EBSCO
Discovery Service™

Tech Sheet

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EBSCO Discovery Service (EDS) is a web-based, cloud-hosted discovery platform that supports unified searching of content across full-text databases, citation databases, the library catalog and other local collections.

While EDS has been designed to require minimal technical knowledge to implement and utilize, your institution may require assistance from your IT Department and other stakeholders in order to use EDS to its fullest extent. This document provides an overview of the technical specifications and details of EDS that may be pertinent to your IT Department.

Cloud Hosting

EBSCO utilizes a 10GB/second network and more than 3,600 physical and virtual servers to host approximately 3 Petabytes of data and to power *EBSCO Discovery Service* and EBSCO*host*. While the majority of EBSCO's computing power resides within our multiple redundant hosting facilities in the greater Boston area, EBSCO also utilizes cloud services with virtual servers across the globe. These virtual servers host images and run certain features of EBSCO products, improving response times for customers across Europe and Asia.

Browser Requirements

EBSCO Discovery Service is entirely web-based and available through any internet-connected device, including tablets and mobile phones. It is compatible with any common web browser and operating system, and does not have any specific hardware requirements (RAM, processors, drives, etc.). However, for best results, EBSCO does recommend use of some minimum browser versions and settings, as outlined below:

Browser	EDS Classic	New EDS
Firefox	Latest version plus one previous version	Latest version plus one previous version
Safari	Latest version plus one previous version	Latest version plus one previous version
Google Chrome	Latest version plus one previous version	Latest version plus one previous version
Microsoft Edge	Latest Edge release plus one previous major version	-
Microsoft Edge Chromium	-	Latest version plus one previous version
Internet Explorer	Latest version plus one previous version	Version 11 (Not recommended)
Other	JavaScript, Cookies Enabled, DOM Storage	JavaScript, Cookies Enabled, DOM Storage

EDS is fully responsive by design, presenting the same features and functionality to mobile users as are available through the desktop version. The interface will adjust to the size of any screen, including tablets, phones and televisions. This responsive design eliminates the worry of broken or lost content and ensures a seamless user experience through secure research platforms.

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As a general practice, whenever possible, EBSCO uses open standard formats that do not require the use of proprietary software. If there is a recommended plug in (i.e., Adobe Acrobat Reader for viewing PDFs), these recommended plug-ins are available for free online, and EBSCO provides users with links to download these plug-ins, where appropriate.

Note that EBSCO has no documented bandwidth requirements. There are many variables in determining an appropriate speed:

- Number of devices accessing the internet
- Number of simultaneous users
- Frequency of large volume downloads

When issues occur, libraries may consult with Customer Support or the EBSCO Connect site **Troubleshooting Guide** for assistance: https://connect.ebsco.com/s/article/Connectivity-Troubleshooting?language=en_US

Due to variations in network bandwidth and service providers, EBSCO has traditionally observed response times to range between 2 and 5 seconds. Additionally, 95% of all user requests responded in less than 8 seconds, including network (customer internet connectivity) times.

EBSCO Domains for Firewalls, Proxy Servers and Allow Lists

Many of our customers need to allow access through firewalls, caching servers, filtering software and other security features. Below is a list of domains that your network will need to have full access to (incoming and outgoing traffic), in order to use *EBSCO Discovery Service* and its associated features:

Web Domains

- ebscohost.com
- *.ebscohost.com
- *.*.ebscohost.com
- *.ebscohost.cloud
- *.ebsco.io
- *.ebscohost.io
- *.ebsco-content.com
- *.ebsco.com
- *.ac.ebsco-content.com
- *.ebsco.zone
- ebsco.babelscape.com
- *.epnet.com
- *.dynamed.com

Service-Specific Domains

EBSCO Discovery Service

- eds.a.ebscohost.com
- eds.b.ebscohost.com

EBSCO Discovery Service Catalog Real Time Availability Checking (RTAC)

- Please refer to the Real Time Availability Checking (RTAC) - User Guide.

EBSCO Discovery Service Catalog/Institutional Repository using OAI-PMH

- 140.234.252.9
- 140.234.253.9
- 140.234.255.9

EBSCO*admin*

- eadmin.ebscohost.com
- s3.amazonaws.com (For some Reporting functionality)

Link Services

- linking.ebscohost.com
- openurl.ebscohost.com
- resolver.ebscohost.com

Resource Management API

- *.ebsco.io

Z39.50

- zgw.ebscohost.com
- Port 210

Text-to-Speech

- app.rs.ebscohost com
- media.rs.ebscohost.com
- vttts.rs.ebscohost.com
- nvntts.rs.ebscohost.com
- ivotts.rs.ebscohost.com

Ports
Allow access to the following ports for TCP, specified by service:

- Port 80 - EBSCO's databases
- Port 210 - EBSCOhost via z39.50
- Port 443 - EBSCOhost via HTTPS
- 554 and 1755 – Audio Streams available from EBSCO interfaces.
- If you cannot view videos, you may need to open all ports for http://epmedia.ebscohost.com
- 8080 and 8443 – may be needed to support Shibboleth

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Email Spam Filters

If you are unable to receive emails from EBSCO's case management system, NetSuite CRM or EBSCO*admin*, you may need to allow the following domains to your institution's spam filter allow list:

NetSuite

- *.netsuite.com
- nmail2.netsuite.com
- nmail3.netsuite.com

EBSCO system emails (EBSCO*admin*, EBSCO*host*, etc.)

- *.epnet.com
- *.ebsco.com
- EBSCOhost@ill.ebsco-gss.net (ILL Forms)

EBSCO Connect emails

- connectreplies@ebsco.com

User Authentication

EBSCO offers a variety of authentication methods to accommodate on-site and remote access needs, including compatibility with proxy servers. To learn more, please see **here**.

As mentioned in the above EBSCO Connect documentation, EBSCO also supports single sign-on through OpenAthens (subscription required), Shibboleth, any SAML-compliant identity solution (such as Ping, Okta, Microsoft ADFS) and through access management federations, or federated SSO (including, but not limited to, InCommon and FEDERUS). (More about federations can be read about **here**).

Several authentication methods can also be employed simultaneously, and EBSCO can work with each library to implement the best possible approach to user authentication needs.

Guest Access

EBSCO Discovery Service also offers unauthenticated or "guest" access. Through guest access, valuable components of EDS will be available to users seamlessly, including the EDS index, the library catalog and institutional repositories.

When searching as a guest, users can search all EDS content and view Detail Records and real-time catalog information for catalog and institutional repository results, which include enrichment information. However, users must log in to view full-text content from an institution's databases, and to print, email, save or export their results.

Library Catalog Integration

Library catalogs can be ingested into *EBSCO Discovery Service* for display of catalog records in the EDS interface. The supported formats include:

- MARC21 (preferred)
- CEPAL

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- MARCXML
- UNIMARC
- KORMARC
- Integrated KORMARC
- CNMARC
- CMARC
- SISIS
- X-Ref

- JordanMARC
- Reference Manager XML
- Cat-P
- DanMARC
- INTERMARC
- SydneyPLUS XML
- HeritageXML

Customers may export MARC update files to EBSCO FTP site as often as daily; there is an automated system in place that looks for new data on a daily basis. Typically, data uploaded to the FTP site requires 24-48 hours to be processed and reflected in EDS.

EBSCO also supports harvesting MARCXML records metadata via OAI-PMH to create and maintain a custom catalog database. Once implemented, EBSCO harvests catalog records on a daily schedule, automatically rebuilding the EDS custom catalog database.

Institutional Repository Integration

Institutional repositories can be loaded into *EBSCO Discovery Service* to be fully searched alongside other EDS resources. At the time of implementation, the library will complete the Institutional Repository (IR) Database Questionnaire, which covers the complete set up of the repository, from initial branding and display questions through data mapping and record retrieval options. Since each repository is different and may contain unique aspects, each institutional repository is analyzed for optimized loading and display. EBSCO can work directly with the library to understand the unique qualities of the IR, and integrate specific aspects of its functionality into the library's EDS instance.

For institutional repositories, the supported formats are:

- Dublin Core
- EAD
- EISIR
- junii2
- METS
- MODS

Those available via the OAI-PMH protocol and in Dublin Core format are most common and EDS has a framework to handle them in a streamlined/automated fashion. EBSCO can also receive institutional repository Dublin Core XML files via FTP. View the **Institutional Repository Questionnaire Guide** for more information: https://connect.ebsco.com/s/article/EBSCO-Discovery-Service-EDS-Institutional-Repository-Database-Questionnaire?language=en_US

EBSCO Discovery Service API

The *EBSCO Discovery Service* Search and Retrieve API enables web developers to include EDS content and relevance-ranked results within a third-party web application. There are no additional licensing or technical restrictions associated with the use of the EDS API beyond EBSCO's standard license agreement.

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There are several methods to perform a search request in the EDS API, including the following:

- Search method: Ability to send a simple search (just the query term) or advanced search (limiters, expanders, modes, search fields, filters, actions) to EDS and get multiple records in return, which can be used to paint a results list.

- Retrieve method: Ability to fetch a single complete record from EDS that contains full text (simulates the patron clicking on a record in the result list).

- Info method: Ability to query the EDS system configuration and fetch metadata such as the defaults set by the librarian, what sorts / search fields / expanders / limiters / search modes are available for a given user profile to build an advanced search page, etc.

Note:
- Supported protocol for the API calls: REST
- Supported protocols for response format: XML and JSON

The EDS API provides extensive documentation and support for existing EDS customers through the EBSCO Connect support portal (account required): https://connect.ebsco.com/s/article/EBSCO-Discovery-Service-API-Documentation

Available documentation accessed through the portal includes:

- *EBSCO Discovery Service* API User Guide
- *EBSCO Discovery Service* API Reference Guide
- *EBSCO Discovery Service* API User Guide Appendix
- *EBSCO Discovery Service* API User FAQs
- *EBSCO Discovery Service* API Sample Applications
- *EBSCO Discovery Service* API Schema

Please note that it is recommended that the library has some knowledge of API integration, XML, and HTML/CSS to use the EDS API.

Privacy and Security Controls

EBSCO is committed to ensuring the security and privacy of customer and end-user data. EBSCO has enabled a set of privacy controls that will allow your end users and patrons to manage their personal information, including the ability to remove their information from EBSCO's services at any time. Any user creating a new personal account (My EBSCO*host* Folder, Personal User Account) will be provided privacy policy information and must complete the account creation process. Users with existing accounts will also be prompted to read the policy the first time they log in after these new privacy controls become available.
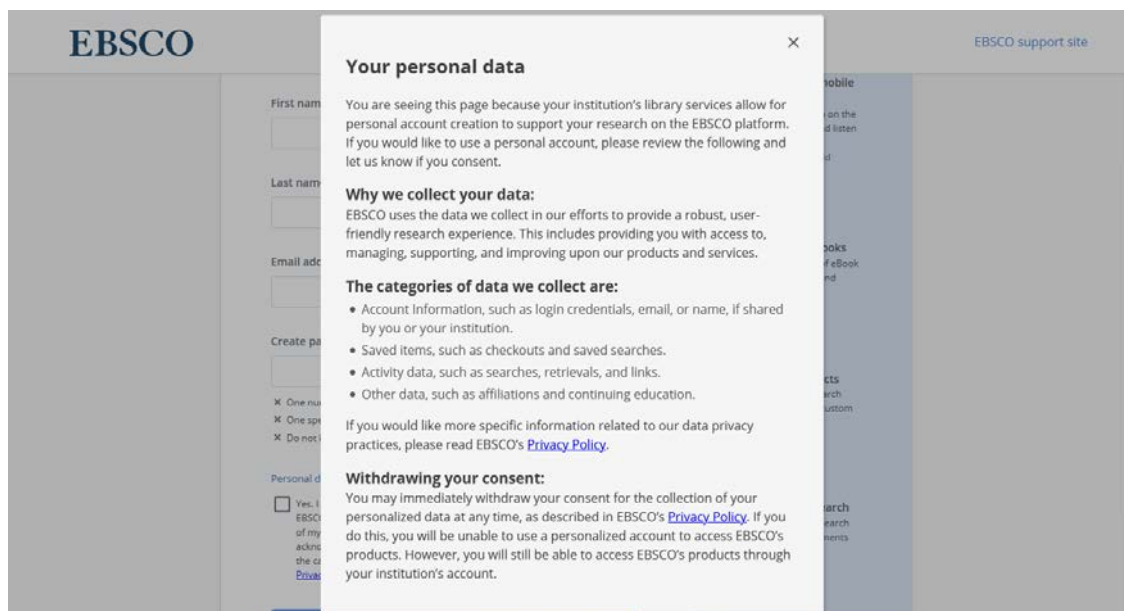
Personal User Account Privacy Statement

Users who do not wish to adhere to the privacy policy have the ability to use the Forget Me option and have their account removed from EBSCO's system. Note that accounts that are removed are not recoverable.

EBSCO's **Privacy Policy** (https://www.ebsco.com/company/privacy-policy) can be found on each page of the interface and on the Support Site and includes details regarding the data collection touchpoints, types of personal information EBSCO collects and how the company protects the information. As changes are made, EBSCO will make updates to its privacy policy.

GDPR Alignment

EBSCO abides by GDPR guidelines, and all users are granted rights to their data, regardless of EU affiliation. As outlined in our Privacy Policy, depending on the country or state of residency, a user may have legal rights with respect to Personal Information (which may be subject to certain exceptions that will be analyzed on a case-by-case basis). These rights include the Right to be Informed, the Right to Restrict Processing, the Right to Object or Opt-Out, the Right to Erasure or Deletion and more.

EBSCO has also implemented a GDPR compliance program to ensure full compliance with the enhanced EU data protection legislation. Please see www.ebsco.com/gdpr for information about EBSCO's compliance.

ISO 27001 Certification

EBSCO Discovery Service is ISO 27001-certified. The scope of EBSCO's certification process was very broad and encompassed both on-prem and public cloud. The certification itself is focused on products and for each in-scope product, a series of security risk assessments, internal audits and risk management activities was performed. These assessments included:

- Information Security Policies and Organization
- Human Resource Security – Prior to, during and post-employment
- Asset Management – Inventory of assets, information classification and media handling
- Access Control – Privileged access management and user provisioning and deprovisioning processes

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- Cryptography – Cryptographic controls
- Physical and Environment Security – Physical security perimeter, controls to physical entry, securing facilities and equipment
- Operations Security – Backups and Vulnerability and patch management processes for physical and virtual assets.
- Communications Security - Intrusion detection and prevention, network security controls
- Systems Acquisition, Development and Maintenance – source code control, code vulnerability scanning and dependency vulnerability management for in-scope products
- Supplier Relationships – Information Security in Supplier Relationships
- Information Security Incident Management - Detection and response capabilities, incident response planning
- Information Security Aspects of Business Continuity Management
- Compliance – Compliance with Legal and Regulatory Controls

The core of the ISO framework is the Information Security Management System (ISMS) – the actual set of policies and processes that ensure that security risks are managed effectively in the in-scope systems.

EBSCO worked with two external partners in the certification process that:

- performed risk assessments, created risk treatment plans and assisted EBSCO with documenting and establishing our risk management framework and our ISMS.
- performed the actual certification audit that included reviews of EBSCO's controls, process and policies.

ISO 27001 details requirements for an ISMS, including a continuous improvement certification model. In order to maintain certification, EBSCO will continue to be subject to annual external audits. The ISMS will be constantly evaluated and improved and our systems will be continually assessed as we move forward.

EBSCO's **ISO 27001 certificate** can be found at https://www.schellman.com/certificate-directory by searching for "EBSCO" in the Organization search box.

Implementation Process

EBSCO Discovery Service implementation entails three key phases, which are described below. Throughout these phases, customers receive outstanding support, service, and communication.

1) **Welcome and Gather Data**
   Phase 1 begins when EBSCO receives a customer order. In this phase, the customer is introduced to EBSCO's Discovery Solutions team and the EDS implementation process is explained. The Discovery Solutions team requests all necessary data from the customer in order to begin the set-up process. The team also clarifies any deadlines when data or feedback will be needed from the customer to ensure an on-time launch of EDS.

2) **Configure and Customize Product**
   With full customer data received and evaluated, the Discovery Solutions team now designs, implements, and tests the solution. Specific configurations will vary based on the services selected by the customer. Configuration and customization happen in parallel, so while the team is setting up EDS, a customized profile is also being created for the customer – including items such as profile settings and search boxes.

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3) **Review and Approve Product**
   After EBSCO's Discovery Solutions team has completed configuring and customizing the solution, the customer will have the opportunity to review and approve the EDS setup. When the customer's specifications are met, EDS is ready to go live. To ensure a successful product launch, the team can also assist the customer with training, promotion, and further customization.

Project Support

The Implementation team and an assigned Implementation Project Manager will work closely with the library and various EBSCO teams involved in the *EBSCO Discovery Service* implementation process. This approach ensures that libraries have constant contact as well as the continuity of service that comes with a single contact point. To provide the best possible response and resolution time, everyone on the EBSCO team has access to the notes and progress associated with a library's custom implementation.

The role of the Implementation Project Manager is to:

- Assist in interpreting and documenting the EDS set up criteria specific to an institution.
- Recommend customization features and ensure that they are implemented as requested.
- Guarantee a smooth hand-off when your EDS implementation is complete.

Implementation Project Managers work closely with the following Software-as-a-Service teams at EBSCO:

- **Catalog and Institutional Repository**: If an EDS implementation includes a custom catalog and/or institutional repository, EBSCO has a team that works to create a custom database and correctly map the fields specified in the library's EDS questionnaires.
- **Knowledge Base and Link Resolver**: Customers that were not previously using *Full Text Finder* will need an account to provide seamless access through EDS. The Project Coordinator will direct the activity of setting up the account and uploading holdings.
- **Library Service Engineers**: If an implementation requires additional technical support for custom search boxes, widgets, apps, etc., or if a library will be using the API, the Project Coordinator will work with the Library Service Engineers to meet these needs.

After your order is placed a Project Coordinator will reach out to you to provide an overview of the information needed to implement EDS for your organization. This process includes a number of questionnaires:

Custom Catalog Questionnaire.
This questionnaire is designed to capture basic information about the library; a description of the catalog; more information about the ILS; metadata format and basic elements; and information for setting up RTAC and a location lookup table. The creation of a custom catalog involves the following steps, with a suggested resource (from the customer's library) noted in parentheses:

- Providing basic information about your ILS system. (catalog specialist)
- Providing information on linking to your catalog records. (catalog specialist)
- Detailing the MARC fields & subfields necessary for EBSCO to harvest specific data points. (catalog specialist)
- Exporting MARC records from your catalog. (technical specialist)

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- Uploading your MARC data to an FTP site provided by your Project Coordinator. (technical specialist)

Partner Database Questionnaire.
While considerable content is available through EBSCO's core indexes, EBSCO is able to build distinct databases for EDS from a number of publishers. These databases comprise a set of content referred to as Partner Databases, which are represented in the "Content Provider" facet limiter in EDS.

To provide a customized experience to mutual customers, the following information is requested through the Partner Database questionnaire, with a suggested resource (from the customer's library) noted in parentheses:

- Customer link resolver and inter-library loan information (electronic resources specialist)
- Awareness of current subscriptions (electronic resources specialist)
- Decisions, or a process for making decisions, regarding the inclusion of Partner Databases and in an EDS profile, including open access content (various stakeholders)

Institutional Repository (IR) Database Questionnaire.
This questionnaire covers the complete setup of a library's repository, from initial branding and display questions through data mapping and record retrieval options. As each repository is different and may contain unique aspects, each institutional repository is analyzed for optimized loading and display.

Completion of this questionnaire requires the following information, with a suggested resource (from the customer's library) noted in parentheses:

- Basic information about the repository – name, description, software/vendor (digital collections specialist)
- Data acquisition preference (digital collections specialist/technical specialist)
- Decisions or a process for making decisions, on preferred linking to collections, as well as the presentation of the collection itself (various stakeholders)
- Ability to define the data elements present in a repository (digital collections specialist)

For a complete **Best Practices Guide for Setup**, please view the following link:
https://connect.ebsco.com/s/article/EBSCO-Discovery-Service-EDS-Best-Practices-Guide-Setup?language=en_US

EBSCO Technical Support

EBSCO offers Technical Support free of charge to customers. EBSCO's Technical Support representatives are trained to fully resolve any questions or issues related to EBSCO products. EBSCO offers this support 24 hours a day, 7 days a week via the following methods:

- Toll-Free Telephone (U.S. and Canada): (800) 758-5995
- International Toll-Free Telephone: (International Access Code) 800-3272-6000
- Online: https://connect.ebsco.com/s/contactsupport

Over 70% of cases reported to EBSCO Technical Support are opened and resolved within the same business day. EBSCO will generally respond to all technical service requests within 24-48 hours. On average, callers into the Technical Support queue wait no more than 20 seconds.

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All requests are also assigned case numbers in EBSCO Connect for tracking purposes. Within EBSCO Connect, there is a case management system, where support issues can be submitted, tracked and responded to as needed. Whenever possible, a query will be resolved immediately, and the customer will be notified. If an issue requires further investigation, Technical Support will escalate the matter to EBSCO's Expert Services Team who will assist in troubleshooting and, if required, track the case through resolution with the appropriate teams at EBSCO. During the resolution process, customers can track their progress and all communications, which are maintained on EBSCO Connect for a complete history. Once the issue is resolved, the customer will be notified, and the case will be closed.

EBSCO Connect (https://connect.ebsco.com) is available 24/7. In addition to case management, it also offers user guides, videos, tutorials, FAQs, promotional materials and other self-service support resources at no additional charge to customers. For customers who have created an account and logged in, they can also participate in peer-to-peer community support forums.