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Overview

The purpose of this document is to provide an example of a SirsiDynix Symphony library system configuration as hosted by SirsiDynix Software as a Service (SaaS) as well as any dependencies each application may have on one another. The diagram in this document indicates how various SirsiDynix products communicate with one another and what types of ports and protocols they use to communicate.

This document does not illustrate the use of the entire suite of SirsiDynix products that are compatible with SirsiDynix Symphony.



All of the ports listed in this diagram are intended for illustration purposes only; the components and features that form a SirsiDynix Symphony library system are flexible and configurable to the needs of your library system.

Comments and suggestions

SirsiDynix welcomes and appreciates your comments on its documentation. We want to know what you think about our manuals and how we can make them better. If you have comments about this guide, please send them to docs@sirsidynix.com.

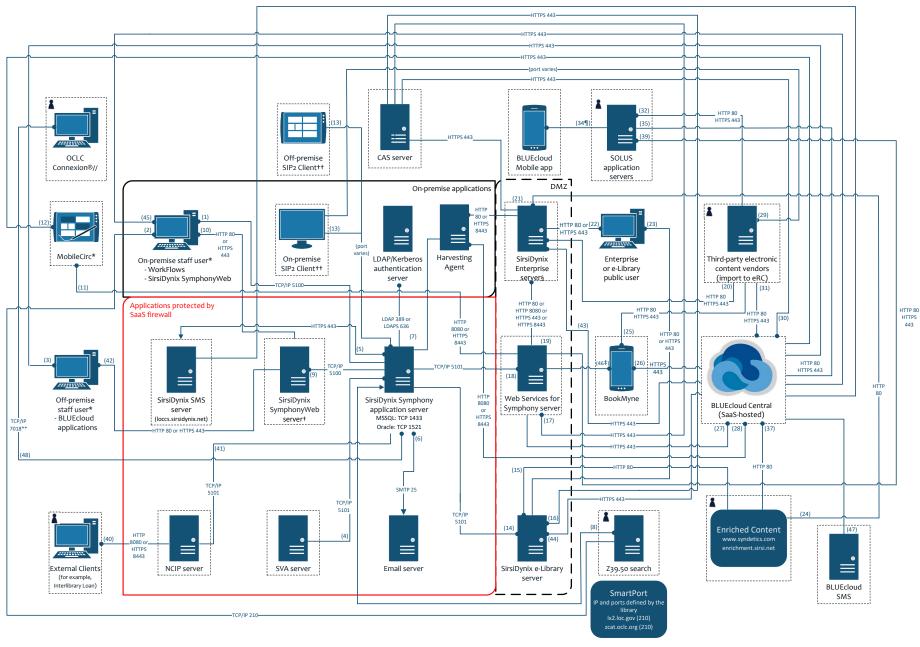
Be sure to include the title and version number of the guide and tell us how you used it. Then tell us your feelings about its strengths and weaknesses and any recommendations for improvements.

Legend and Diagram

Symbol	Meaning
•	The application initiates the communication between itself and another application.
1	Only the initiating application sends requests; the application receiving the communication does not make ever requests to the initiating application.
*	The application is hosted by a third party; its performance would not be dependent on the configuration of your library system.

Dotted lines surrounding any application indicate that the product or service is optional to the operation of the core SirsiDynix Symphony system. The use of any particular product or service may require additional products or services to make use of full functionality (for example, Web Services for Symphony is required for sites that have purchased SirsiDynix Enterprise); for information about which products and services depend on one another, see Dependencies on page 10.

For information on the pricing of products and services, contact your SirsiDynix sales representative.



- * WorkFlows and SirsiDynix SymphonyWeb can also be used outside the firewall, and MobileCirc and BLUEcloud applications can be used on
 - For the sake of illustration, BLUECloud application connections are being represented through the off-premise staff user element of this diagram. Likewise, the on-premise staff user element of this diagram is being used to represent connections between WorkFlows and SirsiDynix SymphonyWeb and other applications.
- † The Apache server that fronts SirsiDynix SymphonyWeb is located on the SirsiDynix Symphony server.
- ‡ HTTP 80 or HTTPS 443.
- § Either or both SirsiDynix Enterprise and SirsiDynix e-Library may be fronted by a proxy server.
- HTTP 80 or HTTPS 443.

- The IP range for OCLC Connexion® is 132.174.2.1 132.174.2.253 connecting directly to the SaaS-hosted SirsiDynix Symphony server through the indicated port.
- ** The MARC Listener port number typically ends in "18" (for example, 7018).
- †† Some SIP2 clients can be used outside the SaaS firewall.

The following table lists the types of information the SirsiDynix Symphony configuration transfers across each of its applications as well as whether or not personally identifiable information (PII) is included in that information. If a particular type of encryption is used by the software for protecting information, the type of encryption used is also included.



The protocol used to secure many of the following connections is configurable according to the requirements of the library system. Library sites also have the option to route many of these connections through a virtual private network (VPN).

Whether or not data is encrypted over a particular connection depends on the type of protocol being used.

Each number listed in the table corresponds to a connection in the diagram.

	Connection	Types of Information Transferred	Contains PII	Type of Encryption Used
1	WorkFlows (In-network staff user) SirsiDynix Symphony	Acquisitions Cataloging Circulation Inventory Patron Serials	Yes	None
2	WorkFlows (In-network staff user) Z39.50 search	Request for title information	No	None
3	BLUEcloud client (Remote staff user) BLUEcloud Central	Analytics Bibliographic Circulation Patron Payment	Yes	SSL or TLS
4	SirsiDynix Symphony SVA server	Message Patron Patron phone number	Yes	None
5	SirsiDynix Symphony SirsiDynix SMS server	Patron Patron phone number SMS message	Yes	SSL or TLS

	Connection	Types of Information Transferred	Contains PII	Type of Encryption Used
6	SirsiDynix Symphony Email server	Circulation Patron email Patron name	Yes	None
7	SirsiDynix Symphony LDAP/Kerberos authentication server	User authentication	Yes	SSL or TLS
8	Z39.50 search SirsiDynix Symphony	Bibliographic	No	None
9	SirsiDynix SymphonyWeb server SirsiDynix Symphony	Cataloging Circulation Inventory Patron	Yes	None
10	SirsiDynix SymphonyWeb client (In-network staff user) SirsiDynix SymphonyWeb server	Cataloging Circulation Inventory Patron	Yes	SSL or TLS
11	MobileCirc Web Services for Symphony	Cataloging Circulation Patron	Yes	SSL or TLS
12	MobileCirc BLUEcloud Central	License information	No	SSL or TLS
13	SIP2 Client SirsiDynix Symphony	Cataloging Circulation Patron	Yes	TLS
14	SirsiDynix e-Library SirsiDynix Symphony	Acquisitions Cataloging Circulation Patron Serials	Yes	None
15	SirsiDynix e-Library Enriched Content	Bibliographic	No	SSL or TLS

	Connection	Types of Information Transferred	Contains PII	Type of Encryption Used
16	SirsiDynix e-Library CAS server	User authentication	Yes	SSL or TLS
17	Web Services for Symphony CAS server	User authentication	Yes	SSL or TLS
18	Web Services for Symphony SirsiDynix Symphony	Analytics Bibliographic Circulation Patron	Yes	None
19	SirsiDynix Enterprise Web Services for Symphony	Cataloging Circulation Patron	Yes	SSL or TLS
20	SirsiDynix Enterprise Third-party electronic content vendors	Bibliographic	No	Varies by vendor
21	SirsiDynix Enterprise CAS server	User authentication	Yes	SSL or TLS
22	Public user SirsiDynix Enterprise	Cataloging Circulation Patron	Yes	SSL or TLS
23	Public user SirsiDynix e-Library	Cataloging Circulation Patron	Yes	SSL or TLS
24	SirsiDynix Enterprise Enriched Content	Bibliographic	No	SSL or TLS
25	BookMyne Third-party electronic content vendors	Bibliographic	No	Varies by vendor
26	BookMyne BLUEcloud Central	Library information	No	SSL or TLS

	Connection	Types of Information Transferred	Contains PII	Type of Encryption Used
27	BLUEcloud Central Web Services for Symphony	Cataloging Circulation Patron	Yes	SSL or TLS
28	BLUEcloud Centrall SirsiDynix Symphony (via BLUEcloud Harvester)	Staff user	Yes	SSL or TLS
29	Third-party electronic content vendors SIP2 Client	User authentication	Yes	Varies by vendor
30	BLUEcloud Central CAS server	User authentication	Yes	SSL or TLS
31	BLUEcloud Central Third-party electronic content vendors	Bibliographic	No	Varies by vendor
32	SOLUS application servers Third-party electronic content vendors	Bibliographic	No	Varies by vendor
33	SirsiDynix Enterprise SirsiDynix Symphony	Bibliographic	No	SSL or TLS
34	BLUEcloud Mobile app SOLUS application servers	Cataloging Circulation Patron	Yes	SSL or TLS
35	SOLUS application servers BLUEcloud Central	Cataloging Circulation Patron	Yes	SSL or TLS
36	BLUEcloud Mobile app BLUEcloud Central	Bibliographic Circulation	No	SSL or TLS
37	BLUEcloud Central Enriched Content	Bibliographic	No	SSL or TLS

	Connection	Types of Information Transferred	Contains PII	Type of Encryption Used
38	BLUEcloud Mobile app Web Services for Symphony	Cataloging Circulation Patron	Yes	SSL or TLS
39	SOLUS application servers Web Services for Symphony	Cataloging Circulation Patron	Yes	SSL or TLS
40	NCIP server SirsiDynix Symphony	Cataloging Circulation Patron	Yes	None
41	External clients NCIP server	Cataloging Circulation Patron	Yes	None
42	Remote staff user SirsiDynix SymphonyWeb server	Cataloging Circulation Inventory Patron	Yes	SSL or TLS
43	SirsiDynix Enterprise BLUEcloud Central (BLUEcloud Commerce)	User ID Transaction details	Yes	SSL or TLS
44	SirsiDynix e-Library BLUEcloud Central (BLUEcloud Commerce)	User ID Transaction details	Yes	SSL or TLS
45	WorkFlows or SirsiDynix SymphonyWeb client (In-network staff user) BLUEcloud Central (BLUEcloud Commerce)	User ID (except for anonymous transactions) Transaction details	Yes	SSL or TLS
46	BookMyne Web Services for Symphony	Cataloging Circulation Patron	Yes	SSL or TLS

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	Connection	Types of Information Transferred	Contains PII	Type of Encryption Used
47	BLUEcloud Mobile Web Services for Symphony	Cataloging Circulation Patron	Yes	SSL or TLS
48	OCLC Connexion® SirsiDynix Symphony	Bibliographic MARC Listener policy information	No	None

Dependencies

The following table lists each possible application in a SirsiDynix Symphony configuration along with any other applications in the system that it relies on to function.

Relying Application	Relies On	Notes
BLUEcloud Central	LDAP/Kerberos authentication server SIP2 Client SirsiDynix Symphony application server Web Services for Symphony server	
BLUEcloud Mobile app	BLUEcloud Central SOLUS application servers Web Services for Symphony	
BookMyne	BLUEcloud Central Third-party electronic content vendors	
CAS server	N/A	Needs a connection to other applications to perform authentication for those applications, but does not require them to remain operational
Email server	N/A	Managed by your system administrator
Enriched Content	N/A	Managed by independent content vendors
LDAP/Kerberos authentication server	N/A	Needs a connection to other applications to perform authentication for those applications, but does not require them to remain operational

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Dependencies

Relying Application	Relies On	Notes
MobileCirc	BLUEcloud Central Web Services for Symphony server	
OCLC Connexion®	SirsiDynix Symphony (for record export)	
NCIP server	SirsiDynix Symphony application server	
SIP2 client	SirsiDynix Symphony application server	
SirsiDynix Enterprise server	CAS server Third-party electronic content vendors Web Services for Symphony server	Use of CAS is optional If the CAS server is unable to perform authentication, the application's native method of user authentication will be used instead
SirsiDynix SMS server	N/A	Managed by SirsiDynix
SirsiDynix Symphony application server	Oracle, MSSQL, or ISAM database Email server (reports) SirsiDynix SMS server (SMS)	
SirsiDynix SymphonyWeb server	SirsiDynix Symphony application server	
SOLUS application servers	N/A	Managed by SOLUS
SVA server	SirsiDynix Symphony application server	
Third-party electronic content vendors	N/A	Managed by independent third-party vendors Needs a connection to other applications to provide content

Relying Application	Relies On	Notes
Web Services for Symphony server	CAS server SirsiDynix Symphony application server	Use of CAS is optional If the CAS server is unable to perform authentication, the application's native method of user authentication will be used instead
WorkFlows client	SirsiDynix Symphony application server BLUEcloud Central (BLUEcloud Commerce) Z39.50 services	
Z39.50 Search/SmartPort	N/A	Managed by independent Z39.50 sources

The following table lists each application in the example SirsiDynix Symphony configuration, any dependent applications, and the effects on the dependent applications if communication with the supporting application fails.



While an application may be listed as a supporting or dependent application, that application may not be required unless your site has chosen to purchase that product or service or another product or service depends on that application.

Supporting Application	Dependent Applications	Effects if communication with supporting application fails
LDAP/Kerberos server	SirsiDynix Symphony application server	SirsiDynix Symphony cannot use single sign-on authentication
SirsiDynix SMS server	SirsiDynix Symphony application server	SirsiDynix Symphony cannot send SMS messages
Email server	SirsiDynix Symphony application server	SirsiDynix Symphony cannot email report results
NCIP server	External clients	External clients cannot receive information from SirsiDynix Symphony

Dependencies

Supporting Application	Dependent Applications	Effects if communication with supporting application fails
SIP2 client	BLUEcloud Central	Some electronic content vendors cannot authenticate
SirsiDynix Enterprise server	Public users	Users cannot access OPAC
Third-party electronic content vendors	BLUEcloud Central	Cannot serve electronic content in BLUEcloud PAC
	BookMyne	BookMyne cannot return electronic content
	SirsiDynix Enterprise server	SirsiDynix Enterprise cannot serve electronic content in OPAC
SirsiDynix Symphony application server	WorkFlows client	WorkFlows cannot process transactions; users cannot log in to WorkFlows
	NCIP server	NCIP cannot provide external clients with Symphony information
	SIP2 Client	SIP2 cannot complete transactions
	Web Services for Symphony server	Web Services cannot retrieve information from SirsiDynix Symphony database
	BLUEcloud Central	The BLUEcloud Harvester cannot run
	SirsiDynix SymphonyWeb	SirsiDynix SymphonyWeb is inaccessible
	OCLC Connexion®	OCLC Connexion® cannot export bibliographic records to Symphony
Web Services for Symphony server	BLUEcloud Central	BLUEcloud Central cannot send or receive information from SirsiDynix Symphony database
	MobileCirc	MobileCirc cannot complete transactions
	SirsiDynix Enterprise server	SirsiDynix Enterprise cannot retrieve patron, catalog, or circulation information from the SirsiDynix Symphony database

Dependencies

Supporting Application	Dependent Applications	Effects if communication with supporting application fails
BLUEcloud Central	WorkFlows client	WorkFlows cannot send monetary transactions to BLUEcloud Commerce
	MobileCirc	Staff users cannot log in to MobileCirc
	BookMyne	BookMyne does not work
	BLUEcloud Mobile	Search, authentication, and My Account do not work
	SirsiDynix e- Library	e-Library cannot send monetary transactions to BLUEcloud Commerce
	SirsiDynix Enterprise	Enterprise cannot send monetary transactions to BLUEcloud Commerce
SVA server	SirsiDynix Symphony application server	SirsiDynix Symphony cannot send telephone messages
Z39.50 search	WorkFlows client	SirsiDynix Symphony cannot receive bibliographic information via SmartPort
SirsiDynix SymphonyWeb server	SirsiDynix SymphonyWeb	SirsiDynix SymphonyWeb is inaccessible
SirsiDynix SymphonyWeb	SirsiDynix SymphonyWeb client (Staff user)	SirsiDynix SymphonyWeb is inaccessible
SOLUS application servers	BLUEcloud Mobile	BLUEcloud Mobile does not work
OCLC Connexion®	SirsiDynix Symphony	Symphony cannot receive bibilographic records exported from OCLC Connexion®