



Perisian Sumber Terbuka Eprints

- Sejarah
- Ciri Eprints
- Perbandingan perisian
- Kelebihan
- Kekurangan
- Pengguna







- EPrints was created in 2000 as a direct outcome of the 1999 Santa Fe meeting that launched what eventually became the OAI-PMH.
  - The **Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)** is a protocol developed for harvesting metadata descriptions of records in an archive so that services can be built using metadata from many archives. An implementation of OAI-PMH must support representing metadata in Dublin Core, but may also support additional representations
- In academic publishing, an eprint or e-print is a digital version of a research document (usually a journal article, but could also be a thesis, conference paper, book chapter, or a book) that is accessible online, usually as green open access, whether from a local institutional or a central digital repository.
- When applied to journal articles, the term "eprints" covers both preprints (before peer review) and postprints (after peer review).
- Digital versions of materials other than research documents are not usually called e-prints, but some other name, such as e-books.



#### **EPRINTS ROADMAPS FOR 2023/24**

- **EPrints 3.4** Currently EPrints is on version is 3.4.5, released June 2023. EPrints 3.4.6 is due for release late 2024.
- **3.4.5** is an incremental release with updates which benefit searching, security, and user interface customisation. For more details see https://wiki.eprints.org/w/EPrints 3.4.5
- The next steps for 3.4 are: To fully support optional citation caching to speed up search results and listings pages. Allow access data to be stored on disk rather than confined to the database. Groundworks for 3.5, to ease transition for future upgrades.
- EPrints Services hosted customers will continue to be migrated to the latest version by our continued upgrade projects. Any security related updates are back ported and patched to existing services ahead of these upgrades.
- 3.4.6 is in the planning stages, for more details see https://wiki.eprints.org/w/EPrints\_3.4.6

#### **EPRINTS 3.5**

• EPrints 3.5 represents the next step forwards for our platform. It will feature both user facing changes as well as some internal changes to improve maintainability and performance. The majority of changes are proposed for the EPrints Core, with specific support added to a flavour where appropriate.



- 1. Easy end-user uploads.
- **2. Bulk importing and exporting of records** (ASCII, BibTex and more) for uploading established collections.
- 3. Three user roles: administrator, editor and author.
- **4. Administrator** role controls all back-end options such as organization of records, web interface appearance and functionality, and all other server-side settings.
- **5. Editor** role reviews submissions before they are published online and may edit metadata on submissions to maintain consistency or correct errors.
- **6. Author** role allows submission of documents and management of previously submitted documents.
- **7. Easy search and browse features** (multifaceted browsing available, customizable by administrator).
- 8. All necessary software for **full functionality is open-source** (Linux, Apache, MySQL, Perl).
- 9. Provides RSS feeds for entire collections or based on specific criteria such as subject, author, etc.

- **10.** Functions with many file types, including: PDF, HTML, JPEG, TIFF, MP3, and AVI.
- **11. Thumbnail preview of documents and images** is generated automatically upon file upload.
- 12. Eprints has a 10 year history with an active development community.
- **13.** Easy to develop plug-ins using Perl.
- 14. OAI compatible (which means that **Google Scholar can** index the contents of your Eprints archive).
- 15. Any materials that cannot be displayed online can be requested with the click of a button.
- **16. Temporary restrictions** to accommodate embargo periods are easy to set.
- 17. Preset and custom **authority files** available to maintain metadata consistency and avoid ambiguity (with author names, for example).
- **18. Custom subject categories** for browsing (faculty, department, LC subject headings, etc.).
- **19. Integration with SHERPA/RoMEO** for quickly checking publisher policies and author rights.

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## PERISIAN SUMBER TERBUKA - EPRINTS PERBANDINGAN

UNIVERSITI TEKNOLOGI MALAYSIA

| Table-I Com | parison betwe | een DSpace. | . GSDL and | EPrints | Software. |
|-------------|---------------|-------------|------------|---------|-----------|
|             |               |             |            |         |           |

| Feature            | D Space                           | E Prints                 | Greenstone             |
|--------------------|-----------------------------------|--------------------------|------------------------|
| Creation year      | 2002                              | 2000                     | 1997                   |
| Developed by       | Mit Libraries and                 | University of            | University of waikato  |
|                    | Hewlett-Packard Lab               | Southampton              |                        |
| Cost of license    | Free                              | Free                     | Free                   |
| Resource           | CNRI                              | No                       | OAI Identifier         |
| OAI-PMH            | Yes                               | Yes                      | Yes                    |
| Storage and        | Can storage and                   | Can storage and retrieve | Can storage and        |
| retrieves          | retrieve all type of              | all type of content      | retrieve all type of   |
|                    | content                           |                          | content                |
| Metadata formats   | Dublin core, Qualified            | Dublin core, METS        | Dublin core, Qualified |
|                    | DC, METS                          |                          | DC, METS, NZGLS,       |
|                    |                                   |                          | AGLS                   |
| User interface     | End user deposition,              | End user deposition,     | End user deposition,   |
| functions          | multilingual support              | multilingual support     | multilingual support   |
| Thumbnail          | images                            | Images , Audio, Video    | Images , Audio, Video  |
| preview            |                                   |                          |                        |
| Searching          | Field specified,                  | Field specified, Sorting | Field specified,       |
| capabilities       | Boolean Logic, Sorting            | options                  | Boolean Logic          |
|                    | options                           |                          |                        |
| Browsing options   | By author, Subject and            | Browsing can be done     | Browsing can be done   |
|                    | collection                        | using any field          | using any field        |
| Syndication        | RSS, ATOM                         | RSS, ATOM                |                        |
| User               | LDAP authentication,              | LDAP authentication      | User groups            |
| authentication     | Siboleth                          |                          |                        |
|                    | authentication,                   |                          |                        |
| Statistical report | Count of full record              | Count of full record     | Count of full record   |
| Software           | Linux or Unix,                    | Linux, Unix, Windows,    | Linux, Unix, Windows,  |
| platforms          | Windows, Solaris                  |                          | Mac-OS                 |
| Databases          | Oracle, Postgre SQL               | MySQL, Oracle, Postgre   | Its Own                |
|                    |                                   | SQL, Cloud               |                        |
| Programming        | Java, JSP                         | Perl                     | C++, Perl, Java        |
| language           |                                   |                          |                        |
| Web server         | Apache and Tomcat                 | Apache                   | Apache/IIS             |
| Machine-to         | OAI-MHP, OAI-ORE,                 | OAI-MHP, OAI-ORE,        | Z39.50, OAI-MHP        |
| machine            | SWORD, SWAP                       | SWORD, SWAP, RDI         |                        |
| interoperability   |                                   |                          |                        |
| Licence            | GNU                               | BSD                      | GNU                    |
| Services           | Services via 3 <sup>rd</sup> part | Training consultancy,    | Training               |
|                    | services providers                | Site visit               |                        |

#### Sumber:

Comparing Open Source Digital Library Software: Special Reference to DSpace, EPrint and Greenstone. Amiya Kumar Das. International Journal of Advanced Research in Computer Science and Software Engineering, Volume 5, Issue 7, July 2015.



| Feature/Platform            | DSpace   | EPrints   | Fedora (with Islandora)   | Invenio   |
|-----------------------------|--|---|---|---|
| Origin                      | MIT, HP Labs   | University of<br>Southampton  | Fedora Commons  | CERN  |
| <b>Programming Language</b> | Java   | Perl  | Java, XML, RDF  | Python  |
| License                     | BSD License  | GPL License   | Apache License 2.0  | MIT License   |
| Strengths                   | Widely adopted, strong community support, customizable, extensive plugin ecosystem | User-friendly, highly customizable, strong support for metadata standards | Flexible and extensible, strong digital preservation capabilities, supports complex digital objects       | Scalable, strong support for data management and open access, used by large research institutions |
| Weaknesses                  | Can be resource-<br>intensive, requires Java<br>expertise for<br>customization     | Perl-based, which may be<br>less familiar to some<br>developers           | Complexity can lead to higher maintenance, requires integration with other systems for full functionality | Python expertise needed, less mature than other platforms but rapidly developing                  |
| Metadata Standards          | Supports Dublin Core, qualified Dublin Core, custom schemas                        | Supports Dublin Core,<br>customizable                                     | Highly flexible, supports a variety of metadata standards   | Supports Dublin Core,<br>MARC21, DataCite, and<br>more  |
| User Interface              | Web-based, customizable  | Web-based, customizable   | Web-based, customizable via Islandora   | Web-based, highly customizable  |



| Feature/Platform      | DSpace  | EPrints   | Fedora (with Islandora)   | Invenio  |
|-----------------------|---|---|---|--|
| Digital Preservation  | Good support with plugins for preservation tasks                              | Basic preservation features, extendable                         | Excellent preservation capabilities   | Good support, designed for long-term access                                    |
| Community and Support | Large, active community, extensive documentation and user groups              | ,. <b>G</b>   | Strong community support through Fedora and Islandora, extensive documentation    | Growing community, good documentation and user support                         |
| Use Cases             | Used by many universities and research institutions worldwide                 | Popular among universities, especially in the UK and Europe     | Used for complex digital collections, museums, libraries                          | Used by large research institutions like CERN for data repositories            |
| Integration           | Integrates well with other library systems, CRIS, and harvesters like OAI-PMH | Integrates with other library and research systems              | Requires integration with front-end systems like Islandora for complete solutions | Integrates with a variety of data management and library systems               |
| Customization         | High level of customization possible through plugins and extensions           | Highly customizable, especially through its plugin architecture | Extremely flexible, but requires more technical expertise                         | Highly customizable, designed to be extended and integrated with other systems |



#### **Summary**

- **DSpace** is widely adopted and has strong community support. It's highly customizable but requires Java expertise for advanced customization.
- **EPrints** is user-friendly and highly customizable, making it a good choice for institutions looking for an easy-to-use platform.
- **Fedora**, especially when used with **Islandora**, is extremely flexible and powerful, ideal for institutions with complex digital collections but requires more technical expertise.
- **Invenio** is scalable and well-suited for large research institutions, offering strong support for data management and open access, but requires Python expertise for customization.

Each platform has its strengths and weaknesses, so the best choice will depend on the specific needs, technical expertise, and resources available at your institution.





EPrints is a widely used open-source software for building institutional repositories. It is known for several strong features that make it a popular choice for many institutions. Here are some of the best features of EPrints:

#### 1. User-Friendly Interface

Ease of Use: EPrints has a straightforward, user-friendly interface that makes it easy for users to deposit, manage, and retrieve content.

Customizable Templates: The platform offers customizable templates to match the look and feel of the institution's branding.

#### 2. Customization and Flexibility

**Plugin Architecture**: EPrints has a robust plugin architecture that allows for extensive customization and the addition of new functionalities.

**Configurable Workflows**: The submission and review workflows are highly configurable to meet the specific needs of the institution.

#### 3. Metadata Support

Rich Metadata: Supports a wide range of metadata standards, including Dublin Core, MODS, and others, ensuring thorough and accurate description of repository items.

**Metadata Customization**: Allows for the customization of metadata fields to suit specific requirements.

#### 4. Interoperability

**OAI-PMH Compliance**: EPrints is compliant with the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), which facilitates interoperability with other repositories and harvesters.

**Integration**: Can integrate with other systems, such as library catalogues and research management systems, to provide a seamless experience.



#### 5. Open Access Support

**Support for Open Access**: EPrints is designed to support open access, making it easy to provide free access to research outputs and comply with open access mandates.

**Embargo Options**: Provides options for setting embargo periods on restricted content, ensuring compliance with publisher and funder policies.

#### 6. Search and Retrieval

**Advanced Search Features**: Offers powerful search and filtering options, making it easy for users to find the content they need.

**Browse Options**: Users can browse content by various criteria, such as author, subject, or publication date.

#### 7. Digital Preservation

**Preservation Features**: Includes features that support the long-term preservation of digital content, ensuring that materials remain accessible over time.

**File Format Support**: Supports a wide range of file formats, ensuring that a variety of digital objects can be stored and preserved.

#### 8. Community and Support

**Active Community**: EPrints has an active user community that contributes to the development and support of the software.

**Extensive Documentation**: Provides comprehensive documentation and user guides to help institutions set up and manage their repositories.

#### 9. Statistics and Reporting

**Usage Statistics**: Provides detailed usage statistics, including download counts and access patterns, which can be useful for reporting and analysis.

**Custom Reports**: Allows for the generation of custom reports to meet specific institutional needs.



#### 10. Compliance and Standards

**Compliance with Standards**: Ensures compliance with various industry standards and best practices for digital repositories. **Support for Funders' Mandates**: Helps institutions comply with funders' mandates regarding open access and data management.

#### **Example Institutions Using Eprints**

University of Southampton: The birthplace of EPrints and a long-time user of the platform for their institutional repository.

University of Glasgow: Uses EPrints for their Enlighten repository, showcasing research outputs.

Queensland University of Technology (QUT): Employs EPrints for their QUT ePrints repository, providing access to a wide range of research materials.

EPrints stands out for its ease of use, customization options, strong support for open access, and active user community. These features make it an attractive choice for institutions looking to establish or enhance their institutional repository.

### PERISIAN SUMBER TERBUKA - EPRINTS KEKURANGAN





EPrints is a popular open-source repository software used for building open access repositories. While it has many advantages, such as flexibility and a strong community, it also has some disadvantages:

- Technical Complexity: Setting up and maintaining EPrints can be technically challenging, requiring expertise in Linux and server management.
- **Customization Limitations**: While EPrints is highly customizable, it often requires significant technical knowledge to implement custom features and designs, which can be a barrier for institutions without in-house technical expertise.
- **User Interface**: Some users find the default user interface of EPrints to be outdated and less intuitive compared to more modern repository solutions. Customization can improve this, but it requires additional effort.
- **Documentation and Support**: Although there is a community and some documentation available, users sometimes find it insufficient or difficult to navigate when troubleshooting specific issues.
- **Integration with Other Systems**: EPrints might have limited integration capabilities with other institutional systems or software compared to some commercial solutions that offer more seamless integration options.

### PERISIAN SUMBER TERBUKA - EPRINTS KEKURANGAN





- Performance Issues: For very large repositories, performance can become an issue, requiring significant optimization and powerful server resources to maintain acceptable speed and reliability.
- **Development Activity**: Depending on the version and the specific community involvement, the frequency of updates and new features might be slower compared to other repository software, leading to concerns about staying up-to-date with the latest technologies and security practices.

Understanding these disadvantages can help institutions weigh their options and prepare for potential challenges when considering EPrints for their repository needs.





Here is a table listing some institutions worldwide that use EPrints for their institutional repositories, sorted by continent:

This table provides a snapshot of institutions across different continents that utilize EPrints for their institutional repositories. The institutions listed are a mix of universities and research institutions, demonstrating the widespread adoption and versatility of EPrints.

| Continent      | Country      | Institution                         | Repository Name                                  |
|----------------|--------------|-------------------------------------|--|
|                | South Africa | University of Cape Town             | UCT Scholar                                      |
| <b>A.S.</b> .: | Egypt        | American University in Cairo        | AUC Knowledge Fountain                           |
| Africa         | Nigeria      | Covenant University                 | Covenant University Repository                   |
|                | Ghana        | University of Ghana                 | UGSpace  |
|                | Malaysia     | Universiti Teknologi Malaysia (UTM) | UTM Institutional Repository                     |
| Asia           | Japan        | Kyushu University                   | QIR (Kyushu University Institutional Repository) |
|                | India        | Indian Institute of Science         | ePrints@IISc                                     |
|                | China        | Zhejiang University                 | ZJU Institutional Repository                     |



| Continent     | Country        | Institution                                    | Repository Name   |
|---------------|----------------|--|---|
|               | United Kingdom | University of Southampton                      | ePrints Soton   |
|               | Germany        | University of Stuttgart                        | OPUS (Online Publications of the University of Stuttgart) |
| Europe        | Norway         | Oslo Metropolitan University                   | ODA (Open Digital Archive)                                |
|               | Italy          | University of Trento                           | UNITN-eprints   |
|               | Spain          | University of Barcelona                        | Dipòsit Digital de la Universitat de<br>Barcelona         |
|               | United States  | Caltech (California Institute of Technology)   | CaltechTHESIS   |
| North America | Canada         | University of British Columbia                 | cIRcle  |
| North America | Mexico         | Universidad Nacional Autónoma de México (UNAM) | Repositorio Institucional de la UNAM                      |
| Oceania       | Australia      | University of Queensland                       | UQ eSpace   |
| Oceania       | New Zealand    | University of Waikato                          | Research Commons  |
|               | Brazil         | Universidade de São Paulo                      | USP Digital Library                                       |
| South America | Colombia       | Universidad del Rosario                        | Repository of Universidad del Rosario                     |
|               | Chile          | Pontificia Universidad Católica de Chile       | Repositorio PUC   |

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### PERISIAN SUMBER TERBUKA - EPRINTS



Here is a list of institutions in Malaysia that use EPrints for their institutional repositories:

| INSTITUTION  | REPOSITORY NAME                                    |
|--|--|
| Universiti Teknologi Malaysia (UTM)                      | UTM Institutional Repository                       |
| Universiti Putra Malaysia (UPM)                          | Universiti Putra Malaysia Institutional Repository |
| <ul> <li>Universiti Sains Malaysia (USM)</li> </ul>      | USM Repository                                     |
| <ul> <li>Universiti Kebangsaan Malaysia (UKM)</li> </ul> | UKM Institutional Repository                       |
| Universiti Teknologi MARA (UiTM)                         | UiTM Institutional Repository                      |
| Universiti Malaysia Sabah (UMS)                          | UMS Institutional Repository                       |
| Universiti Malaysia Sarawak (UNIMAS)                     | UNIMAS Institutional Repository                    |
| Universiti Tun Hussein Onn Malaysia (UTHM)               | UTHM Institutional Repository                      |
| Universiti Teknikal Malaysia Melaka (UTeM)               | UTeM Institutional Repository                      |
| Universiti Utara Malaysia (UUM)                          | UUM Repository                                     |
| Universiti Pendidikan Sultan Idris (UPSI)                | UPSI Digital Repository                            |
| Universiti Islam Antarabangsa Malaysia (UIAM)            | IIUM Repository (IREP)                             |
| Universiti Malaysia Pahang (UMP)                         | UMP Institutional Repository                       |
| Universiti Malaysia Perlis (UniMAP)                      | UniMAP Repository                                  |
| Universiti Sultan Zainal Abidin (UniSZA)                 | UniSZA Repository                                  |
| Universiti Malaysia Terengganu (UMT)                     | UMT Institutional Repository                       |

These institutions in Malaysia utilize EPrints to manage and disseminate their scholarly and research outputs.