

iDigBio Collection Management System (CMS) Information Gathering

Thank you for taking the time to consider and respond to the following questions. iDigBio will make your responses available to the natural history collections community, both as an online resource available to anyone, and as a reference specifically for participants in our “Introduction to Biodiversity Specimen Digitization” course. This resource will serve as an update to a similar survey we did in 2012: <https://www.idigbio.org/content/biological-collections-databases>.

Please return your completed survey to Erica Krimmel (ekrimmel@fsu.edu).

BASIC QUESTIONS

1. Name and email of person responding to this survey:

Name: Qinglian Zhang

Email: qinglian.zhang@gallerysystems.com

2. Name of Collection Management System (CMS):

TMS Suite, which includes a series of browser-based collection management solutions: including TMS for Windows, TMS Collections, Media Studio, Conservation Studio, eMuseum, and Audit Manager

3. Website: <https://www.gallerysystems.com>

4. Company or group responsible for maintaining CMS: Gallery Systems, Inc.

5. Long-term funding structure for maintaining CMS (e.g., grants, membership, private):

TMS Suite clients pay an annual maintenance and support. Gallery Systems employs experienced professionals to provide effective ongoing assistance for our clients in their tasks on an ongoing basis. TMS Suite user support includes unlimited access to our support team who, together, have over 50 years of experience supporting our clients. It also includes Gallery Systems Community portal with access to support, downloads, documentation, and webinars. Gallery Systems regularly provide interim updates incorporating bug fixes and additional features and functions between major version releases. Software upgrade packages are provided as part of the service. Clients can pay for this as part of their general budget. Other common scenarios are when clients receive grants or funding from the government, corporate or other organizations to cover the cost.

6. Brief summary highlighting the market niche for this CMS:

Gallery Systems specializes in developing and implementing management systems for cultural collections, content and media. We currently work with almost 800 museums and

cultural heritage collections worldwide of all sizes and types, managing collections ranging from art to natural history and costumes to archives.

USABILITY QUESTIONS

7. Restrictions on types of collection objects and/or disciplines (e.g., cannot handle anthropology):

TMS Suite is design to handle a variety of collection items that are unique objects. So far, Gallery Systems team has work with the following types of objects: fine art (ranged from traditional to modern and contemporary, and includes time-based media), decorative art, natural history, living collection, anthropology, archaeology, air and space, archives, moving images, oral history, rare books and manuscripts.

8. Capacity for handling complex information related to taxonomic names (e.g. taxon concept mapping, recording annotations):

Yes, TMS Suite meets this requirement. The Thesaurus manager tool in TMS Collections is capable of managing the hierarchical vocabulary, including taxonomy. It supports both industrial standard concepts, such as Species 2000, and in-house vocabulary that is specific for the institution's collection. In Conservation Studio, users will be able to make annotations and input preservation remarks for the collection pieces detailed to each component. For example, users will be able to mark damaged area of a piece of work in the gallery on an image record in Conservation Studio using an iPad.

9. Capacity for handling complex information related to geographic places and for facilitating tasks such as georeferencing:

The application can capture all the geo-location information within TMS Collections with location related fields, including geographic coordinate system for collection object itself as well as the related site information. Additionally, the Getty's Thesaurus of Geographical Names and Art and Architecture Thesaurus is one of the default Thesauri comes with the purchase package.

eMuseum can publish the information online via an interactive map for user engagement.

10. Capacity for handling complex information related to people (e.g. collectors, identifiers, loan agents):

Constituents module in TMS Suite meets this requirement, and it manages all information related to individuals and corporate bodies from the Constituents Module. Constituent records can be linked to all other modules with a variety of user-defined roles. All fields specified here are managed by a constituent record. A constituent can be a conservator, researcher, collector, field worker, lender/borrower, curator, author, donor, appraiser, volunteer or another partner institution.

11. Capacity for handling complex information related to extended data facets such as traits of (e.g. morphometrics) and interactions between (e.g. parent-child) collection objects:

TMS Suite is a relational database that has the ability to link different types of records together. Records can be linked in a *one-to-many* way. When two or more records from the same module are linked together, they become associated records. In all modules, records can be associated by a Parent-Child or a See-Also relationship. Users will be able to view the related information in a hierarchy view. For example, users can define the type of the relationship, such as part to whole. For fossil objects, each bone can be a child record link to the parent record in the system for detailed cataloging, conservation and movement tracking.

12. Capacity for facilitating linkages between collection objects and extended data stored elsewhere, such as a genetic data repository:

TMS Suite supports linking data from various resources. If the data is available via a website. Users will be able to store the URL link in the application. If the data are exported in file formats, users will be able to link to the collection record as a media file.

Besides internal cataloging, eMuseum also supports linking/displaying external vocabularies to publish the institutional record information on a shared web platform.

13. Capacity for facilitating collection management transactions, such as loans, accessions, and transfers:

TMS Suite modules can all be cross reference and inter-relate to each other. The Loan module can manage both incoming and outgoing loans, including all aspects of related legal and financial process. Shipping module is designed to manage shipment to borrowers and from lenders, plus any types of shipping for your collection. Users could create workflow-oriented data entry views within Object module to match the institutional routine. With the help of Objects, Loans and Shipping module, TMS Suite users will be able to manage both domestic and international transaction for the collection.

14. Capacity for facilitating physical collections care including tracking storage locations and condition reporting:

Location is managed as an authorities list within the TMS Suite application. Users will be able to document both inhouse and external location into hieratically detailed level. The Location Authority contains all of the locations in which objects in your storage (or those on loan) are either stored, displayed, or being treated (as with conservation), etc. They include current and historical locations. Any location can be made inactive, but the location will still be displayed as part of the Location History screen for that object.

Once users have moved an object to a location, the move cannot be deleted from the database (for audit trail and security purposes). If, however, users accidentally move an

object to the wrong location, system administrators can deactivate the move; this option allows user to provide more accurate information on the Location History screen for that object. The location movement is detailed to object component level. Condition report and location history record can be generated within the TMS Suite system.

15. Capacity to manage media (e.g., 2D images, 3D images, audio, video), and/or to work in sync with a dedicated Digital Asset Management System:

The Media Module in TMS Collections provides digital asset management features to handle a wide range of media formats, including image, text-based files, audio and video, using simple upload functionalities, such as drag and drop. Automatically index media metadata, control download access to the asset at different resolution, annotate and compare images and search document content.

16. Capacity for mobilizing collection object data (e.g., publish directly to an IPT, or export custom text files):

All listview within the system can be export into Excel spreadsheet with one click. TMS Suite supports two business standard reporting services: Crystal Report and SQL Server Reporting Service (SSRS). With the purchase of TMS Collections, users will get around hundreds of default Crystal Report that covers the majority of the cultural institution's daily practice, such as exhibition checklist, location history and deed of gift.

17. Capacity for mobilizing collection object media (e.g., serve publicly online via a stable URI):

eMuseum is online collections software within TMS Suite. Since all applications share the same database backend, it allows cultural institutions seamlessly to publish information online via the collections management software which share the same platform with all the other products within TMS Suite. Using its fully configurable layouts, users can create dynamic digital exhibitions and publish them to organization's public-facing website or intranet. Each object record will have a unique link associate with it on the eMuseum website.

18. Ability for users to customize the CMS:

TMS Suite is a series of highly configurable tool. All the field names can be relabeled according to organization's policy. Users will be able to design the data entry forms based on the organization's workflow. Besides, features like text entries and flexible fields, as well as Gallery Systems customization services would meet the requirements for all types of collections.

IMPLEMENTATION QUESTIONS

19. Computer infrastructure (hardware, software) required:

- SQL Server
- Windows operating system (depends on the specific products and services)
- Crystal Reports Web Components: Tomcat and Apache Server (depends on the specific products and services)
- Microsoft Office

20. **In-house IT expertise required:** knowledgeable in relevant third-party applications such as the database server and Windows Server operating systems.

21. **Estimated costs for initial set up:**

The pricing structure varies from products to products, and cost depends on the product/services that a client would need. Gallery Systems sales team is happy to have a conversation with the prospect to find out more details.

22. **Estimated costs for ongoing expenses such as membership or upgrades:**

The same as above.

23. **Migration or other new user services offered:**

Gallery Systems takes an iterative approach to data conversions, which involves mapping data in the source/legacy databases to the target database. The process includes parsing data into separate elements where appropriate. Often authorities and vocabularies are established, and some pre-migration data cleanup is prescribed. Some data cleanup is performed as part of the migration. Often duplicate values (such as personal names) are resolved and “de-duped.” Once there is a complete initial mapping, we run an initial “iteration” of the data migration which can be useful for viewing legacy throughout data in TMS Collections as well as understanding how TMS Collections functions with your data. The iterative process is the refinement and re-running of the mapping and conversion multiple times. Between iterations there is frequent back-and-forth communications related to questions and alternatives as well as quality assurance (QA) checking within Gallery Systems.

Initially, TMS Collections will be installed with the test conversion data on Gallery Systems servers and an initial application training courses will be provided online. The client’s participants in the data review process will verify that the data was mapped accurately and completely. Gallery Systems also carries out a thorough internal review of the data conversion, making any changes required before delivery.

Once the mapping is finalized, the legacy database is frozen, meaning users may have read-only access to their data, but no data may be modified in the legacy system. A fresh copy of the latest data is taken and converted using the final mapping. At this point, an extensive QA process is initiated and the final conversion is thoroughly checked by project team members at Museum and Gallery Systems. Once the data migration routines are tested and finalized, the final data set will be provided by the Museum and converted. After the final data is installed, reviewed and approved, onsite training sessions for staff will be conducted at a time that meets your scheduling requirements. Training is more

meaningful if client data is used; therefore this training is generally conducted post-data conversion.

24. Example institutions/collections using your CMS:

Gallery Systems has over eight hundred clients worldwide, specialized in various disciplines, includes some of the world's finest collections such as The Smithsonian Institute, California State Park, Peabody Museum of Archaeology and Anthropology at Harvard University, The Royal Ontario Museum, The Royal Terrel Museum, The Metropolitan Museum of Art, Museum of Modern Art, The Guggenheim Foundation, Getty Foundation and etc.

25. Representative for potential users to contact:

Chris Alexander | North American Sales Manager
chris.alexander@gallerysystems.com | 510.402.4920

Qinglian Zhang | Account Manager
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26. Best resources to point potential users to (e.g., presentations, brochures, recorded webinars):

TMS Collections Brochure: <https://ideas.gallerysystems.com/About-TMS-Collections.html>

eMuseum Brochure: <https://ideas.gallerysystems.com/About-eMuseum.html>

Conservation Studio Brochure: <https://ideas.gallerysystems.com/About-Conservation-Studio.html>

Media Studio Brochure: <https://ideas.gallerysystems.com/About-Media-Studio.html>

Harvard Peabody Museum Case Study: <https://www.gallerysystems.com/peabody-museum/>

Royal Ontario Museum eMuseum case study:

<https://www.gallerysystems.com/solutions/online-collections/royal-ontario-museum-online-collections/>

California State Park case study: <https://www.gallerysystems.com/california-department-of-parks-and-recreation/>