

# e-Archives: Online Cataloguing System for Odisha State Archives, Bhubaneswar

The system helps citizens, research scholars, historians, thinkers to know more about the history of Odisha, its rich cultural heritage, freedom movement, old publications, newspapers etc. This online Cataloguing System has eliminated the tedious process of people visiting Odisha State Archives and manuals making request for viewing archival records.



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**e-Archives** is an on-line cataloguing system developed by NIC for Odisha State Archives (OSA) to facilitate systematic collection (scanning and storing), preservation, management, publication and educational use of the rare records and historic documents digitally. One of its kinds, the e-Archives software is useful especially to the research scholars, teaching faculties and students as they can have online access to the rare and archival records of the rich culture and heritage of Odisha. Besides the catalogued documents, e-Exhibition and various other books & publications are also accessible through this portal.

e-Archives enable its users for online searching of the various available documents in catalogue formats. For the purpose of detailed study and researches, scholars can register through the portal of e-Archives. Once registered, using the user ID and password provided along with the confirmation SMS received on their mobile and e-Mail, the registrants can visit the OSA centre to access desired information in detail from the database of the Centre's local server.

## PROJECT BENEFICIARIES:

Though the **e-Archives** is accessible online to citizens at any time from anywhere, the main target users of the project are:



“This generic product ‘e-Archives’ developed by National Informatics Centre, Bhubaneswar is unique of its kind and helps citizens, research scholars, historians, thinkers & writers forum to know more about the History of Odisha and its rich cultural heritage, freedom movement, old publications, newspapers and many more.”

**Manoranjan Panigrahy, IRS**  
Commissioner & Secretary  
Department of Culture  
Govt. of Odisha

1. Odisha State Archives
2. Research scholars, teaching faculties, students and writers

**Archiving process:** With the use of high-end digital scanning machines connected to computer systems installed at OSA, various important historic documents including the rare antique books, micro films etc. related to undivided Odisha, Bihar and West Bengal are scanned and digitally stored. These are archived at the lo-

cal server with a LAN connection to about 50 computers.

Previously, citizens and researchers from across the globe used to visit personally to the Odisha State Archives (OSA) and make requests to view archival records in person. This involved carrying out various permission formalities and processes. It was not permissible to take records outside of the OSA premises and neither was permitted to scan, take any digital print or photo of the records. With the introduction of the e-Archives concept, anyone can access the digitized records online cataloguing system anytime (24x7x365), and search any desired document. Only the first and last page can be downloaded and the printouts can be taken for the same. For further research and knowledge on the subject, author etc., he/she can visit the OSA computer centre and access details through offline e-Archives system available through LAN which is available from 10.00 AM to 5 PM during which they can take printouts and soft copy.

**PREVIOUS CHALLENGES:**

In the past, one had to visit the Odisha State Archives (OSA) for making the requisition and access the Archival records. Necessary permission procedures were also required to be followed which were tedious and time consuming. Besides, it was permitted only for reference by reading. Taking records outside the OSA premises was restricted and neither the records were allowed to be scanned or captured using camera.

The concept of **e-Archives** eliminated the above challenges and with its efficient search features, easy access has been made available to everyone.

Citizens can pinpoint the search and can find out the availability of the document, read, download & print the first and last page of the document.

For detailed study of desired document in full, one can visit the OSA as mentioned earlier.

**MODULES OF E-ARCHIVES:**

**e-Catalogue Module:** With this on-

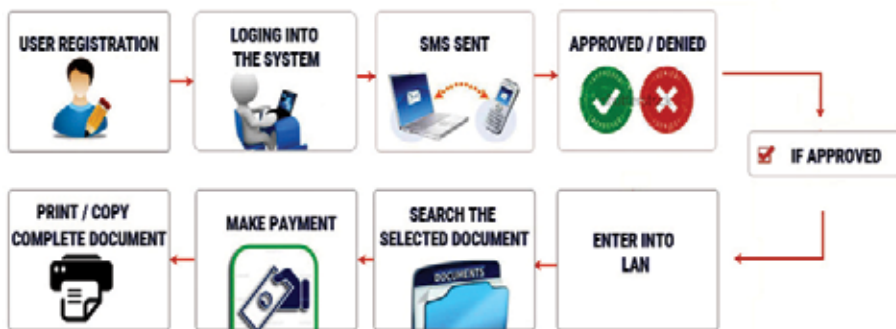
line catalogue module, a visitor can view the various categories of archival documents and can read the first and last page online as described. Various other categories include books, records, private collections, gazetteers, journals & periodicals, microfilms and maps, archives of voice recordings of freedom fighters are stored digitally and can be access through this portal. The e-cataloguing are made as per the subject/topic area, year, author details etc. This module also facilitates advanced searching on all archival records.

**MODULE FOR ONLINE APPLICATION FORM FOR RESEARCH PERSONS:**

This is an online application form for those researchers who are interested to become members for the purpose of study and research at OSA. Once applied through the registration form online, the applicant receives an SMS through their mobile and e-Mail. On successful completion of the approval process, the applicant gets registered to OSA.

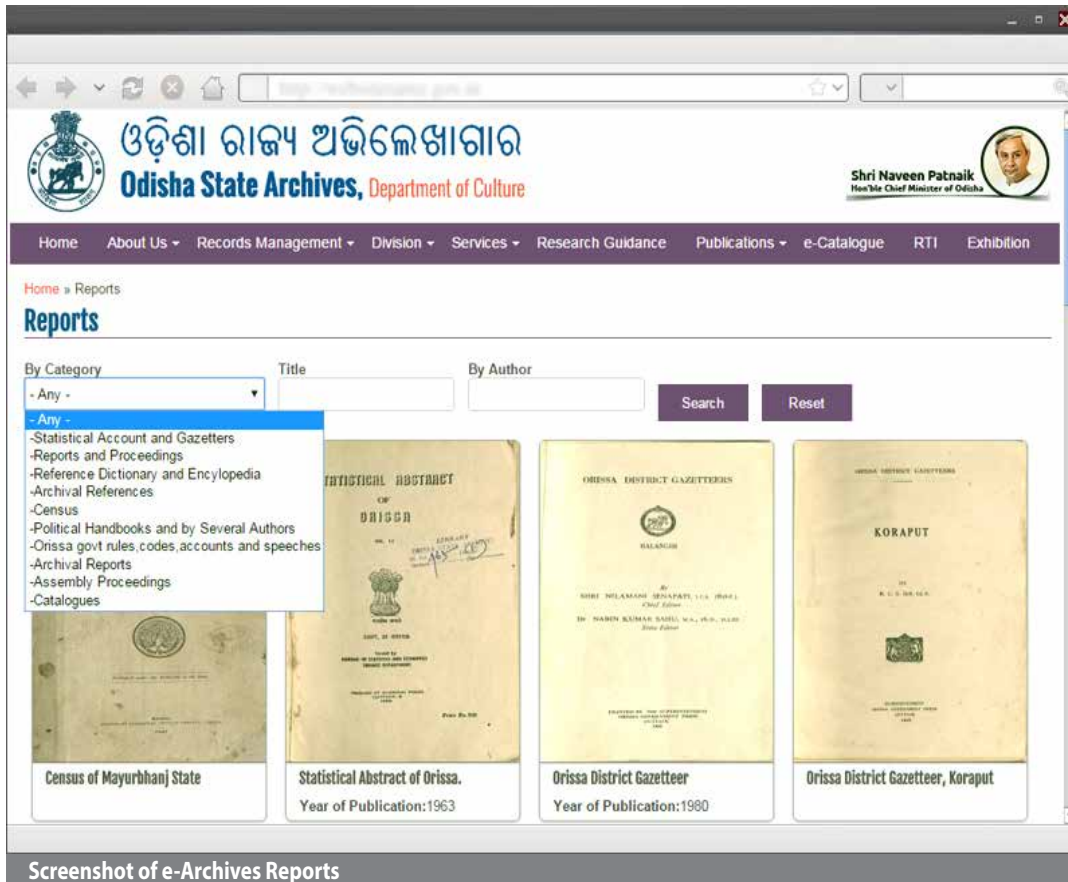
**SCANNING & DOCUMENT MANAGEMENT MODULE:**

This module facilitates options for scanning documents at various de-



e-Archives process workflow diagram

Screenshot of e-Archives web portal



Screenshot of e-Archives Reports

sired resolutions. Moreover, the module has features for image cropping and optimizing, save and storing the images and data to the local server at OSA.

## DEPLOYMENT AND SCALABILITY:

**e-Archives** application has been deployed at the NIC Data Centre New Delhi. The application has been designed to manage steady traffic in addition to load balancing during occasional heavy traffic by adopting Modularity, Session variables etc. The application has been thoroughly tested and audited for cyber security and a strong network and application security has been maintained. **e-Archives** application software has been designed and developed considering its scope to scale up for the

purpose to use it generically across the nation.

## COST BENEFITS:

1. It is financially beneficial to the users availing the services through **e-Archives** portal as no service charge or logistic or indirect cost will be incurred to them.
2. The facility can be provided at a very nominal charge if the user can visit the CSC.
3. Significant stationary cost minimizing could be achieved as the reports used to be submitted in the form of hardcopy earlier can now be replaced with soft copy.
4. As the archiving is an ongoing process, necessary scanner facility and servers has been established at OSA computer centre in order to scan, pro-

cess and store new documents continuously.

The website of **e-Archives** has been developed with responsive design to enable the users of desktops, laptops, various hand held devices such as tablets and mobile phones to conveniently view the web pages by auto screen adjusting layouts.

## BACKEND TECHNOLOGY:

Server-side scripting: PHP

Database: PostgreSQL/Enterprise-DB (EDB CE PGSql Community Version with solution pack)

OS: RHEL6.2 Server

Web Server: Apache Tom-

cat 6.0

CMS: Drupal (for portal management)

**Conclusion:** This generic product is robust enough to take care of even scanning and storing high-resolution images in its database. **e-Archives** has been proposed for hosting National Cloud, MeghRaj. In the next phase, all the inventory and data stored at LAN server are planned for storing and hosting at Cloud environment. **e-Archives** can be an efficient roll out model which can be considered for adoption by other states also.

**Visit:** <http://odishaarchives.nic.in>

### For further information:

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