Topics Covered

- General concepts
- System access
- Inventory module
General Concepts

Objective:

To equip users with skills necessary to find specific bridges and view bridge inspection and inventory information.

System

- Web based
- Internet explorer 11
- Install Microsoft Silverlight version 5.1.4
System Access

https://app.mdt.mt.gov/sms/

Your initial access to the Structure Management System is a two-step process. To begin, you must have an ePass Montana account to use the Structure Management System.

If you don't have an ePass account, click “Login to SMS Using ePass” and click Login. Next, click "Create an ePass account", and enter all the required fields.

If you have an ePass account, click on "Login To SMS Using ePass". If you are not a State of Montana employee, click "ePass Montana Login" or if you are a State of Montana employee, click "State Employee Login" and enter your Username and Password.
System Access

Once you have logged into ePass, you will see the screen below.

Click on **Connect SMS (Public Access)**

This will take you directly into SMS. If you get an error, or Internet Explorer crashes, make sure you have the latest version of Microsoft Silverlight on your computer.
To navigate around the system, take note of the following:

- There are 3 main elements in all screens:
  - quick search and customized filter: allows you to search for structures
  - navigation interface: allows you to access different modules
  - main working interface: this is where interaction with the system mainly occurs
Inventory Module

The inventory module includes functions to view the structure inventory. This includes a list view of all structures, a map view of all structures, filtering capability for finding structures with specific attributes, and access to inspection resources such as the MDT Bridge Inspection and Load Rating Manual.

Inventory Menu:
Inventory Module - Assets

- This is a list view of structures along with access to detailed information on selected structures.

- Click on the Inventory box, or choose Assets from the Inventory drop-down menu on the left:

  ![Inventory screenshot]

- A window will come up asking if you want to display mixed content. Click Yes. If you do not see this window, and SMS seems to freeze up, make sure this window isn’t hiding under your main window.
Inventory Module - Assets

This is what the Assets page looks like:
Quick search: allows the user to locate a single structure.

Step 1: click on the quick search box

Step 2: start typing the MDT Structure ID or the NBI Structure ID for the desired structure

Step 3: As you enter characters, the predictive drop down box of matching assets populates. The drop down list will appear after a minimum of three characters have been entered.

Step 4: select the desired structure from the predictive drop down by highlighting this and clicking on it

Step 5: the structure information opens

Note: Once a filter has been selected, it will remain in effect throughout all interfaces until it is removed (remove it by clicking Clear Filters)
Inventory Module - Assets: How to Search for Structures

Custom filter:

This allows the user to locate any number of particular assets using any combination of its

- Generalities - general information common for all assets such as MDT Structure ID, NBI Structure ID, and General Structure Comments
- Attributes - inventory-related information such as owner,

**Searching using asset generalities**

- Step 1: enter part or all of the MDT Structure ID, NBI Bridge ID, or General Bridge Comments in the “Filter on generalities” section
- Step 2: Click apply and the filter shows your results in the list view
Inventory Module – Assets: How to Search for Structures

- **Custom Filter:**

- **Searching using asset attributes**
  - Step 1: Use the drop down box and select the desired attribute to search with, for example posted speed limit and a relevant option for operators or list of options will appear.

  ![Filter on attributes]

  - Drop down box
  - Operator selection
  - Enter value

  ![Filter on attributes]

  - Step 2: select the relevant operator, for example =, > or if its just text based select from the drop down a list of options for the attribute chosen.
Inventory Module – Assets: How to Search for Structures

- **Custom Filter:**

- **Searching using asset attributes**

  Step 3: Click Add Filter Attribute (Note: if you click on Select Values and choose your value from a box, you don’t need to click Add Filter Attribute)

  Step 4: If you desire to have another attribute included, follow steps 1 to 3 to add more constraints on your filter.

  Step 5: Once you are ready, select apply and the results will be shown in the list view of the asset

- **Note:** To clear the filter or make a different selection, you can click “Clear all”. If you don’t want the filter anymore, click cancel to go back to your previous screen.
Inventory Module – Assets: How to Search for Structures

Saved filter:

This allows the user to locate any number of particular assets using a publicly saved filter

Step 1: Select the Saved filters drop down box

Step 2: Select the desired filter from the list in the dropdown box. After a selection is made, the results of the saved filter appears.

Note: only the administrator can pre-define and save filters
Inventory Module – Assets: How to View Structures

- The Assets page is set up in two parts. The list of structures is on the top, and details of the structure selected in the list appear in the bottom.
- At the top of the bottom section of the page are tabs you can click to view different information about the selected structure.
Inventory Module – Assets: How to View Structures

Note that the bottom half of the screen can be enlarged by hovering over the line circled below, then clicking and dragging up. It can be made smaller by clicking and dragging down.
Inventory Module – Assets: How to View Structures

Location Tab

- The Location tab typically has an identifying photo of the structure selected, some identifying information, and the structure location, both shown on a map and in the Latitude and Longitude fields.
- A user can zoom in and out in the map, pan, and switch from Road, Aerial, Bird’s Eye, and Streetside views.
Attributes Tab

The Attributes Tab contains general information about the structure along with some inspection-specific information.

A user can scroll through the attributes, collapse and expand chapters, and use the Filter box to search for specific attributes.
Components Tab

The Components tab allows the user to view all inspection elements attached to the bridge and the details of each element.
Repairs Tab

- Allows the user to view recommended and completed repairs on the selected structure.

To see more information about the repair, click on Show details.
Inventory Module – Assets: How to View Structures

Inspections Tab – How to View Inspections

- The Inspections tab allows the user to view all inspections for the selected structure.
- The inspections list shows the inspection type, status (final, on-going, scheduled, etc), the team the inspection is assigned to, the inspection Team Leader, and the dates the inspection was or will be conducted.
- To view the inspection report for any bridge with a Final status, click on .
- To view more details, highlight the desired inspection, and click on .

![Table of Inspections]

<table>
<thead>
<tr>
<th>Inspection type</th>
<th>Status</th>
<th>Initial team</th>
<th>Team leader</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP21 Inspection</td>
<td>QC Review Complete</td>
<td>Missoula</td>
<td>Darrel Reich</td>
<td>2/26/2014</td>
<td>2/26/2016</td>
</tr>
<tr>
<td>NB1 Element Inspection</td>
<td>Final</td>
<td>Recover Pontis Data</td>
<td>Advitam Advitam</td>
<td>2/26/2014</td>
<td>2/26/2014</td>
</tr>
<tr>
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<td>Final</td>
<td>Headquarters</td>
<td>Advitam Advitam</td>
<td>2/26/2014</td>
<td>2/26/2014</td>
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<td>Advitam Advitam</td>
<td>2/28/2012</td>
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<tr>
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<td>Recover Pontis Data</td>
<td>Advitam Advitam</td>
<td>5/2/2002</td>
<td>5/2/2002</td>
</tr>
</tbody>
</table>
Inventory Module – Assets: How to View Structures

Inspections Tab – How to View Inspections

Below is a view of the Inspection window. Use the tabs to navigate through the inspection.
Inventory Module – Assets: How to View Structures

Photos Tab – viewing bridge-specific photos

- The Photos tab contains all photos attached directly to the bridge. These photos are NOT inspection-specific. They are typically identification photos to help inspectors ensure they are at the correct bridge.

- A user can:
  - enlarge a photo by clicking on the small box in the upper right-hand corner
  - minimize the enlarged photo by clicking anywhere on the photo
  - Click on Show Details to see any comments on the photo
  - Download the photo to view in another tab for zooming in and out
Inventory Module – Map

- The map displays all bridges selected in the current filter. If the bridges don’t show up when Map is selected from the Inventory menu, the user needs to zoom in.
Support

For any requests/concerns, please contact MDT at mdtbridgesmssupport@mt.gov

Thank you!