Software/Tool Comparison Worksheet

Criteria   **Evaluation**

Name	Axiell's Electronic Museum (EMu) (formerly from KE Software)
Website/Contact	Website/Contact https://emu.axiell.com 124 Church Street, 3rd Floor Toronto, ON M5C 2G8 Canada 409 Granville Street Suite 655 Vancouver, BC V6C 1T2 Canada Tel: +1-416-238-5032
Description	EMu is a comprehensive collections management system for natural history museums, cultural history museums, art museums, herbaria, archives, and special collections. Natural history focuses include zoology, earth sciences, paleobiology, botany, and physical anthropology. It is widely used by large museums and collections worldwide. Notable clients in the United States include the American Museum of Natural History, Field Museum of Natural History, New York Botanical Garden, Smithsonian Institution, and Yale Peabody Museum. A brief statement about the uses of EMu at Yale can be found at: http://emu.axiell.com/about-emu/our-clients/case-studies/1181-yale-peabody-museum-new-haven-usa EMu includes a robust collection of tools and features, some of which are itemized below.
Computer hardware Operating system Supplementary software	Server The specifications for the server depend on the operating system, number of concurrent users, and data storage requirements. Contact Axiell to discuss specifics. The following guidelines apply:

General

- Perl 5.8.5 or later is required (5.10 and 5.12 are fine).
- Allow 100–200 MB of RAM per concurrent user a+ OS memory.
- If using RAID, RAID 10 is recommended.
- A web server is required; PHP is no longer required. The client libraries can be PHP, perl, java or .Net.
- For Windows NT/2000/2003, allow one Pentium 4 (2.0GHz min) for every 5 to 10 concurrent users.

Unix / Linux

There are no special requirements. Contact Axiell to discuss the specifics of your proposed configuration.

Windows NT / 2000 / 2003

- Server must be dedicated to running EMu.
- Microsoft IIS must be installed for EMu Internet or Intranet interfaces.
- Microsoft SMTP service must be installed or an SMTP server must be available on the local area network for sending automated task reminders and system administration reports.

Workstation Requirements

The EMu client will run on Windows 2000 Professional, Windows 2000 Server, Windows XP, Windows Vista, Windows 7, Windows 8, Windows 10, and Windows 2008 Server. Minimum requirements include a video card capable of at least 800 x 600 resolution with 24-bit color and a contemporary web browser. The EMu client application must run at a minimum resolution of 800 x 600. The following minimum requirements apply:

- Windows 2000: Pentium III CPU, 128MB RAM (256MB recommended), Service Pack 2 (or greater)
- Windows XP Pentium III CPU, 256MB RAM

	(512MB recommended), Service Pack 2 (or greater) • Windows Vista: Pentium Core Duo CPU, 1GB RAM (2GB recommended) • Windows 7: Pentium Core Duo CPU, 1GB RAM (2GB recommended) • Windows 2008: Pentium Core Duo CPU, 2GB RAM (4GB recommended)
Additional Hardware/software required	Printer, barcode reader

Features	Includes a module-based interface with intuitive menus and database modules, including modules for:
	
	   o catalog,
	   o taxonomy,
	   o parties,
	   o sites,
	   o collection events,
	   o loans/transactions,
	   o multimedia,
	   o conservation, and
	   o tasks.
	• Supports collections management activities including accessioning and de-accessioning, incoming and outgoing loans, shipments, location tracking, internal movements, valuations, insurance, indemnity, etc.
	• Provides comprehensive conservation and condition check documentation. Allows tracking of details about storage conditions, and includes a Condition Check facility to document an object's current and historical conditions and the future schedule of condition checks. Conservation work on collection objects can be scheduled and monitored, capturing examination details, a description of the damage or other reason for conservation treatment, details of the treatments performed, the results of those treatments, and any associated costs.
	• Includes an integrated pest management subsystem, tracking pests captured in traps within the museum, highlighting danger areas and

	sources of infestations.
	• Supports research applications though documenting, organizing, reporting, aggregating, and interpreting data.
	• Supports a Digital Asset Management system through a multimedia repository compliant with the Dublin Core Metadata Standard.
	• Allows users to author audience-specific narratives about collection objects, including but not limited to those for school children, researchers, and the general public.
	• Supports public engagement, including visual geographic mapping.
	• Provides support for publishing data to the internet and intranet with the integrated IMu Internet Museum system.
	• Includes an Application Programming Interface.
	• Provides support for extensive user customization of workstation and web interfaces, including customization by field, tab, and module, all configurable to individual users.
	• Provides support for Darwin Core exports and GBIF harvesting.
	• Import and export tool for varying views are provided.
	• Provides a strong security model for building groups and for adding and managing users in those groups.
	• Provides support for taxonomic synonyms.
	• Provides a tab for geographic status tracking.
	• Includes a full bibliographic module.
	• Provides custom support, technical assistance, training, user conferences, and user documentation, allowing clients to become part of a larger community of users.
	• Annual meetings provide the opportunity to learn about new features as well as to rally support from other institutions for user- or community-centered changes.
Market presence	More than 25 years.
Initial cost	Installation costs vary on institution size, institutional IT knowledge, and number of concurrent users. Contact Axiell ALM to discuss specifics.

Maintenance cost	Approximately US$1,000.00 per year per concurrent license.
Ease of setup/ prerequisite skills	The EMu Windows client can be installed stand-alone on each PC or on a shared fileserver folder with a "light" installation on each PC. Stand-alone installations must be upgraded individually. Upgrades to installation on a shared fileserver are usually performed simply by upgrading files in the shared folder. In many instances, IT assistance is needed.
Continuing IT support required?	Yes
Special skills required for maintenance	The system administrator is typically responsible for: • physical integrity of the server, • operating system and ancillary programs maintenance and upgrades, • adding and deleting user accounts and password management, unless the accounts are maintained on a Windows NT / 2000 / 2003 primary domain controller or a Unix NIS server, • backup and restore; typically done with a commercial backup product, such as Veritas BackupExec or CA Arcserve.
Challenges	EMu relies on Texpress, a proprietary SQL '92 compliant, relational database management system. As with virtually any complex database management system with an extensive interface, data migrations may require extensive mapping, making data not easily transferable to other database systems. Although all data can be exported via ODBC or XML, migration may be challenging. Cost of installation and maintenance can be high for smaller institutions, those with limited information technology budgets, or those with the need for numerous concurrent licenses.