Highways by Exor

MapCapture
User Guide V4.5

The world’s leading highways asset management system
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Quality Assurance Statement

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Introduction

This guide is designed for the End User of MapCapture and will take you through the process of collecting defects and assets. MapCapture has been set up for you by your administrator to make it simple to use and not get in the way of your day to day job.
CHAPTER 1

Running MapCapture

MapCapture Executable

Starting MapCapture is achieved by double clicking on the MapCapture icon or from the start menu.

Having double clicked the MapCapture icon you are presented with the screen below, this will allow you to start a new survey from scratch, from an existing template, from an existing saved survey or open a recently used survey.

Typically you will start the day and use the ‘Create Map Document from Template’ that has already been configured by your administrator.
CHAPTER

2

Starting a survey from a Template

Introduction
MapCapture is the tool that you will use to survey your network on a day to day basis.

Having selected the ‘Create Map Document from Template’ radio button click the select button at the bottom.
This gives you the list of the existing templates that have been created by your system administrator. Having highlighted the relevant survey click the ‘Open’ button.

This will open the survey from the last saved position of the template.

Map Navigation.

There are a number of icons we can use to navigate around the map these are

- **Zoom in** – this allows the user to zoom into an area either by a single click or by drawing a box around the area to be enlarged.

- **Zoom out** – this allows the user to display more of the map area this is achieved by a single click and it will zoom out at a set rate.

- **Zoom to full extent** – this zooms the map to the full extent of all the layers.

- **Zoom to previous extent** – returns to the previous map area before either a zoom in/out or pan action.
Zoom to location – this enables the user to zoom to a known location as an ‘X-Y’ set of Grid References i.e., 500618, 278013.

Centre at – this centres the map on the set of co-ordinates.

Zoom to – this zooms at a set scale.

Adds to a set of bookmarks that can be zoomed to later.

Zoom to selected bookmarks.

Zoom to all markers.

Delete selected markers.

Delete all Markers.

Zoom to Layer – this will zoom to the highlighted layer this will only work for layers with geography. I.e. this will not work for background map layers that are images.

Pan – this allows the user to move the map around at the set scale by holding the mouse button down and moving the cursor.
Select – this allows the user to select items from the map.

Information – this allows the user to click on the map and get information on the layer i.e. network information.

Measure – this allows the user to measure a line from the map the measure is displayed by the cursor and down in the bottom right.

The tolerance can be set in either ‘Pixels’ or ‘Map Units’ and then a number which is the number of units. This is the buffer around the cursor that things get selected within.
CHAPTER

3

Creating a Detailed Defect

Defects
Defects are created by clicking on the map. These defects are created based on the metadata maintained within the core exor application. This enables you to only create defects that can be loaded back into the main application once back in the office.

Firstly select the activity area on the left ie ‘minor carriageway repairs’

This will turn the cursor into a pencil when moved over the map on the right if the ‘automatically enable create tool’ icon is selected. If not the click on the ‘toggle create feature’ icon.

Create Defect.

Move the icon to the location of the defect and click on the map, the section nearest will be highlighted and a dot will be displayed next to the cursor.
Each time you click on the map the dot will move to the desired location.

Once the location is correctly displayed, double click on the map at the defects location. A box will pop up displaying the available defects for ‘Minor Carriageway Repairs’.

Highlight the required defect ‘POTH – Pothole’ for instance and click ‘Select’ then the defect screen will pop up.

This is where the defect details are entered. The defects form has a number of tabs across the top, the first is the details tab. The details tab is the main form that needs completing.
If a Safety Inspection is selected the user will be prompted to enter the activity, then the defect.
Details Tab

Most of the details are completed for us the ‘Activity’ is set to MC for Minor Carriageway. The Code has been set to ‘POTH’ for pothole. Other fields ‘Chainage’, ‘Easting’, ‘Northing’ have also been filled in along with the road details on the top right.

Fields that have pick lists have a drop down button next to them and Mandatory fields are highlighted in cyan these fields will have been setup by your administrator.
Photographs Tab

This tab is used to attach photos

Photos can be attached by clicking the box with the red cross which will popup the box to attach photos
If you have a camera attached to the device, like a web camera, you can click the ‘capture’ button. If you have the photo stored on the device click the ‘from file’ button which will bring up windows explorer where you can navigate to the required image you want to attach.

This will attach the picture to the defect. Up to 4 photos can be attached to a defect.
Actions Tab

This is where we fill in the required actions for the defect these are split into two additional tabs ‘Immediate/Temporary’ and ‘Permanent’.

An action has to be specified for each defect this could be something as simple as ‘send repair crew’ or an action can be selected from the drop down list if these have been configured.

The Date/ Time option is used if you have made the repair there and then. For example if the defect was a sign pointing the wrong way and you had turned it to point it in the correct direction, this would log the fact there was a defect but create it as a completed defect back in the main application.
Inspection Details Tab

This tab is for information only unless you need to change the Weather or Road Conditions from the drop down lists.
Once all items had been entered, then click on the [save] button. This will create the defect on the map. The icon will depend upon the defect created and the icon set to be used by your administrator, in our case it is a green square.
CHAPTER 4

Creating a Safety Defect

Safety Defects

Safety Defects are created by clicking on the map in the same way a detailed inspection would be carried out although with a further step in the process. These defects are created based on the metadata maintained within the core exor application. This enables you to only create defects that can be loaded back into the main application once back in the office.

Firstly select the activity area on the left you will have safety inspection and not defective.

This will turn the cursor into a pencil when moved over the map on the right if the ‘automatically enable create tool’ icon is selected. If not the click on the ‘toggle create feature’ icon.
Create Defect.

Move the icon to the location of the defect and click on the map, the section nearest will be highlighted and a dot will be displayed next to the cursor.

Each time you click on the map the dot will move to the desired location.

Once the location is correctly displayed double click on the map. A box will pop up displaying the available Activities for ‘Safety Inspections’.
Having selected the required activity area for the defect, click the select button. The available defects for that activity will then be displayed. Select the required defect and click the ‘Select’ button.

Highlight the required defect ‘POTH – Pothole’ for instance and click ‘Select’ then the defect screen will pop up.

This is where we will enter the details of the defect we are creating. The defects form has a number of tabs across the top; the first is the details tab. The details tab is the main form that we need to complete.
Most of the details are completed for us the ‘Activity’ is set to MC for Minor Carriageway. The Code has been set to ‘POTH’ for pothole. Other fields ‘Chainage’, ‘Easting’, ‘Northing’ have also been filled in along with the road details on the top right.

Fields that have pick lists have a drop down button next to them and Mandatory fields are highlighted in cyan; these fields will have been setup by your administrator.
Photographs Tab

This tab is used to attach photo’s

Photo’s can be attached by clicking the box with the red cross which will popup the box to attach photo’s
If you have a camera attached to the device, like a web camera, you can click the ‘capture’ button. If you have the photo stored on the device click the ‘from file’ button which will bring up windows explorer where you can navigate to the required image you want to attach.

This will attach the picture to the defect. Up to 4 photo’s can be attached to a defect.
### Defect: Minor Carriageway Repairs (POTH)

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**Inspection Details**

**Defect Details**

**Photographs**

**Actions**

**Photo1**

**Photo2**

**Photo3**

**Photo4**

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Actions Tab

This is where we fill in the required actions for the defect these are split into two additional tabs ‘Immediate/Temporary’ and ‘Permanent’.

An action has to be specified for each defect this could be something as simple as ‘send repair crew’ or an action can be selected from the drop down list if these have been configured.

The Date/Time option is used if you have made the repair there and then. For example if the defect was a sign pointing the wrong way and you had turned it to point it in the correct direction, this would log the fact there was a defect but create it as a completed defect back in the main application.
Inspection Details Tab

This tab is for information only unless you need to change the Weather or Road Conditions from the drop down lists.
Once all items had been entered, then click on the save icon. This will create the defect on the map. The icon will depend upon the defect created and the icon set to be used by your administrator, in our case it is a red circle.
CHAPTER

5

Editing a defect

Editing

Once a defect has been created on the map this isn’t hard and fast and can be edited.

Editing an existing defect can be done in one of three ways, either by highlighting the defect type and then selecting it from the map, using the data tab or by using the information tool.

The easiest way is to use the information tool [1] this is on the main toolbar. Having highlighted the icon move your cursor over the defect to be edited and left click the screen. This will pop up the information window.
This will give information on any items found in the select buffer area, in the case above it has found the main network layer and the defect.

To edit the defect high light the defect in the left hand tree and click the edit button at the bottom.

This will bring up the defect details window that is used during the defect creation process all fields that can be edited can now be changed.
Creating an Asset

Assets
Assets are created by clicking on the map. These assets are created based on the metadata maintained within the core Exor application. This enables you to only create assets that can be loaded back into the main application once back in the office.

Firstly select the asset to be created on the left i.e. ‘Gully’

This will turn the cursor into a pencil when moved over the map on the right if the ‘automatically enable create tool’ icon is selected. If not click on the ‘toggle create feature’ icon.

To create the asset move the icon to the required location of the asset and click on the map, the section nearest will be highlighted and a dot will be displayed next to the cursor.
Each time you click on the map the dot will move to the desired location.

Once the location is correctly displayed double click on the map. This will then pop up the box for you to enter the details of the asset.

For each asset the Flexible Attributes on the bottom left will be specific to that item. Any of the attributes that have pick list will have a drop down icon once you click in the relevant field.

Photo’s can be attached by clicking the box with the Red Cross, which will popup the box to attach the photo.
If you have a camera attached to the device, like a web camera, you can click the ‘capture’ button. If you have the photo stored on the device click the ‘from file’ button which will bring up windows explorer where you can navigate to the required image you want to attach.

This will attach the picture to the defect. One photo can be attached to an asset.
Exporting data

Exporting
Data collected within MapCapture can be exported so as to be loaded back into exor. Using the export option under the file menu will allow us to export data in a number of formats.

There are a number of formats that can be exported these are :-
For defect collected these scan be exported in ‘RMMS Detailed Inspections’ or ‘RMMS Safety Inspections’

Once the relevant format has been selected then you can also select which records are to be exported.

‘All Records’ will export all records from the current survey whether they have been exported previously or not.

‘New/Updated Records’ will export only records that haven’t been exported previously.

‘Date Range’ will export all records between the chosen dates.

Once the relevant fields have been completed, click the ‘export’ button. The ‘Export Completed’ button will be displayed, this will have exported the survey into the export directory set up by your system administrator.
CHAPTER 8

Loading data

Loading
Data collected within MapCapture can be exported and then loaded back into exor. Using the maintenance manager inspections loaders. Full details of these loaders and the automated process can be found in the Maintenance Manager Inspection Loader Manual.