CIMCC Mukurtu Community Guide

Welcome to the California Indian Museum and Cultural Center CMS

The California Indian Museum and Cultural Center was founded in 1996 with the purpose of educating the public about the history, culture, and contemporary life of California Indians and to honor their contributions to civilization.

Browse by Category

Biographies
Missions

Educational Resources
Places

History
Storytelling

Language
Traditional and Cultural

URL LINK: CIMCC.INFO
What is Mukurtu and what does it mean?

Mukurtu is a free and open source community archive platform designed with the unique needs of indigenous communities, libraries, archives, and museums in mind. Mukurtu is built on the Drupal content management system with features set aimed at indigenous cultural heritage management needs.

The word “mukurtu” in Warumungu means “dilly bag.” Dilly bags hold sacred items and are accessible by acting responsibly within the community and gaining the permission of knowledgeable community leaders. Like the dilly bag the archive is a “safe keeping place,” a community repository for cultural materials and knowledge that grows from continued use, dialogue and negotiations. The Warumungu community maintains the original archive at the Nynikka Nyunyu Art and Culture Centre where people access their materials, deposit new content, add knowledge and information to existing content, and create new materials.

The "3C's": Communities, Cultural Protocols, and Categories

These three structural elements are required to create digital heritage items. You will need at least one community, one cultural protocol within that community, and one category before you can start working with content.

Communities and Protocols are at the Core of your Mukurtu CMS. Communities group together site users: the WHO of Mukurtu. Through membership in communities, users can interact with and join cultural protocols. Cultural Protocols are HOW content is shared between people.

Search and browse terms like categories and keywords not only help users locate specific digital heritage items, they link together similar kinds of digital heritage items, and aid users in discovering other items of interest.

What are communities?

Communities are one of the three core elements of every Mukurtu site. The other two core elements are Cultural Protocols and Categories.

Communities can be large or small, public or private, and your Mukurtu site can have as many communities as needed.

Each community represents a group of content contributors and site users and contains digital heritage items relevant to those community members. User access to individual digital heritage items within a community is managed through the use of cultural protocols that are created within the community.

Some examples of communities could be specific families or clans, tribal government departments, or a space for youth-appropriate content.
How to create communities?

To create a new community, either use the +Community button from the navigation menu or the Create Community link from the Dashboard.

The only required field is Community Name, but when creating a new community the more information, the better.

Best practice is to provide a brief description, so that users can have some understanding of the purpose of the community, its membership, and the content they can expect to find within.

Communities can be customized with a banner and thumbnail image.

In order for the community to be listed on the main site page, it will require a thumbnail. It can still be accessed without a thumbnail, but users will have to navigate to it through the Browse Communities button.
On the Advanced tab, privacy and access settings can be changed.

When a user first registers for an account, they can request access to communities (requests are approved by community administrators). For a new site user to be able to request admission to the community, select Show on registration page. This option is not selected by default.

Group roles and permissions can also be modified, but this is not recommended without a thorough understanding of how roles and permissions work.

When done, click Save. All fields can be edited or updated later by editing the community.

After saving the community, a confirmation message will be displayed, and will contain three notes:

- The community has been created,
- A Default cultural protocol was created,
- You have been added to both the community and the default protocol.

Along the right sidebar, the community membership is displayed, along with a list of all the protocols within that community that the user is a part of.
What is a Cultural Protocol?

Cultural Protocols are one of the three core elements of every Mukurtu site and provide users with appropriate access to content. The other two core elements are Communities and Categories.

Each cultural protocol exists within a community, and each community can have multiple cultural protocols. Digital heritage items are placed within at least one cultural protocol and can then be viewed by users who are also members of those protocols.

There are two types of cultural protocols: open and strict. Digital heritage items within an open protocol can be viewed by anyone (including anonymous site visitors), while items within a strict protocol can only be viewed by members of that protocol. Multiple protocols can be layered to ensure that users can only view items appropriate for them, and to provide very granular access. For example, if an item is part of the two strict protocols ‘Women Only’ and ‘Elders Only,’ then only users who are members of both the ‘Women Only’ and ‘Elders Only’ protocols can view that item.

The three main levels of protocols overall:

- **Open**: Setting this sharing protocol to your Community or Cultural Protocol means any user or guest of your Mukurtu CMS can see that your community exists. If it is set to your digital heritage items, these are also publicly visible.

- **Community**: Setting this sharing protocol to your Community or Cultural Protocol means that only users may only see your group if they are assigned as a member of your Community or Cultural Protocol. Any DH items that are attributed to a “Community” Community or Cultural Protocol, but assigned “open” access are visible to the public, while the community name remains anonymous.

- **Strict Community**: This is like the "Community" sharing protocol, but when you post a digital heritage item and attribute it to more than one "strict community", the sharing protocol on that item will default to only sharing within the "strict community" Community or Cultural Protocol. If you assign two strict
communities on one item, a user will have to be a part of both "strict community" communities and/or cultural protocols.

Some examples of cultural protocols could be gender-based (male only, female only), age-based (elders only, no youth), seasonal access only, clan or tribal affiliation, secret/sacred, community only, or public access/open.

**Configuring Protocols**

Cultural Protocols help define how content is shared within your Mukurtu CMS. Cultural Protocols can be added within each community you create and must be nested within a parent community. When you create a new community, a default cultural protocol is generated for sharing content within your community only. Notice that any time a member is added to your community, they are also added to this protocol.

When you add a cultural protocol, keep in mind that this is a portal through which users will access your content. Like a community, the cultural protocol has a name, description, and images, but it also has a sharing protocol and a parent community. The sharing protocol is the default sharing setting for any content within the cultural protocol. If you select 'open', digital heritage items will be accessible to any site visitor. If you select 'strict' digital heritage items will be accessible to cultural protocol members only. If you have reached this form via a community page, the parent community will be selected for you. You can select a parent community from any community you administer.

**How to Create Cultural Protocols?**

To create a new cultural protocol, either follow the +Cultural Protocol button from the navigation menu, or Create Cultural Protocol link from the Dashboard.

Each Cultural Protocol must have a name. Best practice is to provide a name that is descriptive and unique - if a site has three cultural protocols named ‘Public Access’, that may be confusing for users.
Select ‘Open’ or ‘Strict’ for the Sharing Protocol.

- If a protocol is Open, any site visitor (even those without an account) can view content within that protocol.
  
- If a protocol is Strict, only users who are also members of that protocol can view content within it.

Protocols are not standalone, they reside within communities. Select a community from the dropdown menu. Only communities in which the user is a protocol steward will be displayed at this step.

Best practice is to provide a brief description, so that users can have some understanding of the purpose of the cultural protocol, its membership, and the content they can expect to find within.

Cultural protocols can be customized with a banner and thumbnail image.
On the **Advanced** tab are more controls for access and membership.

A protocol can be set so that all new members are automatically added to it. This might be convenient if there is a general protocol which all users will need access to. This option is not enabled by default, to best manage privacy settings.

When a user first registers for an account, they can request access to cultural protocols (requests are approved by protocol stewards). For a new site user to be able to request admission to the cultural protocol, select **Show on registration page**. This option is not selected by default.

When done, click **Save**. All fields can be edited or updated later by editing the cultural protocol.

You will see a confirmation screen saying that the new Protocol has been created. You will also be added to the new protocol by default.

After saving the cultural protocol, a confirmation message will be displayed.
What is a category?

Categories are one of the three core elements of every Mukurtu site, and help users search and browse for content. The other two core elements are Communities and Cultural Protocols.

Categories are terms that describe your digital heritage items. They should be broad enough that each item on your site is represented by at least one category and so each category describes many items. For example, ‘Fishing’ or ‘Food’ may make good categories as they could apply to a range of items, but ‘salmon’ may not make a good category, as it is likely to only apply to a small number of items. For narrower or more specialized terms, consider using keywords. More information about keywords is available in the support article Using Categories and Keywords.

Most Mukurtu sites usually have around 10-15 categories, but the categories chosen should reflect the collection and users.

Some examples of commonly used categories include Lifeways, Education, Lands, Architecture and Dwellings, Language, Ceremony, and Artistry and Artifacts.

How to create categories?

To create a new category, either follow the +Category button from the navigation menu, or the Create Category button from the Dashboard.

Categories must have a name

Categories should have a description, as the intended meaning of the term may not be immediately apparent to all users.

When ready, click Save
Using Categories and Keywords

Functionally, categories and keywords work the same way: they both relate and connect digital heritage items that have something in common. When viewing a digital heritage item, the categories and keywords will appear on the right side of the page, along with other digital heritage metadata. Clicking on a category or keyword will redirect a user to a page that shows a list of all digital heritage items with that same category or keyword.

While categories and keywords function very similarly to each other, they are also intended to serve different purposes. Categories are applied site wide, across all communities, and help with high-level navigation and browsing. They are generally broad concepts, rather than specific identifiers (e.g., Architecture, as opposed to Seattle Public Library). It is best to select a relatively small number of categories. The number of suggested categories varies, but it is typically recommended to include between 10 and 15. Only Mukurtu Administrators can create new categories.

Keywords, unlike categories, are meant to be more open and flexible. Keywords are also applied site-wide. They can be used more like tags, and a digital heritage item can include as many keywords as are useful (typically 3-5). New keywords can be added much more freely than with categories. Since any contributor creating or editing a digital heritage item can add a new keyword, site administrators may want to provide or maintain a list of recommended or approved keywords as part of an internal workflow.
What is a digital heritage item?

Digital Heritage Items are the main pieces of content that populate a Mukurtu site and combine metadata and media assets to share cultural heritage about an object, person, story, image, and more. A DH item must have a title, community, cultural protocol, and category associated with it, listed in the Mukurtu Essentials tab. Digital heritage items can be as simple as a few lines of text or metadata; they can be built around a single media asset, like an image, video, document, or audio clip; or they can be more complex, using multiple media assets and rich metadata to tell a story available in the following tabs: Mukurtu Core, Rights and Permissions, Additional Metadata, and Relations.

Digital Heritage Items are grouped together by categories, and are created within communities. Appropriate user access to items is provided through cultural protocols.

Mukurtu CMS includes an extensive set of descriptive, administrative, and technical metadata fields to best represent digital heritage items. While some fields are more generic (e.g. Title, Description, or Format), there are additional fields that allow for a richer experience, such as Cultural Narrative, Traditional Knowledge, and an interactive Location field.

Mukurtu CMS supports a wide range of file formats for audio, images, video, and files.

Audio

File Format: mp3
Bit Rate: 192 kbps
Sample Rate: 44.1 kHz

Mukurtu CMS supported file formats: mp3, wav, ogg, mp3, m4a
Images

File Format: jpeg
Bit Depth: Grayscale, 8 bit; Colour, 24 bit
Resolution: 150-200 ppi
Dimensions: 600 pixels across the long side

Mukurtu CMS supported file formats: jpeg, jpg, png, gif
*Mukurtu CMS also supports other preservation formats (dng, tiff), but these are not suited for access copies.

Video

Video files can be very large, using a third party to host video content for access copies saves storage space on your server. Both YouTube (youtube.com) and Vimeo (vimeo.com) offer private and/or unlisted hosting of videos, allowing you to privately host content on either service, and then feed those videos into your Mukurtu site. Please note that each of these hosting services has their own list of supported file formats

Mukurtu CMS supported third party hosting: YouTube, Vimeo, DailyMotion
Mukurtu CMS supported file formats: mp4, webm, ogv

Files

File specifications vary by file format. Recommended file size is less than 5 MB.

Mukurtu CMS supported file formats: pdf, ppt, pptx, xls, xlsx, doc, docx, odt, txt, csv, odg, sxw, ods, rtf, zip, rar, gz, 7z, tar

How to create digital heritage items?

From the navigation bar, click +Digital Heritage.
The Digital Heritage editor has two main components: the metadata fields, split into five tabs (Mukurtu Essentials, Mukurtu Core, Rights and Permissions, Additional Metadata, and Relations), and the media library, which can be expanded and shrunk by clicking on the list icon and/or the search toggle.

The first metadata tab, Mukurtu Essentials includes all fields required to create a minimally viable digital heritage item. These required fields are marked with an asterisk and are Title, Communities and Cultural Protocols, Item Sharing Settings, and Category.

Title is a plain text field. Provide a descriptive title.

Summary is an optional field, and is a good example of the helper text that is provided for many fields. Hovering over the field will prompt a text box that contains additional information to pop up. In this case, it specifies that the field is limited to 140 characters.
The media importer is accessible through the create/edit digital heritage item page and is present on the right hand side of the screen. Clicking the top-most tab on the panel (the ‘list’ icon) will open up the media library of previously uploaded media assets.

Clicking the other icons (one each for audio, files, images, and video) will open up the media importer and begin the media asset upload process.

Select the appropriate media type. Only media assets of one type can be uploaded at a time (image, audio, video, document), but different file formats of the same media type can be uploaded at the same time.

Multiple files can be uploaded at a time. Files can be added by browsing through the importer, or by drag-and-dropping from the computer. At the bottom of the importer window is a list of compatible file
formats. Click on Add Files to locate the files on the computer.

After all files to be uploaded have been selected, click Start Upload. Progress of each file upload will be shown in the browser - do not navigate away, close the window, or click Continue until ALL files have finished uploading. Depending on file size and number of files, this may take a little while.

When all files have been uploaded, click Continue.

Now media-level metadata can be added. Only Title is a required field, but it is best practice to include
as much metadata as possible about the media assets. Metadata is entered individually for each item. Media-level metadata for each file now can be entered manually now, or batch imported later if many media assets will need metadata.

Click **Select a community** to be presented with a drop-down list of communities which the user has permission to add items to. Select one community from the list.

Click **Choose some options** in the **Protocols** field to be presented with a list of cultural protocols from the previously selected community which the user has permission to add items to. More than one cultural protocol from the selected community can be chosen.

Note: multiple communities can be selected by clicking **Add another community**, but this can only be done AFTER at least one category has been selected.

Set the **Item Sharing Settings**. If using one only cultural protocol, leave the default ALL setting. If using more than one cultural protocol, selecting ALL will allow users who are enrolled in all of the listed protocols to see the item; selecting ANY will allow users who are enrolled in one (or more) of the listed protocols to see the item.
Select at least one **Category** from the list. More can be selected if appropriate.

Creator is not a required field, but is required, and is the first indexed field. The circular arrows on the right side of the field indicate that it is indexed. When entering text in an indexed field, the field will display a list of all previously entered terms that match the entered text, and the user can select the appropriate term from the list, or keep typing to enter a new term. This helps maintain consistency between contributors.

If desired, click **Save** to save the progress so far and view the item. There is no technical need to save after filling the first metadata tab, but it is a good place to pause.
Once the item has been saved, from the view screen, click **Edit** to enter the editor again.

Continue to fill out the rest of the metadata fields across the other four metadata tabs as completely as possible, or as specified by your internal workflows and policies.
When all metadata is entered, click **Finish**. Media assets and metadata will be saved and a confirmation page will be displayed. The media assets can now be used in digital heritage items, or to customize the site.

To add a recently uploaded media asset to a digital heritage item, open the media library by clicking the list icon, then drag and drop the thumbnail into the **Media Assets** box. To add more media assets, click **Add another item**, and repeat the above steps as needed.

**What goes in the Traditional Knowledge and Cultural Narrative Fields?**

The Traditional Knowledge and Cultural Narrative fields are descriptive digital heritage item fields unique to Mukurtu and allow community members to share additional information about cultural material that may not be appropriately represented in other fields. While they serve similar purposes and are flexible enough to fit community needs, Cultural Narratives highlight contextual historical, social, and/or political information. Traditional Knowledge is internal, unique, or otherwise esoteric knowledge that is not usually known outside of community members.

As an example, if a digital heritage item consists of a photo of a unique woven basket (and associated metadata), the Description field may be a general physical description of the basket, the Cultural Narrative field may explain the materials used in the basket and meaning of the woven patterns, and the Traditional Knowledge field may provide more information about traditional basket making and use within the community.
In addition to being a text field, contributors can embed media (images, video, or audio clips) directly into the Cultural Narrative and Traditional Knowledge fields.

**What are Traditional Knowledge (TK) Labels?**

From Local Contexts: “The Traditional Knowledge (TK) Labels are a tool for Native, First Nations, Aboriginal and Indigenous communities to add existing local protocols for access and use to recorded cultural heritage that is digitally circulating outside community contexts. The TK Labels offer an educative and informational strategy to help non-community users of this cultural heritage understand its importance and significance to the communities from where it derives and continues to have meaning. The TK Labels are useful when valuable cultural heritage is in the public domain and appears as though it can be shared and used by everyone. This is often not the case for Native, First Nations, Aboriginal and Indigenous cultural heritage materials and labeling is designed to identify and clarify which material has community-specific, gendered and high-level restrictions. This is especially with respect to important sacred and/or ceremonial material, material that has seasonal conditions of use and/or materials specifically designed for sharing and outreach with others. The TK Labels also provide an option for correcting the public historical record. For instance, a TK Label can be used to include information that might be considered ‘missing’, including the name of the community from where it derives, what conditions of use are deemed appropriate and how to contact the relevant family, clan or community to arrange appropriate permissions.”

TK Labels are designed for material that is already considered to be in the public domain and is no longer protected by copyright or when a third party holds the legal copyright. The labels are best suited for older material or when ownership is not clear. The labels are an option for conveying important information about the material. They can be used to include information that might be considered missing from the ‘official’ record, for instance the name of community from where it derives, what conditions of use are deemed appropriate, how to contact the relevant community to arrange appropriate permissions, etc. The labels help users identify sensitive cultural material and, therefore, also help users make informed decisions about how this material should be used and in what ways. The labels are designed to promote the fair and equitable use of expressions of traditional knowledge.
Mukurtu CMS includes support for customization of all thirteen (13) TK Labels, and up to four Labels can be displayed on each digital heritage item.

**What is a collection?**

The default Browse view in Mukurtu CMS shows all digital heritage items on the site that a user has access to (based on the Cultural Protocols that they are a member of), in order of most recently created or edited. Users can search or browse from this view to find content.

To provide users with a more curated or guided experience, create Collections. Collections are groups of items selected by a user with the Curator role. Collections can have title, description, and a featured image, and the order in which items are displayed within a collection can be controlled by the Curator. Digital heritage items from across the site, and from many Cultural Protocols, can be included in one Collection, and users will only see those items they have access to (based on the Cultural Protocols that they are a member of).

Note: While access to individual digital heritage items within a Collection is managed by Cultural protocols, Collections themselves, their titles, descriptions, and featured images will all be publicly visible.

**How to create collections?**

The default Browse view in Mukurtu CMS shows all digital heritage items on the site that a user has access to (based on the Cultural Protocols that they are a member of), in order of most recently created or edited. Users can search or browse from this view to find content.

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Note: While access to individual digital heritage items within a Collection is managed by Cultural protocols, Collections themselves, their titles, descriptions, and featured images will all be publicly visible.

To create a Collection, follow the +Collection button from the navigation menu.

- Collections must have a name, give the collection a descriptive name.
- A 140 character summary will display on the Collections landing page (yoursiteurl.com/collections), give the collection a brief, descriptive summary.
- The rich-text description field supports a longer description of the collection, and can include images, audio, and video.
- The image will display on the Collections landing page, as well as above the description on the collection page.
Digital Heritage Items Tab
Use the Digital Heritage Items Tab to select which digital heritage items to add to the collection. Start typing the name of the item to include.

The drop-down menu will automatically populate with a list of items that match the entered text, select the appropriate item.

Click Add another item to add more items. Repeat as needed.

To rearrange the display order of digital heritage items in a collection, click on the cross symbol to the left of the item name, and drag to re-order.
Click Save when done.

Items can also be added to collections from the Edit Digital Heritage Item page. On the Relations, begin typing the name of the collection, and select the appropriate collection from the drop-down list.

**What is a community record?**

Community Records allow for a greater range of information to be shared about a digital heritage item. Community records can be used for a number of different purposes, for example, preserving an institutional (library, archive, museum) record while enabling community members to add their own knowledge to the item; allowing members of multiple communities to share their own information without having to edit or erase other community members’ contributions; or sharing select metadata fields with different communities to help promote appropriate access to knowledge.

When a community record is created from a digital heritage item, they are displayed together, and they share the same media asset, but the rest of the metadata is completely independent. Community records can have different sets of cultural protocols from the parent record, which can be an effective tool to ensuring select metadata fields are shared with the right people.

**How to create community records?**

In the two sample images below, the first shows some of the metadata that is part of a university library record...
And the next image shows a community record on the same digital heritage item. The media asset (the image) is shared, but many of the metadata fields are entirely different, or include different content.

To add a community record, a user must be a Protocol Steward of at least one of the cultural protocols of the digital heritage item of interest. Note that even though each community record may have its own set of cultural protocols, a user must be able to access the parent record in order to view its community records. If multiple strict community records are going to be used, it is best practice to make the parent record the most public. Multiple community records can be added to a digital heritage item.

To add a community record, navigate to the digital heritage item and click Add Community Record.

All the same fields that are required when creating a digital heritage item are required here: Title,
Community, Cultural Protocol, Sharing Setting, and Category. The only difference between completing a community record and a digital heritage item is that there is no media asset field in community records. When community record is complete, click **Save**.

Other than media assets, all other fields are the same as a regular digital heritage item.

To edit a community record, do not use the large edit button below the title: that only edits the parent record. Navigate to the community record to be edited, and click the small (**edit**) link next to the community record title.

**Related Items, and using them to enrich your content**

Mukurtu CMS allows contributors to identify related digital heritage items, making it easy to navigate between them. Using related items helps to direct users between connected materials, and help them navigate a Mukurtu site.
There are no restrictions on which items can be related but, as always, cultural protocols apply, and if a user does not have permission to view a related item, they will not see a link to that item.

Related items are displayed in two places. At the bottom of a digital heritage item, a list of all related items with their thumbnail, and the title, community, category, and summary fields is displayed. This main display cannot be toggled on and off.

Related items are also displayed in the top right corner of a digital heritage item, with the thumbnail and title displayed - only one related item is displayed at a time here, but there are buttons so users can page through the previews. This smaller display can be toggled on and off through the dashboard, and is toggled on by default for new sites. Only Mukurtu Administrators can make this change.

Adding and Managing Related Items

To add a related item to a digital heritage item, open the digital heritage item to edit it, then navigate to the rightmost Relations metadata tab. In the section for Related Items, begin typing the name of the digital heritage item you would like to list as a related item, and a dropdown menu will appear, displaying all items that match the entered text (only those items that the user has access to through cultural protocols will be displayed). Click on the item from the list and it will auto-complete in the text box. This will also create a related item link back from the second item to the first.

To add more items, click Add another item, and repeat the above steps.

To rearrange the display order of the items, click on the cross symbol to the left of the item name, and drag to reorder.

To remove an item, highlight its title and delete the text. Note that this only removes the relation from this item. Removing the relation back to this item can only be done by editing the other item.
How to add book pages?

Book Pages, or Multi-Page Documents (MPDs), are additions to digital heritage items that allow multiple pages to be added to an item. The pages can be navigated and browsed through within the same digital heritage item page, and do not show up as unique digital heritage items when browsing or searching the site. Each book page can have a unique media asset and unique metadata - they are not inherited from the first page.

To add a book page, ensure that the first page has been created as a digital heritage item. From the digital heritage item page click Add a Book Page.

Some of the fields that are required when creating a digital heritage item are required here: Title and Category. All book page share the same Community, Cultural Protocol, and Sharing Setting as the initial digital heritage item. Additionally, the Relations tab is not present on book pages. When the book page is complete, click Save.
To reorder book pages, from the first page in the book, click the Edit button.

Navigate to the Relations tab.
In the Book Pages section, use the cross symbol beside each page to drag them into the desired order. Click Save when done.
What is Mukurtu Mobile?

Mukurtu Mobile is a mobile authoring tool for Mukurtu CMS, a digital heritage management system designed with the needs of indigenous communities in mind.

Mukurtu users come from all types of local communities who want to define how they share their cultural materials.

With Mukurtu Mobile you can create content on-the-go and upload media to your own Mukurtu CMS-powered community site, while maintaining control over your content.

You can attach multiple media to your content and use Mukurtu Core metadata fields to build a story about your media, an event, person or memory.

*Adapted from Mukurtu CMS, managed by the Center for Digital Scholarship and Curation at Washington State University.*

For more information visit: [http://support.mukurtu.org](http://support.mukurtu.org)