItemRecordID	The Item record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/items/updated?updatedate=12/2/2011 13:00:00
```

Return

```
HTTP/1.1 200 OK
<ItemIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode><ErrorMessage/>
   <ItemIDListRows>
      <ItemIDListRow>
         <ItemRecordID>9367071</ItemRecordID>
      </ItemIDListRow>
   </ItemIDListRows>
</ItemIDListGetResult>
```

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Synch_GetUpdatedItemsPaged

This method returns a list of item record IDs for records that have been added or updated since a specified date and time. The paged method allows the retrieval of the ID list in smaller packets.

A date, last record ID, and number of records to return must be specified. When retrieving the first set of records, the "lastid" of 0 forces the process to start at the beginning of the list. Then, when retrieving subsequent records, the "lastid" is used as the starting ID for the next request.

> **Important:** This method provides information for item records that have a “final” status.
>
> If the time element is not specified, the date and time parameter will assume midnight of the day specified.
>
> This method returns a generic ItemIDListGetResult XML structure (see below).
>
> A call to AuthenticateStaffUser is required before calling any protected methods.

The following events and actions will cause an item to appear in the list of updated items:

- Created via Acquisitions PO Line Item processing
- Created via Acquisitions Invoice processing
- Modified via PO Line Item Receive processing
- Modified via PO Line Item Segment Undo Receipt processing
- Created via Cataloging
- Modified via Item Bulk Change
- Modified via Cataloging
- Checked in
- Checked in (item was lost)
- Checked out
- Declared lost
- Claim was deleted
- Claim was made (returned or never had)
- Circulation status modified via Manage Item dialog from Check In
- Shelf location modified via Manage Item dialog from Check In
- Returned via ILL processing
- Sent in transit via Removing from Course Reserve
- Modified via PO Line Item Segment Receive processing
- Automatic status change from Check In

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- Modified by automatic billed to lost processing
- Circulation status modified because item was held and request pickup branch was modified
- Circulation status modified to Routed by creation of linked route list piece
- Circulation status modified by modification of linked route list piece
- Modified via Floating Collections processing
- Renewal
- Transferred due to hold request
- Transferred due to ILL request
- Created via Acquisitions
- Created via Serials
- Marked for deletion
- Undeleted
- Barcode replaced via Check In
- Non public note modified via Manage Item dialog from Check In
- Free text block modified via Manage Item dialog from Check In
- Library assigned block modified via Manage Item dialog from Check In
- Assigned collection modified via Manage Item dialog from Check In
- Material type modified via Manage Item dialog from Check In
- Bulk checked out via Outreach Services
- Bulk checked out via Borrow by Mail
- Modified via Receive Shipment
- Linked to new bib
- Linked to new bib via Serials
- Due date reset

GET /protected/v1/1033/100/1/[token]/synch/items/updated/paged?updatedate=6/5/2017&lastid=0&nrecs=10

Authorization required?

Yes

Protected method?

Yes

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Query String Parameters

Name	Value	Required	Description/Notes
updatedate	MM/DD/YYYY HH:MM:SS	Yes	Start date for record updates
lastid	Use 0 when starting the retrieval process, otherwise, use the last retrieved ID	No	
nrecs	Number of records to return	No	

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemIDListRows	List of Item record IDs
ItemIDListRow	Container for data
ItemRecordID	The Item record ID

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/items/updated/paged?updatedate=6/5/2017&lastid=0&nrecs=10
```

Return

```
HTTP/1.1 200 OK
<ItemIDListGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode><ErrorMessage/>
   <ItemIDListRows>
      <ItemIDListRow>
         <ItemRecordID>9367071</ItemRecordID>
      </ItemIDListRow>
   </ItemIDListRows>
</ItemIDListGetResult>
```

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Synch_ItemsByBibIDGet

This method will return all item records attached to a particular bib as requested by the user. The items may be specified by bibliographic record ID.

> **Important:** Only one bibliographic record may be requested at a time. Bibliographic record IDs must be numeric. If the bibliographic record requested does not exist, a row will not be returned.
>
> This method is not appropriate for gathering holdings during the context of a catalog search by a library customer; it is meant to be used only during a synchronization process. To get holdings during a search use the public BibHoldingsGet method. See "BibHoldingsGet" on page 59.
>
> A call to AuthenticateStaffUser is required before calling any protected methods."BibHoldingsGet" on page 59.

`GET` /protected/[1]/{AccessToken}/synch/items/bibid/{BibID}

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
BibID	Yes	The bibliographic record identifier.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemGetRows	List of item data
ItemGetRow	Container for data
LocationID	Location identifier to which this piece is assigned.
LocationName	Location name to which this piece is assigned.
CollectionID	Collection identifier to which this piece is assigned.
CollectionName	Collection name to which this piece is assigned.
Barcode	Barcode assigned to the piece.
PublicNote	Public note of the piece.
CallNumber	Local call number of the piece. Includes VolumeNumber if exists.
Designation	Designation assigned to the piece. If the piece is not associated with serial then this value will be NULL.
VolumeNumber	Volume number assigned to the piece.
ShelfLocation	Shelf location assigned to the piece.
CircStatus	Circulation status of the piece.
LastCircDate	Last circulation date of the piece.
MaterialType	Material type of the piece.
TextualHoldingsNote	Textual holdings note associated with the assigned location/collection.
RetentionStatement	Retention statement associated with the assigned location.
HoldingsStatement	Holdings statement associated with the assigned location.
HoldingsNote	Holdings note associated with the assigned location.
Holdable	Specifies whether a hold can be placed on the piece.
DueDate	Specifies when the item is due back to the library.
ItemRecordID	The items record ID

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Name	Description/Notes
BibliographicRecordID	The bibliographic record ID to which the item is attached
IsDisplayInPAC	Boolean true or false. Indicates if the library wishes the record to display in PAC.
CreationDate	The date and time that the record was created in the system.
FirstAvailableDate	The first available date for the bib is the first day the first item linked to the bib becomes available for circulation. This data may be NULL.
ModificationDate	The date and time of last record modification. This data may be NULL.

Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/items/bibid/1
```

Return

```
HTTP/1.1 200 OK
<ItemGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <ItemGetRows>
      <ItemGetRow>
         <LocationID>97</LocationID>
         <LocationName>Scotia Branch - Schenectady County Public
         Library</LocationName>
         <CollectionID>0</CollectionID>
         <CollectionName/><Barcode>0000408366227</Barcode>
         <PublicNote/>
         <CallNumber>Fict Hel</CallNumber>
         <Designation/>
         <VolumeNumber/>
         <ShelfLocation/>
         <CircStatus>In</CircStatus>
         <LastCircDate>Apr 27 2007 </LastCircDate>
         <MaterialType>Book</MaterialType>
         <TextualHoldingsNote/>
         <RetentionStatement/>
         <HoldingsStatement/>
```

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```
          <HoldingsNote/>
          <Holdable>true</Holdable>
          <DueDate/>
          <ItemRecordID>572680</ItemRecordID>
          <BibliographicRecordID>1</BibliographicRecordID>
          <IsDisplayInPAC>true</IsDisplayInPAC>
          <CreationDate>2009-07-28T11:57:09.347</CreationDate>
          <FirstAvailableDate>2009-07-28T11:57:09.347</FirstAvailableDate>
          <ModificationDate>2009-07-28T11:57:09.347</ModificationDate>
       </ItemGetRow>
   </ItemGetRows>
</ItemGetResult>
```

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Synch_ItemByIDGet

This method will return an item record requested by the user. The item may be specified by item record ID.

Important: Only one item record may be requested at a time. Item record IDs must be numeric. If the item record requested does not exist, a row will not be returned. A call to AuthenticateStaffUser is required before calling any protected methods.

GET /protected/[1]/{AccessToken}/synch/item/{ItemID}

Authorization required?

Yes

Protected method?

Yes

URI Parameters

Name	Required	Description/Notes
ItemID	Yes	The item record ID.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	PAPI Error code: Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message
ItemGetRows	List of item data
ItemGetRow	Container for data

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
LocationID	Location identifier to which this piece is assigned.
LocationName	Location name to which this piece is assigned.
CollectionID	Collection identifier to which this piece is assigned.
CollectionName	Collection name to which this piece is assigned.
Barcode	Barcode assigned to the piece.
PublicNote	Public note of the piece.
CallNumber	Local call number of the piece. Includes VolumeNumber if exists.
Designation	Designation assigned to the piece. If the piece is not associated with serial then this value will be NULL.
VolumeNumber	Volume number assigned to the piece.
ShelfLocation	Shelf location assigned to the piece.
CircStatus	Circulation status of the piece.
LastCircDate	Last circulation date of the piece.
MaterialType	Material type of the piece.
TextualHoldingsNote	Textual holdings note associated with the assigned location/collection.
RetentionStatement	Retention statement associated with the assigned location.
HoldingsStatement	Holdings statement associated with the assigned location.
HoldingsNote	Holdings note associated with the assigned location.
Holdable	Specifies whether a hold can be placed on the piece.
DueDate	Specifies when the item is due back to the library.
ItemRecordID	The items record ID
BibliographicRecordID	The bibliographic record ID to which the item is attached
IsDisplayInPAC	Boolean true or false. Indicates if the library wishes the record to display in PAC.
CreationDate	The date and time that the record was created in the system.
FirstAvailableDate	The first available date for the bib is the first day the first item linked to the bib becomes available for circulation. This data may be NULL.
ModificationDate	The date and time of last record modification. This data may be NULL.

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Example

```
https://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/rGhOMQjR7MXZuJYREw6TQHPG
sy1tlZPr/synch/item/572680
```

Return

```
HTTP/1.1 200 OK
<ItemGetResult
   xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
   <ItemGetRows>
      <ItemGetRow>
         <LocationID>97</LocationID>
         <LocationName>Scotia Branch - Schenectady County Public
         Library</LocationName>
         <CollectionID>0</CollectionID>
         <CollectionName/><Barcode>0000408366227</Barcode>
         <PublicNote/>
         <CallNumber>Fict Hel</CallNumber>
         <Designation/>
         <VolumeNumber/>
         <ShelfLocation/>
         <CircStatus>In</CircStatus>
         <LastCircDate>Apr 27 2007 </LastCircDate>
         <MaterialType>Book</MaterialType>
         <TextualHoldingsNote/>
         <RetentionStatement/>
         <HoldingsStatement/>
         <HoldingsNote/>
         <Holdable>true</Holdable>
         <DueDate/>
         <ItemRecordID>572680</ItemRecordID>
         <BibliographicRecordID>410354</BibliographicRecordID>
         <IsDisplayInPAC>true</IsDisplayInPAC>
         <CreationDate>2009-07-28T11:57:09.347</CreationDate>
         <FirstAvailableDate>2009-07-28T11:57:09.347</FirstAvailableDate>
         <ModificationDate>2009-07-28T11:57:09.347</ModificationDate>
      </ItemGetRow>
   </ItemGetRows>
</ItemGetResult>
```

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Synch Methods for 3rd Party Circulation

These protected methods have been developed for use in synchronizing third-party circulation operations with the Polaris database.

See Also:

- "SynchTasksCheckout" on the next page.
- "SynchTasksCheckin" on page 303.
- "SynchTasksExpireCopy" on page 305.
- "SynchTasksNotifyPatron" on page 307.
- "SynchTasksNotifyPatronItem" on page 309.
- "SynchTasksPullMARCData" on page 311.

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SynchTasksCheckout

Writes checkout transaction information into the Polaris database for additional processing within the Polaris ILS.

PUT /protected/[1]/{AccessToken}/synch/tasks/checkout

Authorization required?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
wsid	>0	No	ID of workstation calling this method
userid	>0	No	ID of user calling this method (not patron ID)

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Description/Notes
VendorID	Free text string. Consult with Polaris.
VendorContractID	Free text string. Consult with Polaris.

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Name	Description/Notes
UniqueRecordID	The record ID in thrid-party system that identifies the title.
PatronBarcode	The Patron barcode, as represented in Polaris.
ItemExpireDateTime	Use GMT, ex. 2012-06-01T11:00:00.
TransactionDateTime	Use GMT, ex. 2012-06-01T11:00:00.
PatronVendorContractID	The ID of the patron vendor contract.

Example

```
http://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/[Access token]/synch/
tasks/checkout
```

Body

```
<SynchTasksCheckoutData>
   <VendorID>3M Cloud Library</VendorID>
   <VendorContractID>12345</VendorContractID>
   <UniqueRecordID>djhs8</UniqueRecordID>
   <PatronBarcode>1000200692332</PatronBarcode>
   <ItemExpireDateTime>2012-06-12T23:59:59</ItemExpireDateTime>
   <TransactionDateTime>2012-06-01T11:00:00</TransactionDateTime>
</SynchTasksCheckoutData>
```

Return - Success

```
HTTP/1.1 200 OK
<SynchTasksCheckoutResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</SynchTasksCheckoutResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<SynchTasksCheckoutResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance"><
   PAPIErrorCode>-3000</PAPIErrorCode>
   <ErrorMessage>Error retrieving patron ID.</ErrorMessage>
</SynchTasksCheckoutResult>
```

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SynchTasksCheckin

Writes checkin transaction information into the Polaris database for additional processing within the Polaris ILS.

PUT /protected/[1]/{AccessToken}/synch/tasks/checkin

Authorization required?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
wsid	>0	No	ID of workstation calling this method
userid	>0	No	ID of user calling this method (not patron ID)

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Description/Notes
VendorID	Free text string. Consult with Polaris.
VendorContractID	Free text string. Consult with Polaris.
UniqueRecordID	The record ID in thrid-party system that identifies the title.
PatronBarcode	The Patron barcode, as represented in Polaris.
TransactionDateTime	Use GMT, ex. 2012-06-01T11:00:00.
PatronVendorContractID	The ID of the patron vendor contract.

HML Elements Returned

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
http://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/[Access token]/synch/
tasks/checkin
```

Body

```
<SynchTasksCheckinData>
   <VendorID>3M Cloud Library</VendorID>
   <VendorContractID>12345</VendorContractID>
   <UniqueRecordID>djhs8</UniqueRecordID>
   <PatronBarcode>1000200692332</PatronBarcode>
   <TransactionDateTime>2012-06-01T11:00:00</TransactionDateTime>
</SynchTasksCheckinData>
```

Return - Success

```
HTTP/1.1 200 OK
<SynchTasksCheckinResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</SynchTasksCheckinResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<SynchTasksCheckinResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance"><
   PAPIErrorCode>-3000</PAPIErrorCode>
   <ErrorMessage>Error retrieving patron ID.</ErrorMessage>
</SynchTasksCheckinResult>
```

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SynchTasksExpireCopy

This method is used to inform the Polaris ILS when a copy of a title in the library's eContent collection has expired and is no longer available for check out. For certain publishers this expiration may be time-based; for others the expiration may be based on a particular number of check-out transactions.

POST /protected/[1]/{AccessToken}/synch/tasks/expirecopy

Authorization required?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
wsid	>0	No	ID of workstation calling this method
userid	>0	No	ID of user calling this method (not patron ID)

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Description/Notes
VendorID	Free text string. Consult with Polaris.
VendorContractID	Free text string. Consult with Polaris.
UniqueRecordID	The record ID in thrid-party system that identifies the title.
PatronBarcode	The Patron barcode, as represented in Polaris.
TransactionDateTime	Use GMT, ex. 2012-06-01T11:00:00.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
http://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/[Accesstoken]/synch/tasks/
expirecopy
```

Body

```
<SynchTasksExpireCopyData>
   <VendorID>3M Cloud Library</VendorID>
   <VendorContractID>cezmf</VendorContractID>
   <UniqueRecordID>tomg9</UniqueRecordID>
   <PatronBarcode/>
   <TransactionDateTime>2012-09-02T00:00:00</TransactionDateTime>
</SynchTasksExpireCopyData>
```

Return - Success

```
HTTP/1.1 200 OK
<SynchTasksExpireCopyResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</SynchTasksExpireCopyResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<SynchTasksExpireCopyResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Failure -general</ErrorMessage>
</SynchTasksExpireCopyResult>
```

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SynchTasksNotifyPatron

Writes patron notification transaction information into the Polaris database for additional processing within the Polaris ILS.

PUT /protected/[1]/{AccessToken}/synch/tasks/notifypatron

Authorization required?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
wsid	>0	No	ID of workstation calling this method
userid	>0	No	ID of user calling this method (not patron ID)

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Description/Notes
VendorID	Free text string. Consult with Polaris.
VendorContractID	Free text string. Consult with Polaris.
PatronBarcode	The Patron barcode, as represented in Polaris.
Message	Patron notification message from a third-party vendor that integrates with Polaris.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
http://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/[Access token]/synch/
tasks/notifypatron
```

Body

```
<SynchTasksNotifyPatronData>
   <VendorID>3M Cloud Library</VendorID>
   <VendorContractID>12345</VendorContractID>
   <PatronBarcode>1000200692332</PatronBarcode>
   <Message>Please resolve your holds</Message>
</SynchTasksNotifyPatronData>
```

Return - Success

```
HTTP/1.1 200 OK
<SynchTasksNotifyPatronResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</SynchTasksNotifyPatronResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<SynchTasksNotifyPatronResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-3000</PAPIErrorCode>
   <ErrorMessage>Error retrieving patron ID.</ErrorMessage>
</SynchTasksNotifyPatronResult>
```

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SynchTasksNotifyPatronItem

Writes patron notification transaction information into the Polaris database for additional processing within the Polaris ILS. This method is to be used for when a message relates to a specific patron/title combination.

PUT /protected/[1]/{AccessToken}/synch/tasks/notifypatronitem

Authorization required?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
wsid	>0	No	ID of workstation calling this method
userid	>0	No	ID of user calling this method (not patron ID)

XML Body Elements

Important: XML elements must be in the order shown below.

Name	Description/Notes
VendorID	Free text string. Consult with Polaris.
VendorContractID	Free text string. Consult with Polaris.
UniqueRecordID	The record ID in thrid-party system that identifies the title.
PatronBarcode	The Patron barcode, as represented in Polaris.
Message	

Example

```
http://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/[Access token]/synch/
tasks/notifypatronitem
```

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Body

```
<SynchTasksNotifyPatronItemData>
   <VendorID>3M Cloud Library</VendorID>
   <VendorContractID>12345</VendorContractID>
   <UniqueRecordID>djhs8</UniqueRecordID>
   <PatronBarcode>1000200692332</PatronBarcode>
   <Message>This title is on hold for you.</Message>
</SynchTasksNotifyPatronItemData>
```

Return - Success

```
HTTP/1.1 200 OK
<SynchTasksNotifyPatronItemResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
   <ErrorMessage/>
</SynchTasksNotifyPatronItemResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<SynchTasksNotifyPatronItemResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-3000</PAPIErrorCode>
   <ErrorMessage>Error retrieving patron ID.</ErrorMessage>
</SynchTasksNotifyPatronItemResult>
```

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SynchTasksPullMARCData

Writes information about a title available in a 3rd party system. This is used as a trigger for a call to a 3rd party vendor API to retrieve an XML MARC record for a particular unique ID. This method should only be used if a 3rd party vendor has a corresponding API with a method that allows pulling MARC record data on a record-by-record basis.

PUT /protected/[1]/{AccessToken}/synch/tasks/pullMARCData

Authorization required?

Yes

Query String Parameters

Name	Value	Required	Description/Notes
wsid	>0	No	ID of workstation calling this method
userid	>0	No	ID of user calling this method (not patron ID)

Request Body XML

Important: XML elements must be in the order shown below.

Name	Description/Notes
VendorID	Free text string. Consult with Polaris.
VendorContractID	Free text string. Consult with Polaris.
UniqueRecordID	The record ID in thrid-party system that identifies the title.

XML Elements Returned

Name	Description/Notes
PAPIErrorCode	Negative values represent errors and are defined elsewhere. **Note:** On successful completion, the PAPI error code is populated with a positive integer representing the number of rows returned.
ErrorMessage	Error or information message

[1]{Version}/{LangID}/{AppID}/{OrgID}

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Example

```
http://[HOSTNAME]/PAPIService/REST/protected/v1/1033/100/1/[Access token]/synch/
tasks/pullMARCData
```

Body

```
<SynchTasksPullMARCData>
   <VendorID>3M Cloud Library</VendorID>
   <VendorContractID>12345</VendorContractID>
   <UniqueRecordID>djhs8</UniqueRecordID>
</<SynchTasksPullMARCData>
```

Return - Success

```
HTTP/1.1 200 OK
<SynchTasksPullMARCResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>0</PAPIErrorCode>
<ErrorMessage/>
</SynchTasksPullMARCResult>
```

Return - Failed

```
HTTP/1.1 200 OK
<SynchTasksPullMARCResult
   xmlns:i="http://www.w3.org/2001/XMLSchemainstance">
   <PAPIErrorCode>-1</PAPIErrorCode>
   <ErrorMessage>Failure -general</ErrorMessage>
</SynchTasksPullMARCResult>
```

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