

METADATA CREATOR USER GUIDE





1. Landing Page Guide for Model Storage and Management System (MS2)

URL - <u>MS2</u>

Welcome to the Model Storage and Management System (MS2), a sophisticated portal designed to facilitate the storage and management of hydrologic and hydraulic models. This system is an essential tool for technical consultants working on flood planning and management.



Key Elements on the Landing Page:

Upon arrival at the MS2 landing page, you will encounter a streamlined interface with several key components:

Top Navigation Menu: The top menu bar contains links to various sections of the system:

- **METADATA**: Redirects to the Metadata Creation page (<u>Metadata</u>), where users can describe and register models and data collections.
- **TWDB ADMIN**: Leads to the Admin Login page (<u>TWDB Admin</u>), providing administrative functionalities.
- **TDIS**: Connects to the Texas Disaster Information System page (<u>TDIS</u>), a comprehensive resource for disaster-related information.
- **TWDB**: Directs to the Texas Water Development Board main page (<u>TWDB</u>), offering a wealth of information on water development in Texas.





Flood Planning Button: Located in the main content area, this button (<u>Flood Planning</u>) takes users to detailed information on flood planning programs.



System Capabilities: A section titled "WHAT DOES THE SYSTEM DO?" clearly outlines the functionalities available to technical consultants, including metadata generation, script creation for model uploads, and communication management with TWDB.

	The TWDB-FP services enable users to describe and register models and data collections for use and review by flood planning program managers at TWDB.
FLOOD PLANNING PROGRAM	METADATA TWDB ADMIN
WHAT DOES THE SYSTEM DO?	rechnical consultants are provided with a login to this system, where they can: 1. Generate metadata about the models, such as when it was created, the model type, and other key pieces of information for the archive.
	 Generate a script to upload the large model files from their computer. Manage communication with TWDB about the model upload.

Support Information: Under "WHAT IF I NEED HELP?", users are provided with contact information for scheduling assistance, ensuring support is just an email away.





Using the Navigation Menu:

Here's how to navigate using the top menu bar:

- 1. Home: Clicking "HOME" will always bring you back to the landing page.
- 2. **Metadata**: By selecting "METADATA," you'll be redirected to the Metadata Creation page, where you can begin the process of documenting your models.
- 3. **TWDB Admin**: "TWDB ADMIN" takes you to a login page for administrative access, requiring proper credentials.
- 4. **TDIS**: Clicking on "TDIS" opens the Texas Disaster Information System, a valuable resource for disaster management data.
- 5. **TWDB**: The "TWDB" link will take you to the main website of the Texas Water Development Board for more comprehensive information about water resources.

Accessing Flood Planning Resources:

To dive into flood planning initiatives:

 Click the "Flood Planning" button prominently displayed in the main content area to be redirected to the flood planning page, offering extensive resources and information for effective flood management.

Seeking Help and Support:

If you need assistance or have queries:

• Refer to the "WHAT IF I NEED HELP?" section at the bottom of the page. The provided email address (tdis@tamu.edu) is your direct line to the TDIS team for support and scheduling meetings.

Footer:

The footer section contains copyright information, affirming that all content within the MS2 is protected and proprietary.

2. METADATA PORTAL

Logging into the MS2 Metadata Application

Step-by-Step Instructions:

Enter Username: Input your username in the top field.

Enter Password: Type your password in the bottom field. The password entered will be masked to ensure secure login.

Log In: Click the "LOG IN" button to proceed.





Quick Tips:

• Ensure Caps Lock is off before entering your details.

Troubleshooting:

• Double-check your credentials for typos.

MS ² METADATA		
LOGIN		
Username		
admin		
Password		
LOG IN		
	7	

3. Managing Metadata Records in MS2

• After logging in successfully, you will land on the main dashboard for managing your metadata records. Here is a concise guide on navigating and utilizing this page:







Toggle Between Views

Within the MS2 Metadata dashboard, you have the flexibility to toggle between two different views for your records:

• **List View**: The default setting presents a concise list of your metadata records. This view is best for scanning through multiple entries quickly and efficiently.

THE R	TEXAS WATER 🕤 T	DIS		MS ² MET	ADATA			Ξ
	METADATA RECORDS							
			Search by n	ame or ID 🔍		CREATE +		
		Model Name	Model Identifier (MODEL_ID)	TWDB Flood Planning Project Identifier(s)	TWDB Flood Planning Region Identifier	Counties	Cities	Upload Spatial Exten Model
	VIEW DUPLICATE	TEST_VIJAY_MN	02000000091	023000091, 023000092	07	Denton, Archer	Frisco, Agua Dulce	
	FIRST < 1 of 1 > LAST							

• **Grid View**: By selecting the grid view toggle, you'll see your metadata records displayed as cards. This format provides a more visual layout where each record is segmented into its own distinct area on the screen.

Navigating Your Records

- Search Function: Use the search bar to quickly find records by name or ID.
- **Record Actions:** Each record has actionable buttons like 'VIEW' and 'DUPLICATE' in the Grid view for easy management.
- **Pagination:** Navigate through your records using the pagination controls at the bottom of the list.

Creating and Editing Records

- **Create New Record:** Click the 'CREATE +' button to start entering metadata for a new model.
- Editing an Existing Record: To edit an existing record, use the 'VIEW' button to access the detailed view, where you can modify information as needed.

Viewing Record Details

Clicking on 'VIEW' will open a detailed page for each metadata record where you can see more indepth information and perform additional actions such as editing or deleting entries.

4. Navigating the Side Menu in MS2 Metadata

To access these options, click on the menu icon on the upper right side of the Metadata records screen. This menu is an essential tool for finding additional resources and managing your user account within the Metadata system.





The MS2 Metadata application includes a side menu to help you navigate to different areas of the system. Here's what each menu option offers:

← → C (25 twdb.metadata.cloud.tdis.io/metadata_app/app/				©⊽ ☆	១១ ភ្ 🛛 🜒 🌘	Relaunch to update :
TDIS	MS ² MET	TADATA				
METADAT	A RECORDS		CREATE +		HOME SETTINGS DOCUMENTATION	
Model Name	Aodel Identifier TWDB Flood Planning (MODEL_ID) Project Identifier(s)	TWDB Flood Planning Region Identifier	Counties		ABOUT SUPPORT	
VIEW DUPLICATE TEST_VIJAY_MN	02000000091 023000091, 023000092	07	Denton, Archer	Frisco	LOGOUT	
	FIRST < 1 o	f1 > LAST		_		

Home: Returns you to the dashboard of the Metadata app where you can view all records.

Settings: Provides access to system settings where you can customize your user preferences. Documentation: Opens a repository of helpful documents, user manuals, and guides for using the Metadata system.

About: Contains information about the Metadata application, such as the version number, release notes, and background on the system.

Support: Connects you to customer support options and contact information

Logout: Signs you out of the Metadata application, ensuring the security of your session.

5. Updating Settings in MS2 Metadata

Accessing Account Settings

When you select "Settings" from the side menu, you are directed to the account settings page. This area is dedicated to maintaining the security of your account and keeping your contact information current.





TDIS	MS ² M	ETADATA	=
PASSWO	RD RESET		
Current p	assword*		
New pas	word*		
Confirm	new password*		
R	SET PASSWORD		
UPDATE	CONTACT INFORMATION		
First Nan	e*	Last Name*	
Akhile	sh	Veerapareddy	
Phone nu	mber*	Affiliation*	
any		Water Development Board	
	UPDATE		
UPDATE First Nan Akhile Phone nu any	CONTACT INFORMATION ie* sh imber* UPDATE	Last Name* Veerapareddy Affiliation* Water Development Board	

Password Reset Section

- Current Password: Enter your existing password that you wish to change.
- **New Password**: Choose a strong, new password that meets the system's security requirements.
- Confirm New Password: Re-enter your new password to ensure it's been typed correctly.

Before resetting your password, check if there are specific criteria, like a minimum number of characters or the inclusion of special symbols.

Update Contact Information Section

- First and Last Name: Verify that your name is correct or update it if necessary.
- **Phone Number**: Provide a current phone number where you can be reached.
- Affiliation: This drop-down menu allows you to select or update your affiliation with the organization.

Performing Updates

- After making any changes, click the "UPDATE" button at the bottom of the contact information section to save the modifications.
- For password changes, press "RESET PASSWORD" to confirm the update.

6. Documentation and Support

Clicking the 'Documentation' menu option will redirect you to an external URL where you can access comprehensive guides and resources for using the MS2 system.

- Documentation Link: <u>TWDB MS2 Documentation</u>
- This documentation may cover a wide array of topics, including system functionality, best practices, and troubleshooting tips.





7. Understanding Metadata Records and the Upload Process

The 'About' section of the MS2 Metadata portal provides essential insights into the functionality and processes within the application:

MS ² METADATA	≡
←	
ABOUT METADATA RECORDS & THE UPLOAD PROCESS	
This site allows you to create metadata records associated with your models, help you upload your models, and track the status of your uploads.	
For full guides and instructions, please reference the official MS ² documentation.	
CREATING METADATA RECORDS	
A metadata record is used to store information about a single model. If you have multiple models, each model should have their own metadata record.	
Once you've created a metadata record, you can duplicate it to easily create a new, editable copy for use on a different model.	
UPLOADING MODELS	
After you've filled out the metadata record form, you'll download a metadata YAML file that will be populated with your metadata information & proceed to the upload instructions.	
This metadata YAML file will be placed into the root directory of your model.	
Next, we'll provide you with an upload script to run on your computer, specifying the location of your compressed model directory with the metadata YAML file inside.	
TRACKING YOUR UPLOAD STATUS	
After a successful upload, leave about 15 minutes for our systems to process your upload.	
Once processing is complete, you'll see your model updated with a "pending admin acceptance" status. You should be able to view the files that you uploaded, & send & receive messages from a TWDB admin at this point.	
If an admin accepts your model, your model's status will be updated to "accepted ". If is rejected, the status will be "rejected" and you'll be provided detailed reasons about why your model was rejected.	

Key Highlights:

- **Purpose**: This section explains the importance of creating metadata records, which are crucial for storing information about individual models and tracking the status of your uploads.
- **Creating Metadata Records**: Emphasizes that each model must have its own unique metadata record. For the ease of use to enter metadata for multiple models, we have provided the ability to duplicate records.
- **Uploading Models**: Details the steps for uploading models, including downloading a metadata YAML file and using an upload script to include the metadata with your model files.
- Tracking Upload Status: Offers information on the expected timeline for processing uploads (approximately 15 minutes) and describes the status updates you will see, from "pending admin acceptance" to in-progress to "accepted" or "rejected."

Useful Information:

This informational page is designed to help users navigate the metadata creation and model upload processes more effectively. It includes guidelines and best practices to ensure a smooth experience within the MS2 Metadata system.

8. Support for MS2 Metadata

Getting Help

The 'Support' section of the MS2 Metadata portal is dedicated to assisting you with any challenges you may encounter:





- **Contact Information**: If you experience persistent issues with the site or upload process, direct support is available via email. You can reach out to Cynthia Roush and Brent Porter at their provided email addresses for personalized assistance.
- Issue Resolution: When sending an email, include detailed information about the issue you're facing, any error messages, and a description of your experience to help the support team understand and resolve your problem efficiently.

TDIS	MS2 METADATA	≡
	←	
	SUPPORT	
	If you run into any persistant issues with the site or upload process, please send an email addressed to both Cynthia Roush (Cynthia.Roush@twdb.texas.gov) and Brent Porter (bporter@csr.utexas.edu) with details on your experience.	

Tips for Contacting Support

- **Be Specific**: Clearly describe the problem you're encountering and include any relevant screenshots or error codes.
- **Be Concise**: While detail is helpful, try to be as concise as possible. This allows the support team to quickly grasp your situation and provide assistance.
- Follow Up: If you don't hear back within a reasonable time, it's appropriate to send a follow-up email.

The MS2 Metadata application is backed by a support team ready to help ensure your experience is smooth and productive.

9. Creating a New Metadata Record in MS2

When you click the 'CREATE+' button in the MS2 Metadata application, you're taken to the form for creating a new metadata record. Here's how to navigate this process:

Identifiers Section

- Model Name: Enter a unique name for the model you're documenting.
- Model Identifier (MODEL_ID): Provide an identifier that will be used within the system to reference your model.
- **TWDB Flood Planning Region Identifier**: Select the appropriate identifier from the dropdown list that correlates with the region your model pertains to.



•



TWDB Flood Planning Project Identifier(s): Input the identifier(s) for any related flood planning projects.

V	
CREATE NEW METADATA RECORD	
This metadata record should refer to a single mo metadata YAML file that will be included in your r	odel. We will use this metadata record to generate a nodel's upload.
IDENTIFIERS	
Model Name* 🛈	Model Identifier (MODEL_ID)* 🛈
TWDB Flood Planning Region Identifier* 🛈	Hydrologic Unit Code(s) (HUC) 🛈
Select V	Select v
TWDB Flood Planning Project Identifier(s)* 🛈	
Type and press enter	
MODEL DETAILS	
Model Description* ①	Model Purpose* 🛈

Model Details Section

- Model Description: Describe the purpose and scope of your model.
- **Model Purpose**: Specify what the model is used for or what it aims to achieve.
- **Model Type**: Choose from a dropdown list the type of model you are documenting.
- Model Creation Date: Select the date when the model was created.
- **Counties**: Choose the county that the model is associated with.
- Cities: (Optional) If applicable, select the cities associated with the model.





Model Type(s)* (i)		Model Last Updated Date* 🛈
Select	<pre></pre>	
Model Creation Date* (i)		Chain of Custody 🛈
		Type and press enter
Counties* 🛈		Cities ①
Select	~	Select V
Time Period(s) Covered 🕕		Supporting Documentation Filenames 🛈
to	×	Type and press enter
+ ADD ANOTHER		
SOFTWARE DETAILS		
SOFTWARE DETAILS		Software Version* ①
SOFTWARE DETAILS		Software Version* ①

Additional Details

- **Software Details**: Document the software used to create the model, including the name and version.
- **Model Originator Information**: Identify the agency or entity that originated the model and, if necessary, add contact information associated with the agency.
- **Contacts**: Provide contact details for the primary point(s) of contact for this model. This is mandatory to ensure communication pathways are clear.

Bottom Action Buttons

- Save: To save the record and continue working on it later.
- **Proceed to Upload**: To move forward with uploading the model after you've completed the metadata record.

Tips for Completing the Form

- Fill in each field with accurate information to ensure the metadata record is comprehensive and useful.
- Mandatory fields are marked with an asterisk (*). The form must be completed in full before you can proceed to upload your model.

After saving or completing the form, you'll be ready to upload your model to the MS2 system, which will include attaching the metadata YAML file you've just created.





MODEL ORIGINATOR INFORMATION

Model Originator Agency* (i)	
	\sim

Add a contact associated with this agency

CONTACTS

The following contact fields will be used as the primary point(s) of contact for this model. At least one contact is required.

Contact akhilesh veerapare	akhileshv@tam akhilesh Texas A and M EDIT
Contact's Role For Model	
Metadata Creator	· ·
	+ ADD ANOTHER CONTACT
ВАСК	SAVE PROCEED TO UPLOAD

10. Model Upload Instructions for MS2 Metadata

When you're ready to upload your model to the MS2 Metadata system, follow these structured instructions to ensure a smooth process:

Preparing Your Model

Your model files must be organized as follows before you begin the upload:

- Place your model files within a directory named after your model ID and model name.
- The directory should include sub-folders for Model_Files/, Supporting/, GIS/, and a geodatabase named Model_<MODEL_ID>_Coverage.gdb.

Hover over each item in the MS2 Metadata system for more detailed instructions on the content and structure of these folders.

For Windows Users:

- 1. Check Software Requirements:
 - Ensure you have PowerShell 7.2 installed. You can verify your version by opening PowerShell and typing **\$PSVersionTable**.
- 2. Download Metadata YAML File:
 - Click the 'DOWNLOAD METADATA YAML FILE' button to get the YAML file with your metadata.
 - Place this file in the root directory of your model.
- 3. Prepare Your Model for Upload:





- Organize your model files according to the structure provided.
- Compress the root directory of your model files without including any compressed files within the folder itself.
- 4. Download and Prepare Upload Script:
 - Download the **upload_script.ps1** file by clicking the 'DOWNLOAD SCRIPT' button.
 - Unblock the script by right-clicking on it, selecting 'Properties', and checking 'Unblock'.
- 5. Execute the Upload Script:
 - Run the script in PowerShell 7.2 by navigating to the directory where your script and compressed model folder are located and executing it.

For Mac OS Users:

- 1. Check Software Requirements:
 - Ensure you have the required version of Terminal or equivalent shell access.
- 2. Download Metadata YAML File:
 - Similar to Windows, download the YAML file and place it in the root directory of your model.
- 3. Prepare Your Model:
 - Follow the same directory structure and compression guidelines as for Windows.
- 4. Download and Prepare Upload Script:
 - Download the **upload_script.sh** file designed for Unix-based systems.
- 5. Execute the Upload Script:
 - Grant execute permissions to the script if necessary using **chmod +x upload_script.sh**.
 - Run the script from Terminal, specifying the path to your model's compressed folder.

Final Steps for Both:

• After executing the upload script, wait for the process to complete. You'll receive a status message indicating the success or failure of the upload.

By following these OS-specific instructions, you'll ensure your model is correctly uploaded to the MS2 system with the appropriate metadata attached.

Note on Software Installation During Upload Script Execution:

The upload script for both Windows and Mac OS will automatically attempt to download and install 'AZ copy' software on your machine as a prerequisite for the model upload process. 'AZ copy' is a command-line utility that helps manage Azure Storage accounts and facilitates the transfer of data. Please ensure that you have the necessary permissions to install new software on your machine before executing the upload script. If you do not have administrative rights or are unsure about the installation process, please contact your IT department or system administrator for assistance. Having the appropriate permissions will prevent any interruptions in the upload process and ensure a smooth, efficient transfer of your model to the MS2 system.

11. Understanding Model Status Updates in MS2 Metadata

After your model upload is complete, it will undergo a review process. The status of your upload will change to reflect its progress through the following stages:





In Progress State

Initially, the status of your model will be indicated as **"in progress"**. This shows that the system has begun processing your upload but has not yet completed the validation checks.

HAPPY WEST ROAD HYDRAULIC MODEL (COPY)	•••
Hydraulic Model of Happy West Road in Randall County	
Abbott	in progress
Randall County	Last updated on 2024-03-11

Pending Admin Acceptance

Once the automated checks are complete, your model will be marked as **"pending admin acceptance."** This status indicates that your model is awaiting review by an administrator.

TEST_VIJAY_MN	•••
Test Model Description	
Frisco, Agua Dulce	pending admin acceptance
Denton County, Archer County	Uploaded on 2024-03-12

Accepted Status

If an administrator reviews and approves your model, the status will update to **"accepted."** This confirms that your model meets the necessary criteria and has been successfully incorporated into the MS2 system.

HAPPY WEST ROAD HYDRAULIC MODEL	•••
Hydraulic Model of Happy West Road in Randall County	accepted
Randall County	Uploaded on 2024-02-15

Rejected Status

Should there be issues with your model that prevent approval, the status will change to "**rejected.**" You will typically receive feedback on why the model was not accepted, allowing you to address any concerns and resubmit.





. . .

HAPPY WEST ROAD HYDRAULIC MODEL

Hydraulic Model of Happy West Road in Randall County

Abbott Randall County rejected Uploaded on 2024-02-15

Remember to monitor the status of your upload and respond to any feedback provided by administrators to ensure your model can be resubmitted successfully, if necessary.

The status indicators provide a clear and efficient way to keep track of where your model stands in the review process and what actions you might need to take.

12. Reviewing Your Model's Status and Details in MS2 Metadata

Pending Admin Acceptance Stage

After the upload process is completed and the automated validation checks are passed, the model's status updates to **"pending admin acceptance."** This indicates that the model is awaiting review by an administrator for final approval.





Viewing Model Details and Communication

METADATA	VIEW HISTORY
TDIS Collection Identifier	Region 07 Collection
Model Name	TEST_VIJAY_MN
Model Description	Test Model Description
Model Type(s)	Coastal, Hydrologic
Model Purpose	Test Model Purpose
Contacts	Akhilesh Veerapareddy, akhileshv@tamu.edu, any, Water Development Board (Role: Metadata Creator) Akhilesh Veerapareddy, akhileshv@tamu.edu, any, Water Development Board (Role: originator, or digital object creator)
Chain of Custody	Chain of Custody, Chain of custody 1
Cities	Frisco, Agua Dulce
Counties	Denton, Archer
Hydrologic Unit Code(s) (HUC)	111201040402
Model Update Frequency	None
Model Originator Agency	Administrative Office of United States Courts
Comparison Decomposite time Films	

- 1. **Status and Messages**: A notification panel will display the current status of the model. Administrators may also provide feedback or requests for additional information here.
- 2. **Uploaded Files**: This section lists all files associated with the model, including the metadata YAML file, supporting documents, and the model's data files. Users can review these to ensure completeness and accuracy.
- 3. Metadata Information: Detailed metadata for the model is presented, including:
 - The model name and description.
 - The model type and purpose.
 - Contact information for those associated with the model.
 - Specific identifiers like TDIS Collection Identifier, region collection, and Hydrologic Unit Codes (HUC).
- 4. **Administrative Options**: Users can view the history of changes and communications related to the model record. If there are discrepancies or further details required by the TWDB admin, users can send messages directly from this page to clarify or update information.

Actions to Take

• **Review Feedback**: If an admin has left comments regarding your model, address them promptly to avoid delays in the acceptance process.





• Send Message to Admin: Use the provided messaging feature to communicate with TWDB administrators if you have questions or need to provide additional details.

By keeping track of your model's status and utilizing the communication tools available, you can ensure a smooth review and acceptance process for your model in the MS2 Metadata system.

What is 'View History'?

The 'View History' feature in the MS2 Metadata system is a powerful tool that provides a chronological record of all changes made to a metadata record. This function allows users and administrators to track edits, updates, and any modifications over the lifecycle of the metadata record.

TATUS & M ^r		dia and and an	
This mod	METADATA RECORD HISTORY	CLOSE 🗙	a TWDB
tdis_adm WARNIN	Edited by Akhilesh Veerapareddy (aveerapareddy) on March 12th 2024, 6:19 pm <u>COMPARE CHANGES</u>		
11ee-9d in file na	Edited by Akhilesh Veerapareddy (aveerapareddy) on March 12th 2024, 6:33 pm <u>COMPARE CHANGES</u>		
PLOADED	Edited by Akhilesh Veerapareddy (aveerapareddy) on March 12th 2024, 6:43 pm <u>COMPARE CHANGES</u>		
• 01000	Edited by Akhilesh Veerapareddy (aveerapareddy)		
me ► Cov ▼ Sup	tadata_TM-84570e9c-e0c1-11ee-9dbe-7c1e52084fe7 /erage_010000000025.gdb /porting	.yml ⊻	
	TechnicalMemo_1_final_20230322.pdf 보 👁		

How to Use 'View History'

- 1. **Accessing History**: By clicking the 'VIEW HISTORY' button, you can see a detailed log of all actions taken on a specific metadata record.
- 2. Understanding the Logs: The history will show a list of entries, each with:
 - The name of the person who made the change.
 - The timestamp indicating when the edit occurred.
- 3. **Comparing Changes**: Next to each edit entry, there is a 'COMPARE CHANGES' button. This allows you to see what was altered during that edit compared to the previous version of the record.





4. **Navigating Through Edits**: The log will show the most recent changes at the top, with earlier edits listed as you scroll down. This provides a clear and intuitive way to review the progression of updates.

Benefits of 'View History'

- **Transparency**: This feature enhances transparency by keeping a clear and accessible log of who made changes and when they were made.
- Accountability: It encourages accountability among users, as each change is attributed to a specific individual.
- **Error Tracking**: If errors or inconsistencies are found, the history can help identify when they were introduced and by whom.
- **Audit Trail**: It serves as an audit trail that can be used for reviewing the model's documentation process, essential for quality control and compliance purposes.

By regularly checking the 'View History', you can ensure the integrity of your model's metadata and maintain a high standard of data accuracy within the MS2 system.

5. Understanding the VIEW, DUPLICATE, and DELETE Buttons in MS2 Metadata



VIEW Button

Clicking the **VIEW** button allows you to open and review the detailed page of the selected metadata record. Here, you can see all associated information, including status, messages from the admin, and a list of uploaded files. You can also view the model's metadata and history of changes.

DUPLICATE Button

The **DUPLICATE** button is a convenient feature if you need to create a new metadata record similar to an existing one. It creates a copy of the selected record that you can then edit as needed. This is particularly useful for creating multiple records for similar models or when you have models with only minor differences.





DELETE Button

Use the **DELETE** button with caution; it will permanently remove the selected metadata record from the system. Ensure you only use this if you are certain that the record is no longer needed, as this action is irreversible.

These buttons enhance the user experience by providing quick access to common actions that users may need to perform on their metadata records.