SIP Message Documentation

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2:38 PM

This will attempt to document the Polaris SIP Service, the SIP messages, and includes any extensions that are supported by the Polaris ILS.

Overview:
The Polaris SIP Service, SIPService, is a multi-threaded application that listens on multiple TCP/IP ports. The ports are related to the various library organizations within a given library system. The Polaris SIPService allows for an almost unlimited number of SIP client connections at each port.

Once a TCP/IP port connection is established the SIP client application, Selfcheck system, or SC must perform a Login message followed by an SCStatus message. The Login establishes the right to use the SIPService and the SCStatus message establishes which SIP version is going to be used for the duration of the connection. After these required messages have been completed, the SCS can then send an infinite number of the other SIP messages until the socket connection is closed by the SC.

Some vendor applications will have a very simple set of transactions. For example: connect to the SIPService, Login, Send the SCStatus message, send the Patron Information message, and then disconnect. Other vendor applications will stay connected for many hours or days at a time.

Request Messages:

MESSAGE	Message #	Protocol Version	Comment
Patron Status	23	1.00 or 2.00	
Checkout	11	1.00 or 2.00	
Checkin	09	1.00 or 2.00	
Block Patron	01	1.00 or 2.00	
SC Status	99	1.00 or 2.00	Required
Request ACS Resend	97	1.00 or 2.00	
Login	93	2.00	Required
Patron Information	63	2.00	If the SC needs additional information - like fine item details, then the start item and end item fields need to be set.
End Patron Session	35	2.00	
Fee Paid	37	2.00	
Item Information	17	2.00	
Item Status Update	19	2.00	
Patron Enable	25	2.00	

Hold	15	2.00	Add (+), and Edit(*) hold modes are supported. Delete (-) hold requests are not supported. The Edit hold mode is really a query to get some hold information for item level holds.
Renew	29	2.00	
Renew All	65	2.00	
Notice Sent	43	Extension	An extension for Talking Tech's I-Tiva product.

Response Messages:

MESSAGE	Message #	Protocol Version	Comment
Patron Status	24	1.00 or 2.00	
Checkout	12	1.00 or 2.00	
Checkin	10	1.00 or 2.00	
ACS Status	98	1.00 or 2.00	The SIPService will reply with the AO field set for that port connection. The value of the AO field should be used in subsequent request messages.
Request SC Resend	96	1.00 or 2.00	
Login	94	2.00	
Patron Information	64	2.00	
End Session	36	2.00	
Fee Paid	38	2.00	
Item Information	18	2.00	
Item Status Update	20	2.00	
Patron Enable	26	2.00	
Hold	16	2.00	
Renew	30	2.00	
Renew All	66	2.00	
Notice Sent	44	Extension	An extension for Talking Tech's I-Tiva product.

Extensions Implemented and Other Notes:

MESSAGE	Message #	Protocol Version	Field	Comment
Login Request	93	2.00	CP	A value of AUTHENTICATE will force the SIPService to check patron passwords and PINS. CP is the SIP field used for Location Code but is not used by Polaris.
			VP	The VP field is used to set a Polaris defined 3rd party or vendor profile. It is not required. Valid vendor profiles are: SIP (default), 3M, ENVISIONWARE, COMPRISE. In Polaris

				3.6 the vendor profile field was incorrectly set to CV.
Checkin Response	10	2.00	CS	Call Number
			CR	Collection Abbreviation
			CT	Pickup Branch
			CV	Alert Type: " ": Normal, "00": unknown, "01": hold for another library, "02": hold for this library, "04": send to other library. Note: "03": hold for ILL and "99": other are two alert types that are not used.
			CY	The next patron barcode who has a hold (Holdable Patron Barcode)
			DA	The next patron name who has a hold (Holdable Patron Name)
Patron Information Request	63	2.00	*Note	The call to this message will update the patron's last use date. This helps eliminate the inadvertent cull of reasonably active patron's.
			AA	The AA field is a standard SIP field which is intended for a patron barcode. Some SC vendors may send a Polaris Username in the AA field for Patron Authentication. **Please note that if a Polaris Patron Username is sent in the AA field in the request, the SIPService will include the real patron barcode in the AA field in the Patron Information Response.** This barcode should be sent for subsequent SIP requests for this patron.
Patron Information Response	64	2.00	BC	Patron birthdate.
			PA	Patron Code
			PE	Patron Organization Abbreviation
			PS	Patron Statistical Class
			U4	Library defined field #4
			U5	Library defined field #5
			PZ	Postal Code
			PX	Expiration Date: SIP formatted date field
			PY	Expired Patron Flag: Y or N
			AV	1. The AV field is a standard field in the Patron Information response. 2. If the vendor profile is NOT set, or SIP, or 3M, or COMPRISE then the default value of the response is: AV<fine transaction id><space><$outstanding fine amount>\| 3. If the vendor profile is ENVISIONWARE then the value of the response is: AV<fine transaction id><space><$outstanding fine amount><space> <"fine type><space><fee description>"<space><related item barcode>

				`<space><Title truncated to 80 characters>|`
Patron Status Request	23	1.00 or 2.00	*Note	The call to this message will update the patron's last use date. This helps eliminate the inadvertent cull of reasonably active patron's.
Block Patron Request	01	1.00 or 2.00	*Note	The call to this message will update the patron's last use date. This helps eliminate the inadvertent cull of reasonably active patron's.
Patron Enable Request	25	2.00	*Note	The call to this message will update the patron's last use date. This helps eliminate the inadvertent cull of reasonably active patron's.
Hold Request	15	2.00	AB	This field should contain the item barcode or pass in the Bibliographic Record ID into the AJ field.
			AJ	The Title Identifier field should contain a Bibliographic Record ID or pass an item barcode into the AB field.
			BY	This field is ignored.
Hold Response	16	2.00	BR	Queue Position - This field is ignored.
			*Note	The response data is most meaningful if the request was made with an item barcode.