VANTAGE

Multi-Discipline Supports

Automatic Drawing Production User Guide



MDS11.6

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1 Introduction

1.1 Overview

AB (Area Based) Automatic Drawing Production is an AVEVA drawing-production application which produces Area Based drawings specifically for the Multi-Discipline Supports application. By way of example, other ABA functions apply to engineering disciplines such as Structural Steelwork.

The purpose of this document is to provide the user with guidance on how to produce drawings from the PDMS model. A pre-requisite to using MDS-ADP is that the PDMS Draft ABA Administrator has both installed and configured.

It is expected that the MDS-ADP user will not need full PDMS training in order to be able to use the application. However, a minimum level of knowledge is required to be able to enter and exit PDMS Draft in the required models.

MDS-ADP allows the user to produce drawings by selecting a support or supports and a template. In an example of a typical MDS-ADP work process, if a user changes the PDMS model for a maintenance project, the drawings used in that area are updated. The user will enter PDMS, start MDS-ADP, select the area and reproduce all the drawings generated for that area, running the process overnight.

This guide has been structured to take the MDS-ADP user through all the steps needed to produce new and existing drawings in a logical order. However, the information has been compiled in a format that should allow a user to reference a particular aspect of ABA to gain specific information.

1.2 An overview of the MDS application

The MDS application allows the user to create standard supports for pipework, cable trays, and HVAC. The application is highly interactive, enabling the user to design supports with the minimum of effort. It is also highly configurable allowing the administrator to define project-related defaults to control the design of supports and to determine the range and types of ancillary support components that can be used on the project.

The standard supports in this application, which are designed using structural sections, are template-driven. A default set of structural templates based on British Standard Steelwork Sections is supplied with the application. All of these templates may be configured to suit the needs of an office or project to adopt a relevant national standard for steelwork sections.

1.3 The administrator’s role

The administrator is responsible for initial setup of the default files associated with the MDS application (refer to the *Administration User Guide*) and setup of the structural steel sizes associated with the framework templates. The MDS application is supplied with a British Steel set of framework templates, which the administrator must modify to suit the specific requirements of the project.

1.4 MDS catalogues and specifications

The MDS application is supplied with a catalogue and specification. The range of bore and components in the catalogue are fixed and should be adequate for all projects. The catalogue supplied and associated specification '/MDS' must not be modified by the administrator or any other user.

2 Using Area Based ADP (Draft users)

1.1 Introduction

The only functionality a normal Draft user has within the Area Based ADP application is the ability to create drawings using the administrative elements previously defined by a Draft administrator such as Templates and Tasks. If any of the application components covered in this user guide do not exist, consult your Draft AB administrator.

Note: Help is provided within ABA in the same manner as other PDMS applications. Searching for ABA or Area Based ADP in the contents will direct you to the required sections.

2.1 Starting the Application

To begin creating one or more ABA drawings, click on **Draft** on the top menu bar and select **Auto Drawing Production…** from the drop down menu (Figure 1).

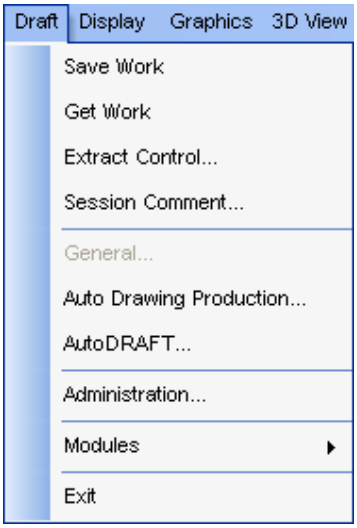


Figure 1 Draft Main Menu

This loads the ADP top menu bar containing the Area Based ADP menu selections, (ABA Defaults & Area Based Drawings), see below.

2.2 ABA Defaults

From the ADP top menu bar, click on **Settings** and select **Area Based ADP Defaults…** from the drop down menu (Figure 2).

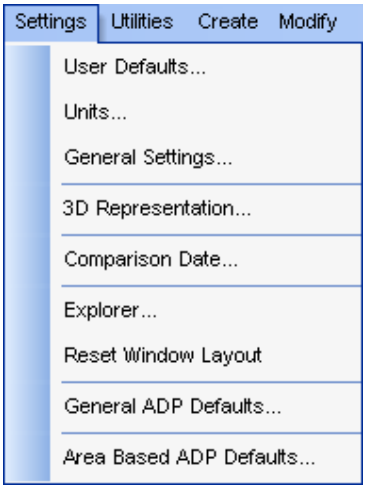


Figure 2 Draft Settings menu

This brings up the ABA Defaults form (Figure 3).

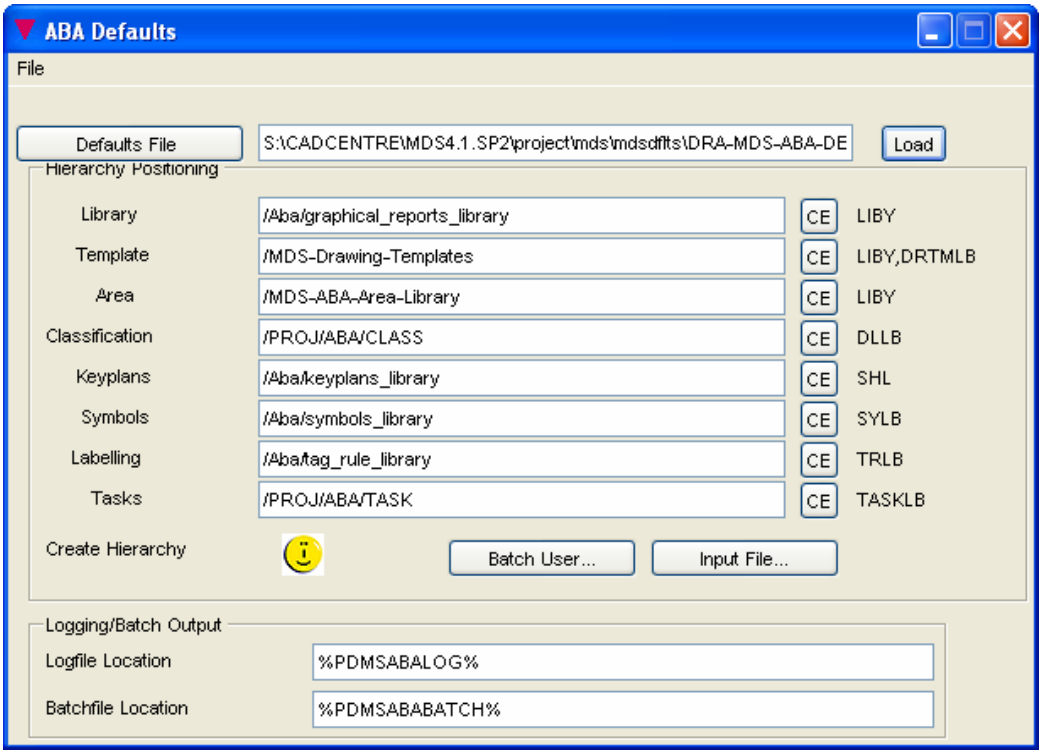


Figure 3 ABA Defaults form

Use the ABA Defaults form for the following tasks:

- Defining the ABA data structure
- Modifying the ABA data structure
- Setting file locations of log files and batch files
- Settings for the Batch User configuration
- Input of text (data) files and supplied template data files

Your project has probably been organised in such a way that different disciplines have different ABA Libraries; the one for MDS-ABA is shown below:

%MDDDFLTS%/DRA-MDS-ABA-DEFAULTS

You will see that MDS-ABA uses the Standard ABA Libraries where available, but has specific MDS Area and Template Libraries.

In general to select a different Defaults file to that initially loaded, enter the name of the file in the Defaults File text box and press the **Return** key. The values held in the Defaults file will appear on the form.

As you loaded this new Defaults file, the name was stored. When you re-enter the ABA application at the next session, this Defaults file will be the one opened initially.

2.3 Starting the MDS-ABA Drawing Process

From within the Automatic Drawing Production module, click on the **Create** top bar menu and select **MDS Drawings…** from the drop down menu (Figure 4).

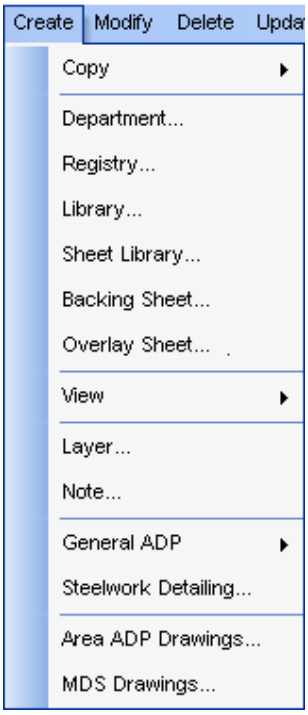


Figure 4 ABA Create menu

The Create MDS Drawing form now appears, allowing the user to begin creating drawings (Figure 5).

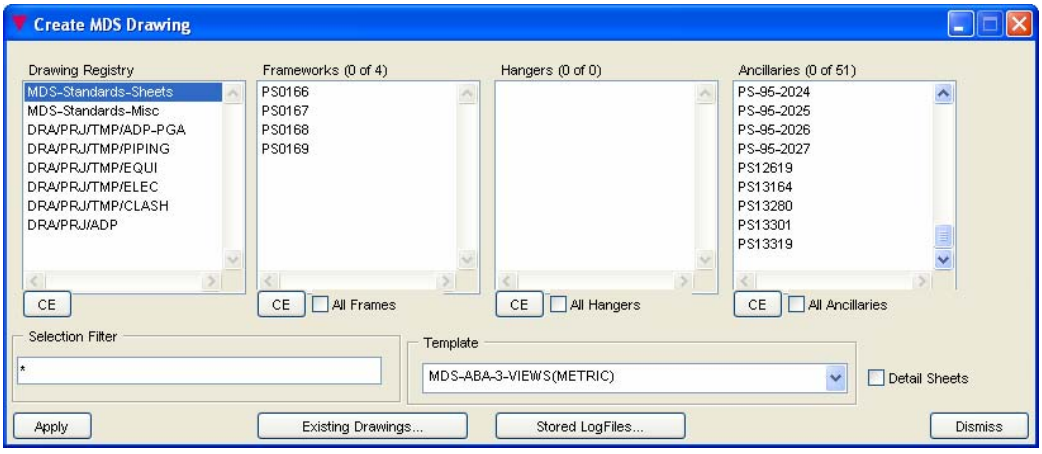


Figure 5 Create MDS Drawing form

This form allows you to:

- Select the Drawing Registry to write the drawing to (select an item from the **Drawing Registry** window).
- Select any elements to include in a drawing from the lists in the **Frameworks**, **Hangers** and **Ancillaries** windows. Click on the **CE** button to select the current element. Lists can be filtered using the **Selection Filter** gadget.
- Select a template from the **Template** gadget.
- Select existing drawings to be updated or regenerated by clicking the **Existing Drawings…** button (see section 2.3.1).
- Review the run time logfiles by clicking the **Stored LogFiles…** button (see section 2.3.2).
- Check the **Detail Sheets** box to produce steelwork shop drawings.

Click on the **Apply** button to finish the process when satisfied with your selections.

2.3.1 Selecting Existing Drawings

Click the **Existing Drawings…** button on the Create MDS Drawing form above to view existing drawings (Figure 6). Click on **Cancel** to return to the Create MDS Drawing form.

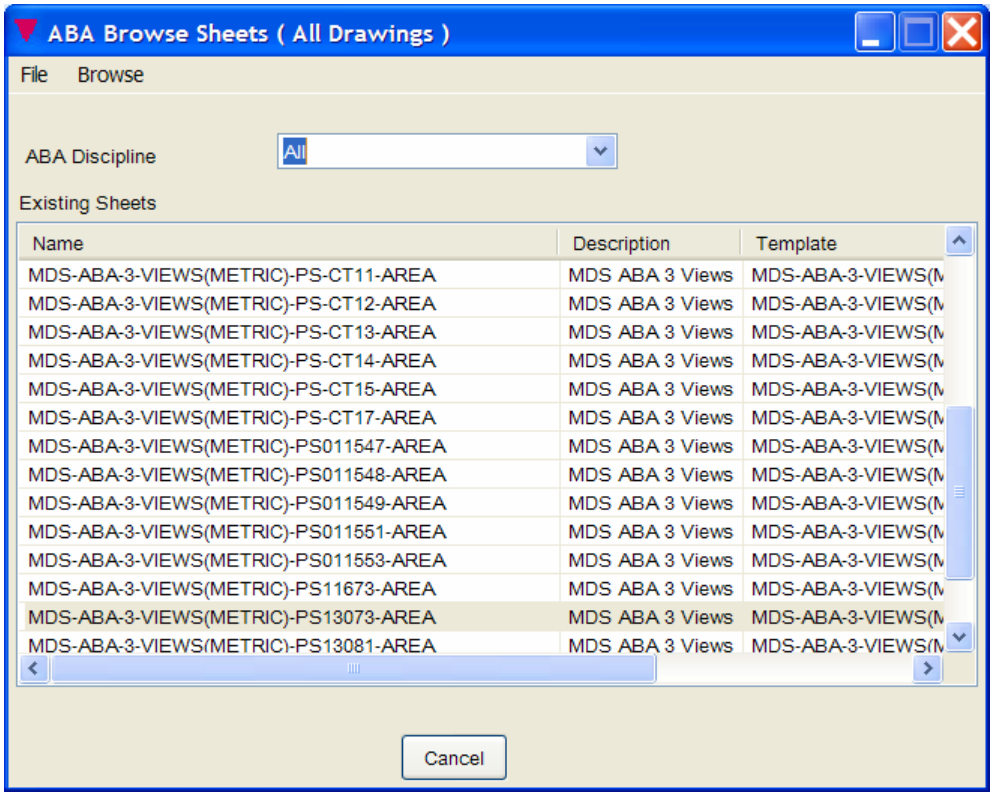


Figure 6 ABA Browse Sheets form

Use this form to:

- Refresh the list of available drawings (Select **File > Reload** from the top menu bar).

- Display a form to read any stored log file (Select **Browse>Stored LogFiles** from the top menu bar).
- Modify Template View(s). Right-click an item to display the ABA Template View form and access the Views available under the Sheet Template from which the picked drawing was derived.
- Modify Template Sheet. Right-click an item to display the ABA Template Sheet form and access the Sheet Template from which the picked drawing was derived.
- Modify Template Drawing. Right-click an item to display the ABA Template Drawing form and access the Drawing Template from which the picked drawing was derived.

2.3.2 Stored LogFiles

To access logfiles click the **Stored LogFiles…** button on the Create MDS Drawing form above. The form shown in Figure 7 is displayed.

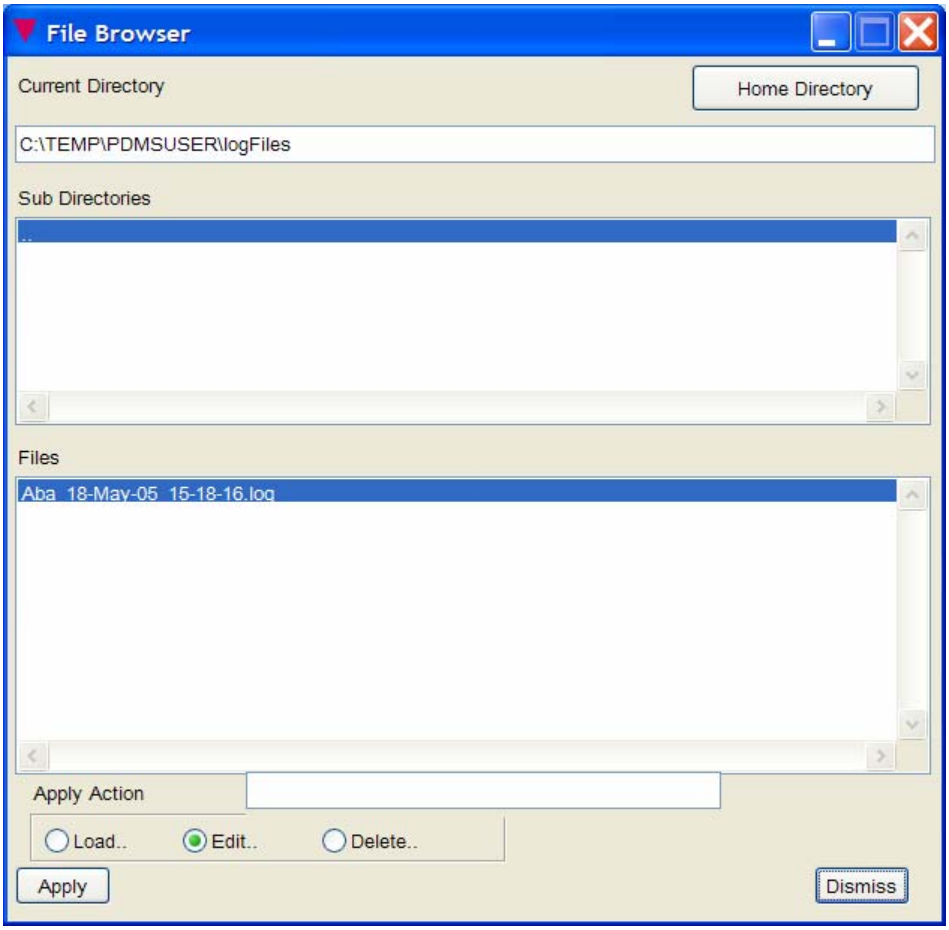


Figure 7 Stored LogFiles form

Use the browser to navigate to the required directory (the default is %PDMSABALOG%), and then select the required file. You can then:

- View the current LogFile.

- Edit a LogFile by selecting **Edit** and clicking on **Apply**. This brings up a default editor.
- Load the contents of a LogFile into the selection fields of the Create MDS Drawing form. To do this select **Load** and click on **Apply**. This allows you to re-create a previous process run.

Click on the **Dismiss** button to return to the Create MDS Drawing form.

3 Utilities

This section describes the use of the last four items accessible from the **Utilities** drop down menu (Figure 8).

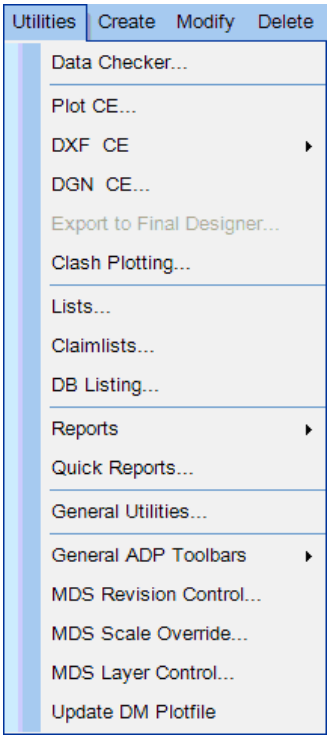
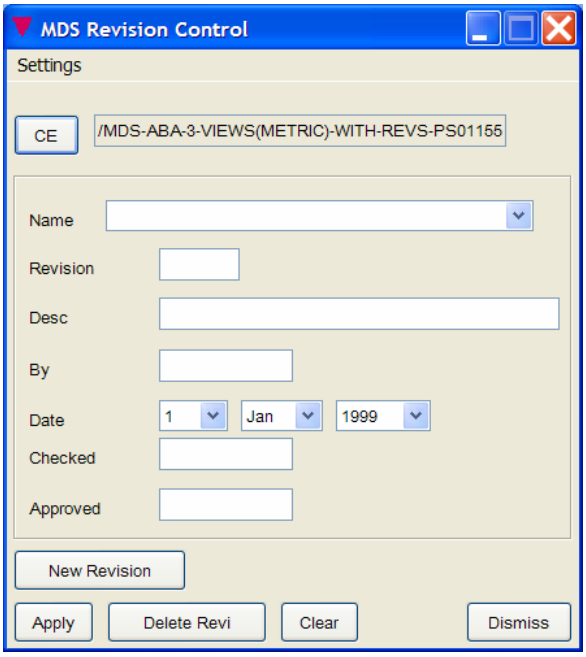


Figure 8 Utilities menu

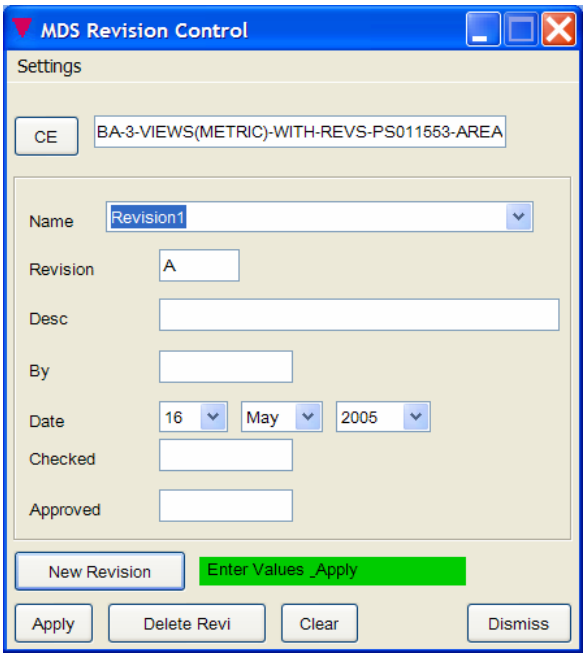
1.1 MDS Revision Control

To use this function:

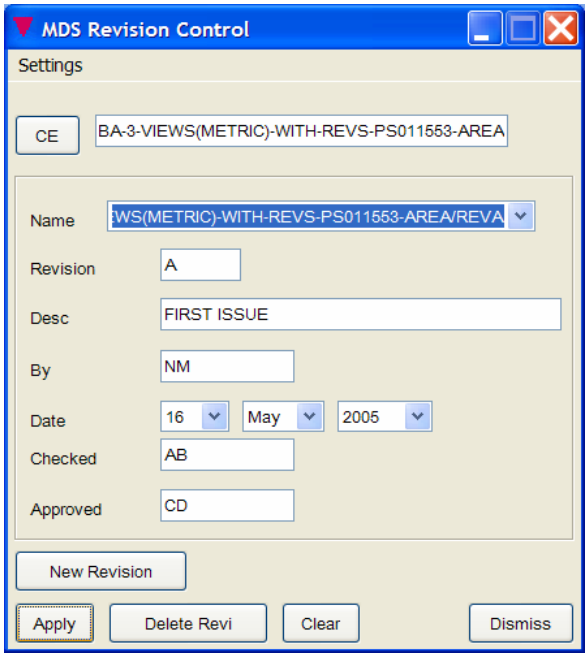
1. Select **MDS Revision Control** from the **Utilities** menu to display the following form:



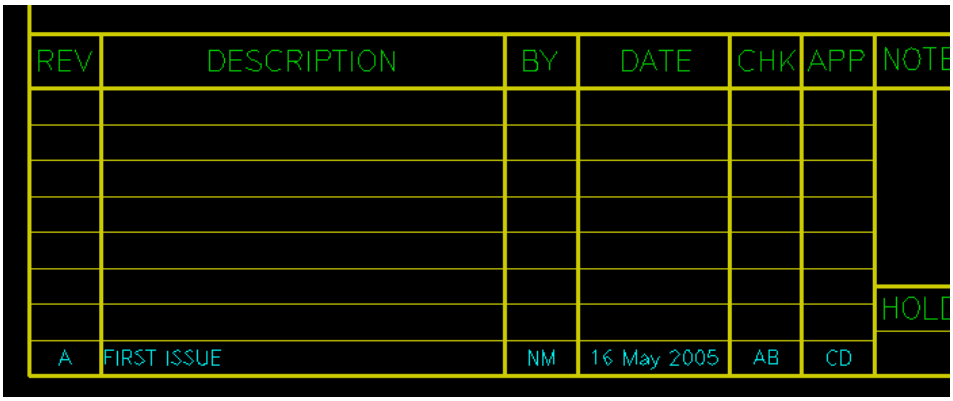
2. Click on the New Revision button and the form changes as shown below:



3. Enter the information you want to add to the drawing. An example is shown below:



4. Click on the **Apply** button to update the information on the drawing as shown on the extract below:



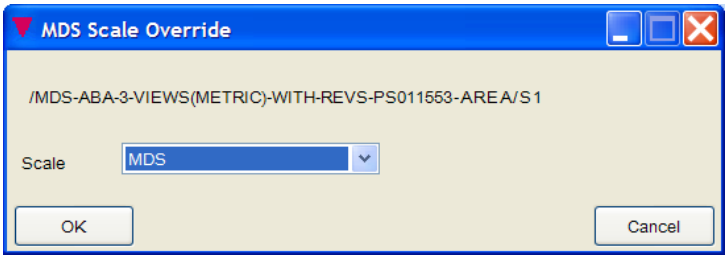
Subsequent updates of drawings retain revision information. Positioning, revision text, and number of allowable revisions are controlled via the drawing template. See *Administration Guide* for more information.

3.1 MDS Scale Override

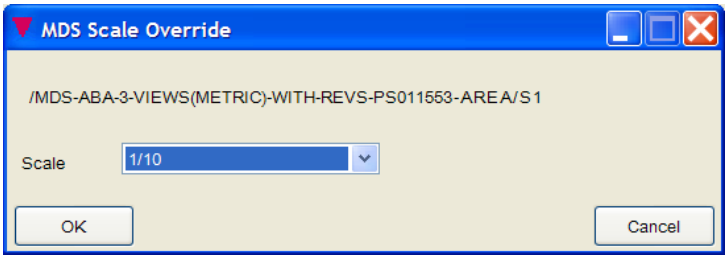
MDS calculates the scale required to fit the whole support within the views. If this scale is unacceptable, the user may override the scale calculated by MDS and force a scale to be used.

To do this:

1. Select **MDS Scale Override** from the **Utilities** menu to display the following form:



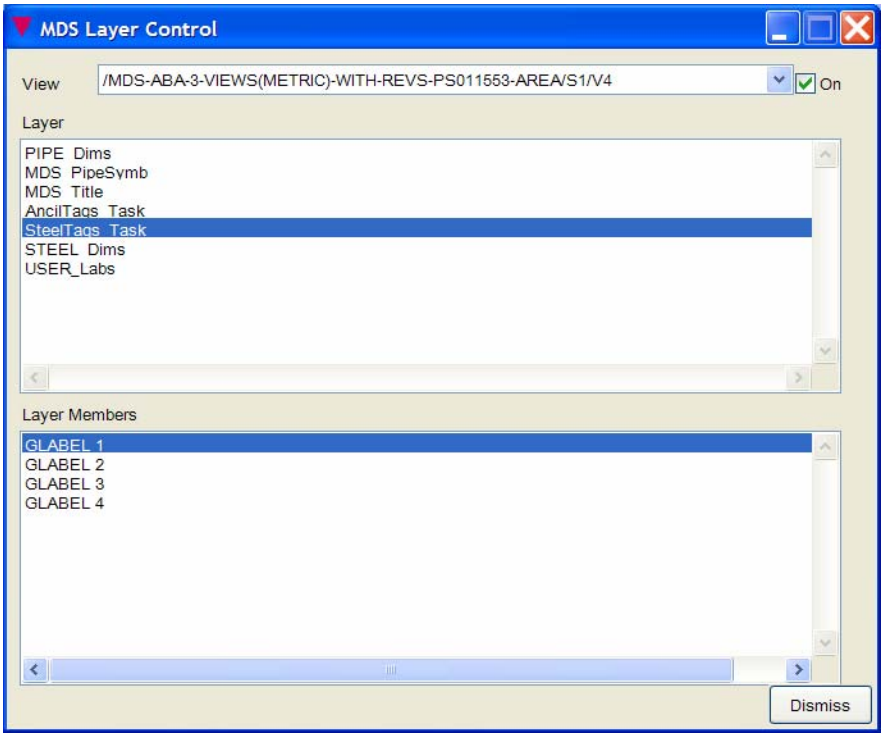
2. Select the required scale from the **Scale** drop down box and click on the **OK** button. In the example shown below a scale of 1/10 has been selected.



3.2 MDS Layer Control

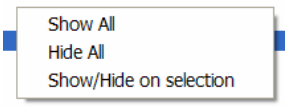
The layers created on a MDS drawing can be controlled.

To do this, **Select MDS Layer Control** from the **Utilities** menu to display the following form:



The **View** gadget shows the current editable view. To turn the whole view on or off, use the toggle in the top right of the form.

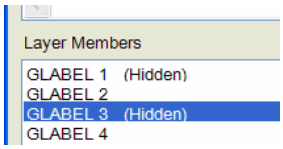
The **Layer** list shows all the current layers in the selected views. Highlighting a layer displays its members in the lower box. Right-click on the **Layer** list to show the following submenu:



Each menu item works as follows:

- **Show All** shows all members of the selected layer.
- **Hide All** hides all members of the selected layer.
- **Show/Hide on selection** changes the behaviour of the list so that when the user selects the list all the members will be shown or hidden depending on their current state.

The **Layer Members** list shows all the members of a particular layer. Click on a member to toggle between show, and hide. In the example shown below two members have been set to hidden.



3.3 Update DM Plotfile

Select **Update DM Plotfile** from the **Utilities** menu to update the Deliverable Manager (DM) plot file with the latest copy in Draft. Use this when modifications have been made in Draft. Update DM Plotfile overwrites the file and runs any post-actions required by DM, for example DM drawing stickers.

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