

LOADRITE™

IMSERIES

MMS™

MMS User Manual

MATERIAL MANAGEMENT SYSTEM
FOR LOADRITE™ MMS Software V5.3

LOADRITE™



LOADRITE™ MMS User Manual

Software Number: 60391 Version Number: 5.30

Document Number: MAN-81113-02

Issued Date: January 2013

E: info@loadritescales.com

W: www.loadritescales.com

A solution from



www.actronictechnologies.com

© 2013 Actronic Ltd. All rights reserved. Actronic Technologies, C-Weigh, Express, Loadrite, Pro, Road Boss and X-Weigh are trademarks and/or registered trademarks of Actronic Ltd. All other trademarks and registrations are the property of their respective owners.

Adobe and Adobe Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. All rights reserved.

Microsoft, Windows and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All rights reserved.

The software contains proprietary information of Actronic Ltd; it is provided under a license agreement containing restrictions on use and disclosure and is also protected by copyright law. Reverse engineering of the software is prohibited.

This document is copyrighted with all rights reserved. Under copyright laws, this document may not be copied in whole or in part, reproduced in any other media, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the express written permission of Actronic Ltd. Permitted copies must carry the same proprietary and copyright notices as were affixed to the original. Under the law, copying includes translation into another language.

Published in New Zealand.

Disclaimer

Actronic Ltd operates a policy of on-going development. Please note that while every effort has been made to ensure that the data given in this document is accurate, due to continued product development, the information, figures, illustrations, tables, specifications, and schematics contained herein are subject to change without notice. Actronic Ltd does not warrant that this document is error-free. The screenshots and other presentations shown in this manual may differ from the actual screens and presentations generated by the actual product. All such differences are minor and the actual product will deliver the described functionality as presented in this document in all material respects. If you find any errors in the document, please report them to us in writing.

Actronic Ltd assumes no liability in connection with the use of any LOADRITE™ branded product.



TABLE OF CONTENTS

- 1. WELCOME..... 1-4**
- 2. WHAT IS MMS?..... 2-5**
 - 2.1. Overview 2-6
 - 2.2. Can I use MMS with my computer? 2-6
 - 2.3. How do I install MMS on my computer? 2-7
 - 2.4. How do I start LOADRITE™ MMS? 2-9
 - 2.5. Getting to know MMS 2-10
- 3. HOW DO I COLLECT WEIGHING DATA? 3-12**
 - 3.1. Radio Connection..... 3-12
 - 3.2. Network Connection 3-13
 - 3.3. LOADRITE™ Data Module Connection..... 3-14
 - 3.4. LOADRITE™ LAT Data Connection 3-16
 - 3.5. FTP Data Connection 3-18
- 4. PRODUCTIVITY..... 4-19**
 - 4.1. How are productivity reports calculated?..... 4-19
 - 4.2. How do I create a new report? 4-20
 - 4.3. How do I edit a report? 4-22
 - 4.4. How do I view a report? 4-25
 - 4.5. How do I export a report? 4-35
 - 4.6. How do I email a report? 4-35
 - 4.7. How do I print a report?..... 4-35
 - 4.8. How do I delete a report? 4-36
 - 4.9. How do I import reports? 4-36
 - 4.10. How do I export reports? 4-36
- 5. BROWSE DATA 5-37**
 - 5.1. How do I find data records? 5-38
 - 5.2. How do I add a new data record? 5-43
 - 5.3. How do I edit a data record? 5-52
 - 5.4. How do I delete a record? 5-53
 - 5.5. How do I print a docket?..... 5-54
 - 5.6. How do I import a data file? 5-54
 - 5.7. How do I export a data file? 5-55
- 6. CHANGE SETTINGS..... 6-56**
 - 6.1. General Settings 6-56
 - 6.2. Setup User Logins..... 6-59
 - 6.3. Setup Data Fields 6-60
 - 6.4. Set up Auto-Archive/Export 6-68
 - 6.5. Set up Auto Import..... 6-71
 - 6.6. Setup Docket Printing..... 6-72

7. LOG MESSAGES 7-73

8. APPENDIX A - METRIC CALCULATIONS 8-74

9. APPENDIX B - EXPORTED DATA FILE FORMATS 9-75

10. APPENDIX C - GLOSSARY 10-76

11. FOR MORE INFORMATION 11-78

1. WELCOME

Thankyou for purchasing LOADRITE™ MMS. Please read this manual carefully before using MMS for the first time. Keep this manual in a safe place and use as your first point or reference.

Formatting

The following formatting in this manual identifies specific types of information:

Convention	Type of Information
Bold	Indicates an area or item displayed on-screen, including buttons, headings, field names and options.
<i>Italics</i>	Indicates the name of a screen or window.
Monospace	The exact error message displayed on-screen.

Action Terms

The following terms are used throughout this manual to describe actions:

Term	Description
Click	Use the left mouse button to click a button or area on the screen.
Double-click	Use the left mouse button to click a button or area on the screen twice in quick succession.
Right-click	Use the right mouse button to click a button or area on the screen.
Select	Click an item in a list, a command from a menu or "check" a checkbox or option.

2. WHAT IS MMS?

LOADRITE™ Material Management System (MMS) is a suite of database software tools which turn your LOADRITE™ Weighing System into a sophisticated production management and reporting system.

MMS allows you to gather operational data and transfer it across your site in a secure, paperless manner. You can then create customized reports and graphs based on loader, product, data, time and many other combinations of available parameters.

Why should I use MMS?

By using MMS, you can:

- ▶ Increase productivity
- ▶ Manage stockpile and product inventory
- ▶ Identify peak loading pattern to improve your business systems
- ▶ Eliminate the need to enter data or process transactions manually
- ▶ Improve your customer billing processes
- ▶ Cross-check information from other sources in your plant, such as weighbridges or production machinery
- ▶ Improve maintenance scheduling
- ▶ Share web reports between sites
- ▶ Export loading information for processing in third-party applications
- ▶ Configure product and data values for each LOADRITE™ Indicator.

Depending on your model of LOADRITE™ Weighing System and the license key that you have entered, some MMS functions may not be available.

What features does MMS have?

- ▶ Simple database management which allows you to:
 - ▶ view, add and edit records
 - ▶ create filters to display the exact data you require
 - ▶ arrange and hide or show each column
 - ▶ sort data by column
 - ▶ adjust column widths to suit your screen
- ▶ Find and Replace functionality which allows you to:
 - ▶ find specific records
 - ▶ replace data
 - ▶ undo replaced data
- ▶ Productivity reports which can be:
 - ▶ created and edited
 - ▶ printed
 - ▶ exported to third-party software
- ▶ Export data for:
 - ▶ other sites or offices to use
 - ▶ importing into third-party CSV software
- ▶ Back-up data to your network by automatically archiving it
- ▶ Remote access for reporting across your company's network
- ▶ Configure data and settings for each of your LOADRITE™ Indicators
- ▶ Adjust the look and feel of MMS.

2.1. OVERVIEW

The general process for using LOADRITE™ MMS includes:

Installation and Setup

- 1) Install LOADRITE™ MMS on your computer.
- 2) Configure all settings, including the customizable data fields.
- 3) Download the setup configuration file to your Indicators.

Daily Tasks

- 1) Collect loading information using the Indicators.
 - ▶ Refer to the applicable *LOADRITE™ User Manual* for more information.
- 2) Upload payload data from the Indicator to the computer running LOADRITE™ MMS.
- 3) Check data records and edit if required.
- 4) Create or view Productivity Reports.

2.2. CAN I USE MMS WITH MY COMPUTER?

Ensure that your computer has the following *minimum* system requirements before installing MMS:

- ▶ IBM-compatible PC
- ▶ 256MB free hard drive space
- ▶ 1GB RAM (2GB RAM recommended)
- ▶ Microsoft® Windows® XP SP2, Windows Vista® SP1 or Windows 7 x32
- ▶ Microsoft .NET Framework 3.5 SP1 or higher
- ▶ Microsoft SQL Server Compact 4.0
- ▶ CD-ROM drive
- ▶ MAPI-compatible email software (required for MMS email functionality)
- ▶ Internet connection (required for MMS email and FTP functionality)

Note: If not already installed on your computer, Microsoft .NET Framework 3.5 SP1 and Microsoft SQL Server Compact 4.0 will be installed as part of the installation of MMS.

2.3. HOW DO I INSTALL MMS ON MY COMPUTER?

LOADRITE™ MMS software is usually pre-installed by your LOADRITE™ distributor when you install or upgrade the LOADRITE™ Weighing System. However, if MMS has not been installed, you can install it from the supplied CD by completing the following:

IMPORTANT: Before you begin, ensure that your computer meets the minimum system requirements for MMS.

- 1) Close all programs on your computer.
- 2) Insert the LOADRITE™ MMS CD into your computer CD drive.
The *LOADRITE™ Material Management System* installer will start.

Tip: If your computer does not automatically run the CD, start the installation manually by completing the following:
a. *Start > Run.*
b. Type **D:\Install\setup.exe** where "D" is the letter assigned to your CD drive, then click **OK**.

- 3) Follow the screen prompts to install MMS, including:
 - ▶ Review and accept the Licence Agreement for MMS when prompted.
 - ▶ Enter your **User Name, Organization**, and select whether MMS will be available to all users on this computer, or just yourself, when prompted.
 - ▶ Select a destination folder for MMS when prompted.
- 4) Click **Install**.
MMS will be installed on your computer in the same language as Microsoft® Windows® if available, otherwise it will be installed using English.

IMPORTANT: As part of the installation, a program called *tiny.exe* will be installed on your computer. Windows may display a *Security Alert* referring to *tiny* or *tiny.exe*. If you receive a security alert, click **Unblock** or **Allow**. *tiny.exe* is safe to install on your computer and if it is not installed, MMS may not function correctly.

- 5) When the installation has completed, click **Finish**.
LOADRITE™ MMS will start and the *Welcome* screen will display.

Tip: From now on, you can access MMS via:
Start > All Programs > Loadrite > Loadrite MMS

2.3.1. How do I use a Licence Key?


When starting MMS for the first time, you will need to choose whether you are going to enter a license key, or start MMS with a 30-day evaluation period.

How do I obtain and enter a license key?


- 1) From the *Welcome* screen, click **Please obtain a License Key from your local LOADRITE™ distributor to activate LOADRITE™ MMS**, then click **Next >**.
The *Activate LOADRITE™ MMS* screen will display.



- 2) Contact your LOADRITE™ distributor and give them the unique Authorisation Code that is displayed.

Tip: Click  to copy the Authorisation Code. You can then paste it in an email or letter to be sent to your LOADRITE™ distributor.

- 3) When you receive your License Key from your LOADRITE™ distributor, enter it in the **License Key** box, then click **Activate >**.

Tip: If you are able to copy the License Key from an email or document, click  to paste it in the **License Key** box.

LOADRITE™ MMS will start.

How do I begin the evaluation period?


If you do not have a license key, you must use MMS in *Evaluation* mode. MMS will run for 30 days, after which certain functionality will be restricted and you will be prompted to enter a license key.

- 1) From the *Welcome* screen, click **Start LOADRITE™ with a 30-day evaluation period**, then click **Next >**.
The *Thank you for evaluating LOADRITE™ MMS* screen will display.
- 2) Click **Start LOADRITE™ MMS**.
LOADRITE™ MMS will start in evaluation mode.


How do I end the evaluation period?

To end the evaluation period, you will need to obtain and enter a license key.

- 1) Start LOADRITE™ MMS.
- 2) *Change Settings > General Settings*.
The *General Settings* screen will display.
- 3) In the **License** section, click **Change....**
The *Activate LOADRITE™ MMS* screen will display.
- 4) Contact your LOADRITE™ distributor and give them the unique Authorisation Code that is displayed.

Tip: Click  to copy the Authorisation Code. You can then paste it in an email or letter to be sent to your LOADRITE™ distributor.

- 5) When you receive your License Key from your LOADRITE™ distributor, enter it in the **License Key** box, then click **Activate >**.

Tip: If you are able to copy the License Key from an email or document, click  to paste it in the **License Key** box.

LOADRITE™ MMS will start.

2.3.2. How do I keep MMS up-to-date?

➤ *Main Menu > Help*

Each time MMS is started, it will check online for new service packs and bug fixes and notify you on the *Help* page. Follow the instructions on the *Help* page to install available software updates.

TIP: Keep LOADRITE™ MMS up-to-date to ensure smooth operation by checking the *Help* page regularly and installing all listed software updates.

2.4. HOW DO I START LOADRITE™ MMS?

After you have installed MMS, you can start it from the Windows® Start menu:



➤ *Start > All Programs > Loadrite > Loadrite MMS*

LOADRITE™ MMS Icon



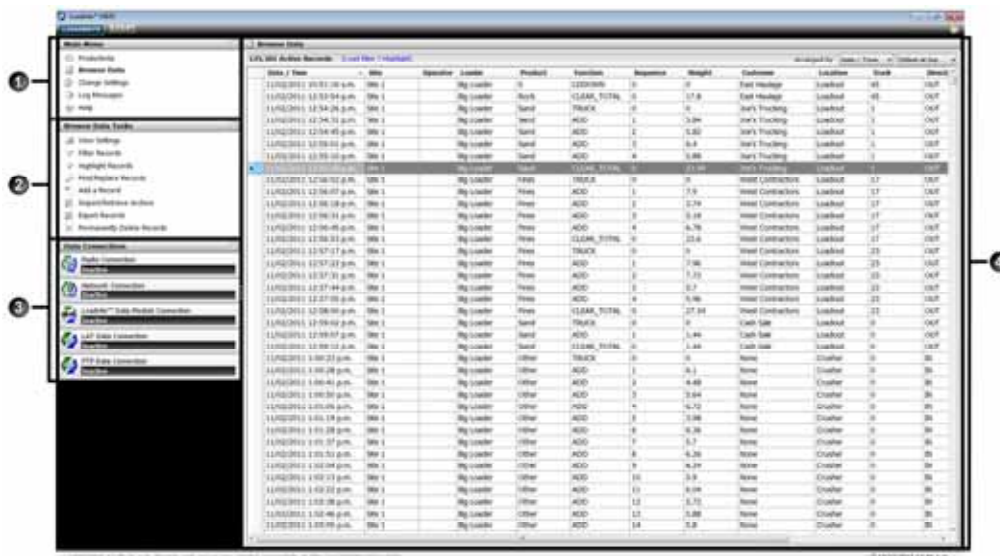
The LOADRITE™ MMS icon in the Windows® Notification Area will rotate while the MMS is processing data. For example, the icon will rotate when one of the data connections is receiving data, data is being archived, etc.

2.4.1. How do I close LOADRITE™ MMS?

- 1) Click  to close the MMS window.
The MMS window will close but is still running in the background.
- 2) Right-click  in the **Windows® Notification Area**, then select **Exit**.
MMS will close.

2.5. GETTING TO KNOW MMS

Depending on your model of LOADRITE™ Weighing System and the license key that you have entered, some MMS functions may not be available.



The MMS screen includes the following sections:

Section	Description
<p>1 Main Menu</p>	<p>The Main Menu section lists the main functional areas of MMS:</p> <ul style="list-style-type: none"> ▶ Productivity ▶ Browse Data ▶ Change Settings ▶ Log Messages ▶ Help <p>Click an option to display the related tasks and functions in the Tasks section.</p>
<p>2 Tasks</p>	<p>Click an option to display the related content in the Content section.</p> <p>To see other tasks, click a different option in the Main Menu section.</p>
<p>3 Data Connections</p>	<p>The Data Connections section displays the status of the various methods for retrieving data from the Indicators. The available data connections include:</p> <ul style="list-style-type: none"> ▶ Radio Connection ▶ Network Connection ▶ LOADRITE™ Data Module Connection ▶ LOADRITE™ LAT Data Connection ▶ FTP Data Connection <p>Move the mouse pointer over a data connection to display the available options.</p>
<p>4 Content</p>	<p>The Content section is the largest section on your screen and displays the data, report or settings selected in the Main Menu or Tasks section. For example, if you select Browse Data in the Main Menu section, a list of weight data records will be displayed in the Content section.</p> <p>Note: The name displayed at the top of the Content section will be the same as the option selected in the Main Menu section.</p>

How do I change the width of the Content section?

The width of the **Contents** section can be adjusted by clicking the bar between the **Contents** section and dragging it left or right. To return the width of the **Contents** section to the default size, double-click the bar.

2.5.1. How do I practice using MMS with example data and reports?

We recommend that you practice using MMS with an example database and sample reports before using MMS with real site data.

How do I use an example database?

A database containing example data is installed on your computer when LOADRITE™ MMS is installed. The example data will be in the same language as MMS if available, otherwise it will be in English. The example database will be used until another database, such as your "live" database, is opened.

- ▶ To open a different database, see, (see "How do I select and manage the database?" on page 6-56).
- ▶ If you need to re-open the example database, it can be found in one of the below *hidden* folder locations, depending on the version of Windows® installed:
 - ▶ Windows XP: C:\Documents and Settings\All Users\Application Data\Loadrite\MMS
 - ▶ Windows Vista/Windows 7: C:\ProgramData\Loadrite\MMS

How do I view sample reports?

➤ *Main Menu > Productivity*

A selection of sample reports are listed in the **Productivity Reports** section. Click the name of the sample report to view it.

- ▶ When you have finished viewing the sample reports, you can edit them (see "How do I edit a report?" on page 4-22) or delete them (see "How do I delete a report?" on page 4-35).

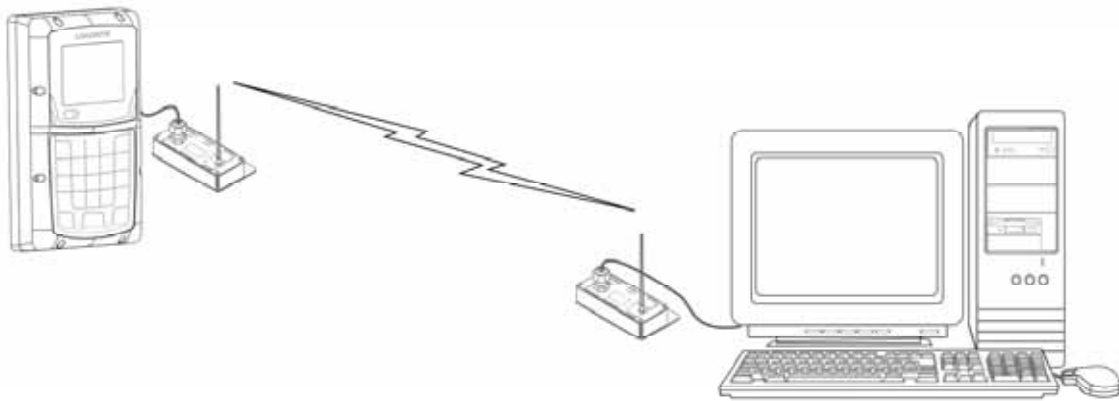
3. HOW DO I COLLECT WEIGHING DATA?

There are several methods of collecting payload data from your Indicators and importing it into MMS:

- ▶ Radio Connection
- ▶ Network Connection
- ▶ LOADRITE™ Data Module Connection
- ▶ LOADRITE™ LAT Data Connection
- ▶ FTP Data Connection

3.1. RADIO CONNECTION

A radio connection can be used to send live payload data from an Indicator to MMS.



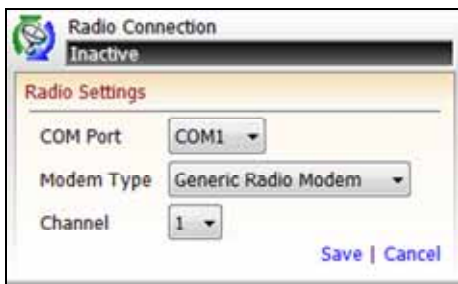
Requirements

- ▶ To send data, a radio modem must be connected to each Indicator.
- ▶ To receive data, a radio modem must be connected to the computer running MMS.

How do I setup a radio connection?

IMPORTANT: We recommend that all modem settings are configured by your LOADRITE™ distributor.

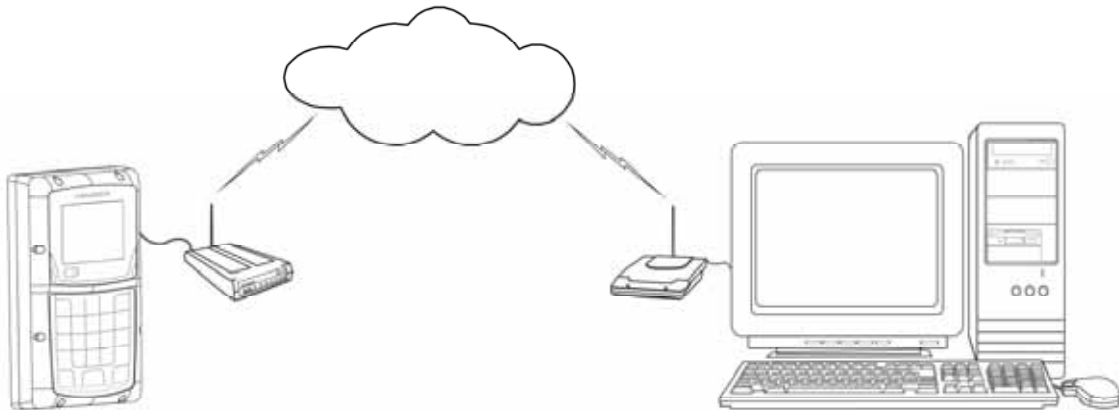
- 1) In the **Data Connections** section, click **Radio Connection**, then click **Setup**. The **Radio Settings** will display.



- 2) Select the COM port which should be monitored for a radio connection from the **COM Port** drop-down box.
- 3) Select the type of radio modem being used from the **Modem Type** drop-down box.
- 4) Select the radio channel which should be monitored from the **Channel** drop-down box.
- 5) Click **Save**, then click **Activate**. The radio data connection is now active and will begin to receive live payload data.

3.2. NETWORK CONNECTION

A network connection can be used to send live payload data from an Indicator to MMS. The network connection can be physical or wireless.



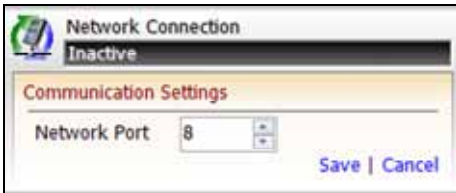
Requirements

- ▶ To send data, either a serial device server physically connected to the network or a wireless serial device server, must be connected to each Indicator.
- ▶ To receive data, the computer running MMS must be connected to the same network as the Indicators.

How do I setup a network connection?

IMPORTANT: We recommend that all modem settings are configured by your LOADRITE™ distributor.

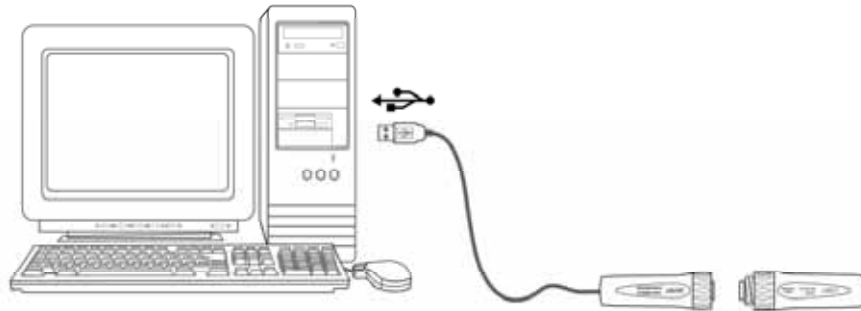
- 1) In the **Data Connections** section, click **Network Connection**, then click **Setup**. The **Communication Settings** will display.



- 2) Select the network port which should be monitored for a network connection from the **Network Port** box.
- 3) Click **Save**, then click **Activate**. The network data connection is now active and will begin to receive live payload data.

3.3. LOADRITE™ DATA MODULE CONNECTION

A LOADRITE™ Data Module (may be sold separately) can be used to record payload data from an Indicator, then at the end of the shift, be connected to the computer running MMS to upload the data. A Data Module can also be used to transfer configuration settings to an Indicator.



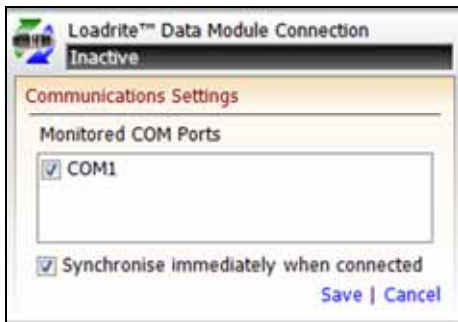
TIP: Depending on the activity on your site, a Data Module may be able to record weighing data for several days. However, we recommend that the data is uploaded to MMS once per day, as this will prevent the Data Module from running out of memory in the middle of a work shift. A Data Module does not have to be full before the data can be uploaded.

Requirements

- ▶ To record data, a LOADRITE™ Data Module must be connected to each Indicator while product is weighed.
- ▶ To upload data, each LOADRITE™ Data Module must be transferred from the Indicator to the computer running MMS.

How do I setup a Data Module connection?

- 1) In the **Data Connections** section, click **LOADRITE™ Data Module Connection**, then click **Setup**. The **Communications Settings** will display.



- 2) In the **Monitored COM Ports** section, select the options for the COM ports which should be monitored for a Data Module connection.
- 3) Complete the following synchronization settings:

If you want to...	Then...
synchronize the LOADRITE™ Data Module with the Indicator <i>immediately</i> when the connection is active	select the Synchronise immediately when connected option, then click Save .
synchronize the LOADRITE™ Data Module with the Indicator only when Synchronise is clicked	clear the Synchronise immediately when connected option, then click Save .

- 4) Click **Activate**. The Data Module data connection is now active.

How do I import data into MMS using a LOADRITE™ Data Module?

- 1) At the beginning of the loader driver's shift, connect the LOADRITE™ Data Module to the Indicator.
 - ▶ Insert the Data Module into the Indicator socket.
 - ▶ Turn the ring on the Data Module until it is tight and the module is securely in place.
- 2) At the end of the loader driver's shift, disconnect the Data Module from the Indicator.
 - ▶ Turn the ring on the Data Module until it is loose.
 - ▶ Gently pull the Data Module from the Indicator socket.
- 3) Connect the Data Module to your computer using a LOADRITE™ interface cable.
 - ▶ Insert the Data Module into the interface cable socket.
 - ▶ Turn the ring on the Data Module until it is tight and the module is securely in place.
 - ▶ Insert the other end of the interface cable directly into a USB port on your computer.
- 4) Start LOADRITE™ MMS.
 - ▶ If MMS has *not* been configured to synchronize automatically, click **Synchronize**.

The data from the LOADRITE™ Data Module will be uploaded to MMS. The Data Module is now empty and ready to be used for the loader driver's next shift.

3.3.1. Synchronizing Data

Each time a Data Module is connected with MMS, the data recorded on the Data Module will be copied to MMS. New data field values added to the Indicator will also be copied to MMS, ensuring that MMS remains synchronized with each Indicator. For example, a new product added to an Indicator will be copied to MMS.

Similarly, each time a Data Module is uplinked with an Indicator, settings configured in MMS will be copied to the Indicator, ensuring that each Indicator remains synchronized with MMS.

- ▶ All synchronizations are done via an Uplink file. For more information on uplink files, see "Uplink File" on page 6-67.

What is synchronized when uplinking a Data Module to an Indicator?

The following information will be copied from the Data Module to an Indicator:

- ▶ All configuration settings.
- ▶ All Data Field values. The data field will only be included if the **Upload to LOADRITE™ Indicator** checkbox is selected on the *Setup Data Fields* screen.

What is synchronized when connecting a Data Module to MMS?

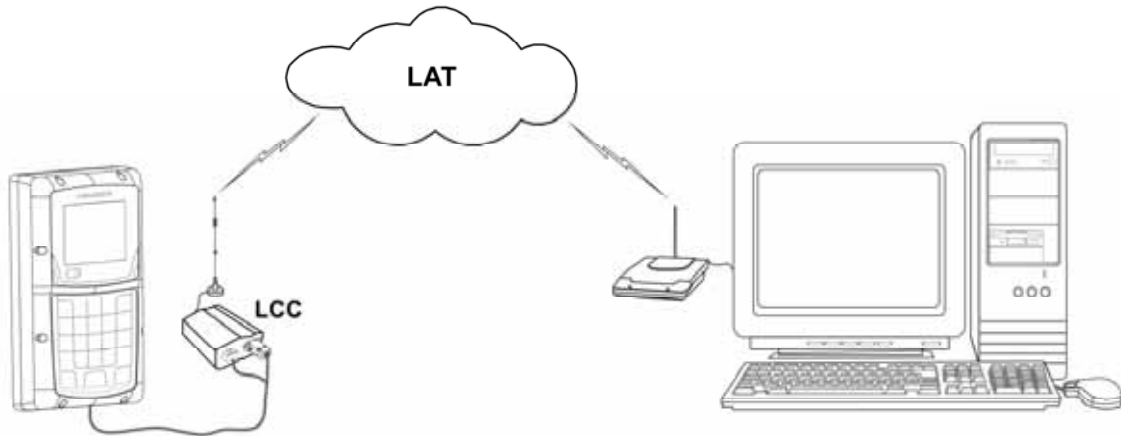
The following information will be copied from the Data Module to MMS:

- ▶ All new weighing data, including Use Value information (see "Appendix A - Metric Calculations" on page 8-74).
- ▶ Descriptions for all new data field values that have been both added to the Indicator *and* used in at least one weigh. You will be prompted to confirm the description of the new data field value if the **Prompt for new descriptions** checkbox is selected on the *Setup Data Fields* screen (see "Setup Data Fields" on page 6-60).

3.4. LOADRITE™ LAT DATA CONNECTION

A LOADRITE™ LAT Server data connection can be used to automatically send both payload data and new Data Field values from an Indicator to MMS via the LOADRITE™ LAT Server.

TIP: Each data record is only stored on the LOADRITE™ LAT Server for 30 days. This means that you must ensure that MMS is run on your computer at least once every 30 days to enable the data to be received. If you have more than one instance of <>SOFTWARE<>, they must each be run at least once every 30 days.



Requirements

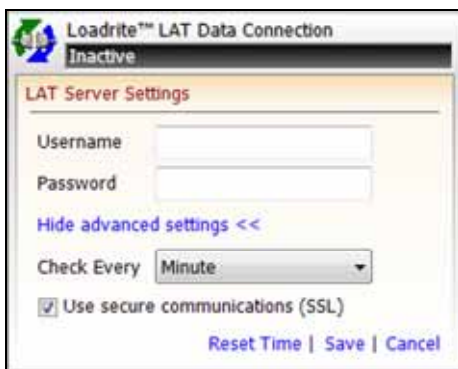
- ▶ To send data, a LOADRITE™ Communication Controller (LCC) must be connected to each Indicator.
- ▶ To receive data, the computer running MMS must be connected to the Internet and be configured to access the LOADRITE™ LAT Server.

IMPORTANT: To use the LAT Data Connection, all Indicators must be compatible with LOADRITE™ LAT Server. Depending on your model of Indicator, a software update may be required to ensure compatibility. For further information, contact your LOADRITE™ distributor.

How do I setup a LAT data connection?

IMPORTANT: We recommend that all LCC settings are configured by your LOADRITE™ distributor.

- 1) In the **Data Connections** section, click **LOADRITE™ LAT Data Connection**, then click **Setup**. The **LAT Server Settings** will display.



- 2) In the **Username** box, enter the user name used to access the LOADRITE™ LAT Server.

TIP: The user name should be the same user name used to configure the corresponding LCC within LOADRITE™ Config Server.

- 3) In the **Password** box, enter the password used to access the LOADRITE™ LAT Server.

TIP: The password should be the same password used to configure the corresponding LCC within LOADRITE™ Config Server.

- 4) Click **Show advanced settings**.
- 5) Select the frequency with which MMS should check the LOADRITE™ LAT Server for new data from the **Check Every** drop-down box.

TIP: Data will only be stored on the

- 6) Complete the following:

If you want to...	Then...
use a secure SSL communication link	select the Use secure communications (SSL) option, then click Save .
do not want to use a secure SSL communication link	clear the Use secure communications (SSL) option, then click Save .

- 7) Complete the following:

If you want to...	Then...
receive all new data from the LOADRITE™ LAT Server	continue to step 6.
only receive new data from the LOADRITE™ LAT Server recorded since a specific date	<ul style="list-style-type: none"> ▶ click Reset Time. The <i>Reset Time</i> window will display. ▶ Select the date from which to receive new data from the drop-down calendar. ▶ Select or enter the time from which to receive new data from the drop-down calendar. ▶ continue to step 8.

- 8) Click **Save**, then click **Activate**.
The LOADRITE™ LAT Server data connection is now active and will begin to receive data at the specified frequency.

3.4.1. Synchronizing Data

MMS will automatically receive payload data and *new* Data Fields from the Indicator via the LOADRITE™ LAT Server at the specified frequency. However, it will only synchronize *current* Data Fields between MMS and each Indicator when the *Send Data List* function is used.

To synchronize MMS with each Indicator, complete the following:

- 1) In the **Data Connections** section, click **LOADRITE™ LAT Data Connection**.



- 2) Click **Send Data List**.
MMS will send a Data List to all Indicators via the LOADRITE™ LAT Server, which synchronizes them with MMS. All Data Field settings (excluding the **Title** value) will be synchronized where the **Upload to LOADRITE™ Indicator** checkbox has been selected on the *Setup Data Fields* screen.

NOTE: The maximum size allowed for the Data List file is 120,000 bytes.

3.5. FTP DATA CONNECTION

A FTP connection can be used to send payload data from an Indicator to MMS via a FTP server.

Requirements

- ▶ To send data, a cellular modem must be connected to each Indicator.
- ▶ To receive data, the computer running MMS must be connected to the the Internet and be configured to access the FTP server.

How do I setup a FTP connection?

- 1) In the **Data Connections** section, click **FTP Data Connection**, then click **Setup**. The **FTP Server Settings** will display.



- 2) Select the type of cellular modem being used from the **Modem Type** drop-down box.
- 3) In the **FTP Address** box, enter the FTP server address.
- 4) In the **Port** box, select or type the FTP port number.
- 5) In the **Username** box, enter the user name used to access the FTP server.
- 6) In the **Password** box, enter the password used to access the FTP server.
- 7) Select the frequency with which MMS should check the FTP server for new data from the **Check Every** drop-down box.
- 8) Complete the following:

If you want to...	Then...
receive all new data on the FTP server	continue to step 8.
only receive new data recorded since a specific date	<ul style="list-style-type: none"> ▶ click Reset Time. The <i>Reset Time</i> window will display. ▶ Select the date from which to receive new data from the drop-down calendar. ▶ Select or enter the time from which to receive new data from the drop-down calendar. ▶ continue to step 8.

- 9) Click **Save**, then click **Activate**. The FTP data connection is now active and will begin to receive payload data at the specified frequency.

4. PRODUCTIVITY

The *Productivity* section enables you to produce custom reports on the productivity of your operations, including your loaders, trucks, stockpiles, jobs and events.

A number of common sample reports are included with LOADRITE™ MMS. You can also create and edit reports to suit your requirements.

Tip: If the sample reports are not available, you can import them from your network, see "How do I import reports?" on page 4-36.

4.1. HOW ARE PRODUCTIVITY REPORTS CALCULATED?

For most productivity reports, the information contained in the report is based on loads, ie: the amount of product added to a truck or wagon.

In order to calculate a load, a **Truck** record, one or more **Add** records and a **Clear Total** record must be recorded:

Record	Description
Truck or Wagon	<p>It is extremely important that the operator selects a truck or wagon at the beginning of each load, because it indicates that loading has commenced.</p> <p>If your operation has only one truck, the operator still needs to select the truck prior to each load.</p> <ul style="list-style-type: none"> Refer to your <i>LOADRITE™ Indicator User Manual</i> for instructions on selecting a truck or wagon.
Add	<p>The <i>Add</i> function records the weight that has been lifted in each bucket. There are three methods of recording an <i>Add</i>:</p> <ul style="list-style-type: none"> Pressing the Add button on the Indicator (the name of the button may differ depending on your model of Indicator) Pressing a Remote Add button (if available) Using the <i>Auto-Add</i> function (if available).
Clear Total	<p>The <i>Clear Total</i> function indicates that a load has been completed. A Clear Total is recorded by pressing the Clear button on the Indicator (the name of the button may differ depending on your model of Indicator).</p>

IMPORTANT: If the operator forgets to perform any of the above functions, you will need to edit the data to prevent incorrect reports. For more information, see "How do I edit a data record?" on page 5-52.

For detailed calculations, see "Appendix A - Metric Calculations" on page 8-74.

Example Load Records

The below image shows example records for two loads (separated by a line):

Date / Time	Site	Loader	Product	Function	Sequence	Weight	Truck
5/07/2009 1:51:59 a.m.	Site 1	Bob's Loader	T. Salt	TRUCK			2048
5/07/2009 1:55:17 a.m.	Site 1	Bob's Loader	T. Salt	ADD	1	4310	2048
5/07/2009 1:57:13 a.m.	Site 1	Bob's Loader	T. Salt	ADD	2	4220	2048
5/07/2009 1:57:47 a.m.	Site 1	Bob's Loader	T. Salt	ADD	3	4500	2048
5/07/2009 1:57:55 a.m.	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		13030	2048
5/07/2009 2:37:42 a.m.	Site 1	Bob's Loader	T. Salt	TRUCK			2056
5/07/2009 2:38:49 a.m.	Site 1	Bob's Loader	T. Salt	ADD	1	2680	2056
5/07/2009 2:39:26 a.m.	Site 1	Bob's Loader	T. Salt	ADD	2	590	2056
5/07/2009 2:39:33 a.m.	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		3270	2056

Each load begins with a **Truck** record and ends with a **Clear Total** record.



4.2. HOW DO I CREATE A NEW REPORT?

It is very easy to create a new report. New reports are based on templates which allows you to create multiple versions of the same report type for different purposes. For example, you could create a *Key Productivity Indicator* report for "This year" and "Last year" so that performance can be compared, or you could create a *Stockpile Summary* report for each site in your operation.

Tips:

- i) If you want to create a summary-style report, ensure that you base it on the **Generic Summary Report** template, or another similar summary-style template. If you want to create a detailed report, ensure that you use the **Generic Detailed Report** template, or another similar detail-style template. If you want to create a productivity report, ensure that you use the **Generic Productivity Report** template, or another similar productivity style template. If you do not use the correct template, the report will not be displayed in the expected format, and therefore may not include the required data.
- ii) You can create folders to group reports together. For example, create a folder for each site, or create a folder for each type of report.

Note: In the below procedure, *Data n* is used to represent Data Fields, for example, Data 1, Data 2, Data 3, etc.

Menu Path:

➤ *Main Menu > Productivity > Create New Report*

Part A: Setup Report



- 1) In the **Report Name** field, enter a name for the report.
- 2) Complete the following:

If you want to...	Then...
add the report to an existing folder	continue to step 3.
create a new folder for the report	<ul style="list-style-type: none"> ▶ click New Folder. The <i>Add a New Folder</i> window will display. ▶ In the New Folder Name field, enter a name for the new folder, then click OK. The new folder name will now be available in the Report Folder drop-down box. ▶ continue to step 3.

- 3) In the **Report Folder** drop-down box, select a folder for the report.
- 4) In the **Report Type** drop-down box, select the report to use as a template for the new report.

Tip: The options available to customize the report will depend on the template selected. For the maximum amount of customization, select **Generic Detailed Report**, **Generic Productivity Report** or **Generic Summary Report** in the **Report Type** drop-down box.

Part B: Select Report Fields and Column to Group By

The screenshot shows a report configuration window with the following fields:

- Group By:** Loader
- Function:** ADD
- Report Period:** Today
- Limit time of day:** (checkbox)
- From (Date):** 13/12/2012 12:00:00 a.m.
- To (Date):** 14/12/2012 12:00:00 a.m.
- From (Time):** 12:00:00 a.m.
- To (Time):** 12:00:00 a.m.
- Column 1:** Customer
- Column 2:** [None]
- Column 3:** Product
- Column 4:** [None]
- Column 5:** [None]
- Column 6:** [None]
- Column 7:** [None]
- Column 8:** [None]
- Weight Unit:** lb

- 1) In the **Group By** drop-down box, select the Data Field to group data by in the report.
- 2) In the **Function** drop-down box, select the type of event data to use in the report.

Note: The **Function** field is extremely important in determining the type of data to be shown in the report. For more information on the metrics used and the type of data which will be included in the report, see "Appendix A - Metric Calculations" on page 8-74.

- 3) Complete the following:

If you want...	Then...
the report to include data from a dynamic period of time based on today's date	<ul style="list-style-type: none"> ▶ in the Report Period drop-down box, select the period of time that the report will cover, for example, Today, This week or This year. ▶ continue to step 8.
the report to include data from between two specific dates	<ul style="list-style-type: none"> ▶ in the Report Period field, select Between The From and To fields will activate. ▶ In the From field, select the earliest date for the report from the drop-down calendar. ▶ In the To field, select the latest date for the report from the drop-down calendar. ▶ continue to step 8.

- 4) Complete the following:

If you want...	Then...
data from the whole day to be included in the report	continue to step 8.
to limit the hours from which data will be included in the report	<ul style="list-style-type: none"> ▶ select the Limit time of day checkbox. The From and To boxes will activate. ▶ In the From box, select or enter the earliest time for the data. ▶ In the To box, select or enter the latest time for the data. ▶ continue to step 8.

- 5) In the **Column 1** to **Column 7** drop-down boxes, select the data that you would like to use in your report.

Tip: If you find that data in a particular column in our report is overlapping with another column, insert a blank column between them by selecting **None** in a column drop-down box between them.

- 6) In the **Weight Unit** field, select the unit of measurement to be used for weighing.

Part C: Select Report Filters



- 1) In the **Site** drop-down box, select one or more sites from the combo-box. To select multiple sites, press and hold **CTRL** while selecting them.
- 2) In the **Operator** box, select one or more operators from the combo-box. To select multiple operators, press and hold **CTRL** while selecting them.
- 3) In the **Loader** box, select one or more loaders from the combo-box. To select multiple loaders, press and hold **CTRL** while selecting them.
- 4) In the **Product** box, select one or more products from the combo-box. To select multiple products, press and hold **CTRL** while selecting them.
- 5) In each **Data n** box, select one or more *Data n* from the combo-box. To select multiple *Data n*, press and hold **CTRL** while selecting them.
- 6) Click **Save**.
The report will display in the **Content** section and is saved in the selected report folder.

4.3. HOW DO I EDIT A REPORT?

All reports can be edited, however the fields available to be edited will depend on the template that the report is based on. When you edit a report, you can edit as many or as few fields as required.

Menu Path:

➤ *Main Menu > Productivity*

Part A: Setup Report



- 1) In the **Productivity Reports** section, select the report that you would like to edit.
The report will display in the **Content** section.
- 2) In the **Productivity Reports** section, click **Edit Report**.
The *Report Settings* screen will display with editable fields available.
- 3) In the **Report Name** field, edit the name of the report.

4) Complete the following:

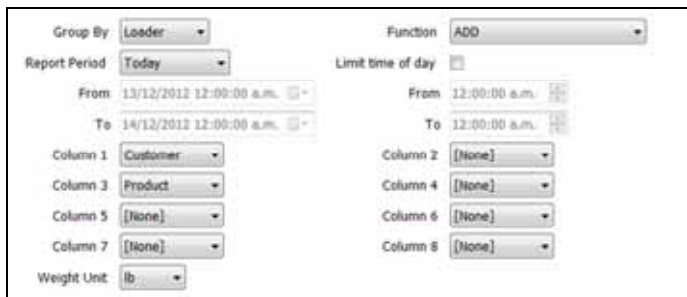
If you want to...	Then...
move the report to an existing folder	continue to step 5.
create a new folder for the report	<ul style="list-style-type: none"> ▶ click New Folder. The <i>Add a New Folder</i> window will display. ▶ In the New Folder Name box, enter a name for the new folder, then click OK. The new folder name will now be available in the Report Folder drop-down box. ▶ continue to step 5.
leave the report in the current folder	continue to step 6.

5) In the **Report Folder** drop-down box, select a folder for the report.

6) In the **Report Type** drop-down box, select the report to use as a template for the new report.

Tip: The options available to customize the report will depend on the template selected. For the maximum amount of customization, select **Generic Detailed Report**, Generic Productivity Report or **Generic Summary Report** in the **Report Type** drop-down box.

Part B: Select Report Fields and Column to Group By



1) In the **Group By** drop-down box, select the Data Field to group data by in the report.

2) In the **Function** drop-down box, select the type of event data to use in the report.

Note: The **Function** field is extremely important in determining the type of data to be shown in the report. For more information on the metrics used and the type of data which will be included in the report, see "Appendix A - Metric Calculations" on page 8-74.

3) Complete the following:

If you want...	Then...
the report to include data from a dynamic period of time based on today's date	<ul style="list-style-type: none"> ▶ in the Report Period drop-down box, select the period of time that the report will cover, for example, Today, This week or This year. ▶ continue to step 10.
the report to include data from between two specific dates	<ul style="list-style-type: none"> ▶ in the Report Period field, select Between The From and To boxes will activate. ▶ In the From box, select the earliest date for the report from the drop-down calendar. ▶ In the To box, select the latest date for the report from the drop-down calendar. ▶ continue to step 10.

4) Complete the following:

If you want...	Then...
data from the whole day to be included in the report	continue to step 8.
to limit the hours from which data will be included in the report	<ul style="list-style-type: none"> ▶ select the Limit time of day checkbox. The From and To boxes will activate. ▶ In the From box, select or enter the earliest time for the data. ▶ In the To box, select or enter the latest time for the data. ▶ continue to step 8.

5) In the **Column 1** to **Column 7** drop-down boxes, select the data that you would like to use in your report.

Tip: If you find that data in a particular column in our report is overlapping with another column, insert a blank column between them by selecting **None** in a column drop-down box between them.

6) In the **Weight Unit** field, select the unit of measurement to be used for weighing.

Part C: Select Report Filters



- 1) In the **Site** drop-down box, select one or more sites from the combo-box. To select multiple sites, press and hold **CTRL** while selecting them.
- 2) In the **Operator** box, select one or more operators from the combo-box. To select multiple operators, press and hold **CTRL** while selecting them.
- 3) In the **Loader** box, select one or more loaders from the combo-box. To select multiple loaders, press and hold **CTRL** while selecting them.
- 4) In the **Product** box, select one or more products from the combo-box. To select multiple products, press and hold **CTRL** while selecting them.
- 5) In each **Data n** box, select one or more *Data n* from the combo-box. To select multiple *Data n*, press and hold **CTRL** while selecting them.
- 6) Click **Save**.
The report will display in the **Content** section and is saved in the selected report folder.

4.4. HOW DO I VIEW A REPORT?

You can easily view a report by selecting the name of the report in the **Productivity Reports** section.

Menu Path:

➤ *Main Menu > Productivity*

All available reports are listed in the **Productivity Reports** section, in alphabetical order within each folder. The default reports that are available include:

- ▶ Generic Detailed Report
- ▶ Generic Productivity Report
- ▶ Generic Summary Report
- ▶ Key Productivity Indicators
- ▶ Loader by Day
- ▶ Loader by Hour
- ▶ Loader Product Summary
- ▶ Loader Productivity Summary
- ▶ Site Status Summary
- ▶ Stockpile Summary









Tip: If the default reports are not available, you can import them from your network, see "How do I import reports?" on page 4-36.

Report Toolbar

The **Report Toolbar** is displayed at the top of each report and allows you to perform various functions with the report, such as exporting and printing.



The following options are available on the **Report Toolbar**:

	Button	Description
	Export	Click to export the report to your computer or network. The available export formats include: <ul style="list-style-type: none"> ▶ Crystal Reports (.rpt) ▶ Adobe Acrobat (.pdf) ▶ Microsoft Excel (.xls) ▶ Microsoft Excel Data Only (.xls) ▶ Microsoft Word (.doc) ▶ Rich Text Format (.rtf)
	Print	Click to print the report.
	Refresh	Click to refresh the report with the latest data (if applicable).
	Navigation	Click to view the first page of the report. Click to view the last page of the report. Click to view the next page of the report. Click to view the previous page of the report.
	Go To Page	Click to enter the number of the page to view.
	Close	Click to close the report.
	Find Text	Click to search the report for specific text.
	Zoom	Click to select a zoom level to zoom in or out of the page.

4.4.1. How do I view reports from a remote computer?

Remote Reporting is an advanced feature of LOADRITE™ MMS which allows you to view reports from a computer which isn't running MMS.

For example, satellite offices can access MMS reports from a computer at head office using the local network or Internet. If MMS is installed at a satellite office, then head office could access the reports using the local network or Internet.

WARNING: If no user logins are created, *Remote Reporting* will not be secure. To ensure that *Remote Reporting* is restricted to authorized users, use LOADRITE™ MMS to create at least one user login.

Requirement of computer running MMS

- ▶ LOADRITE™ MMS must be installed and running at all times.
- ▶ The *LOADRITE™ MMS Reports Server* must be running in order to generate web reports. The *Reports Server* will start running as part of MMS, but it may not run properly if another web server is running, or if an Internet firewall is installed. You can confirm if the *Reports Server* is running, by checking the *LOADRITE™ MMS Log Messages* for the following message: **Reports Webserver was started.**

Requirements of remote computer

- ▶ A web browser installed.
- ▶ A PDF viewer installed, such as Adobe® Reader®.
- ▶ The IP address or name of the computer running MMS must be known.
- ▶ A user login must be known, if *User Login* functionality is enabled.

How do I access *Remote Reporting*?

- 1) On the remote computer, open a web browser, for example, Internet Explorer® or Firefox®.
- 2) In the **Address** bar of your web browser, enter the IP address or network name of the computer running MMS. The *Reports* screen will display. If *User Login* functionality is enabled, the *User Login* page will display.

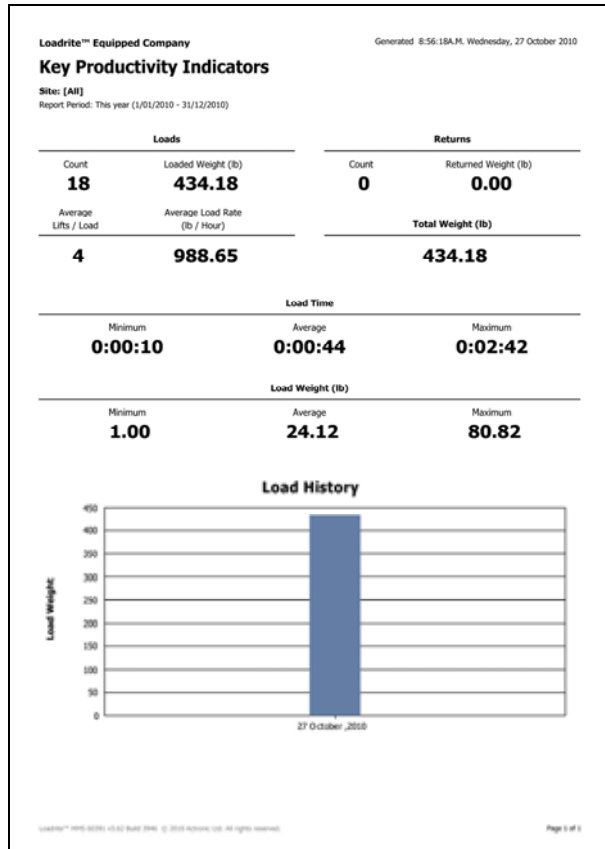
4.4.2. Key Productivity Indicators (KPI) Report

The *Key Productivity Indicators (KPI)* report is a summary overview of the loading operation between selected dates. This report includes a bar graph of each day's total tonnage.

Customizable Values

- ▶ Site
- ▶ Report Period
- ▶ Weight Unit

Example Report



Report Contents

Item	Description
Load Count	The total number of trucks or wagons that have been loaded out of the stockpiles.
Loaded Weight	The total amount of tonnage that has been loaded out of the stockpiles.
Return Count	The total number of truck or wagon loads that have been returned to the stock pile.
Return Weight	The total amount of tonnage that has been returned to the stock piles.
Average Lifts per load	The average number of buckets that have been loaded into each truck or wagon.
Average Load Rate/Hour	The average tonnage per hour that has been loaded.
Total Weight	The net result of product loaded out, ie: the difference between the loads and the returns.
Load Time	The minimum, average and maximum amount of time that it has taken to load each truck or wagon.
Load Weight	The minimum, average and maximum amount of tonnage that has been loaded into each truck.
Load History	A bar graph which displays the load weight per day for the selected period.

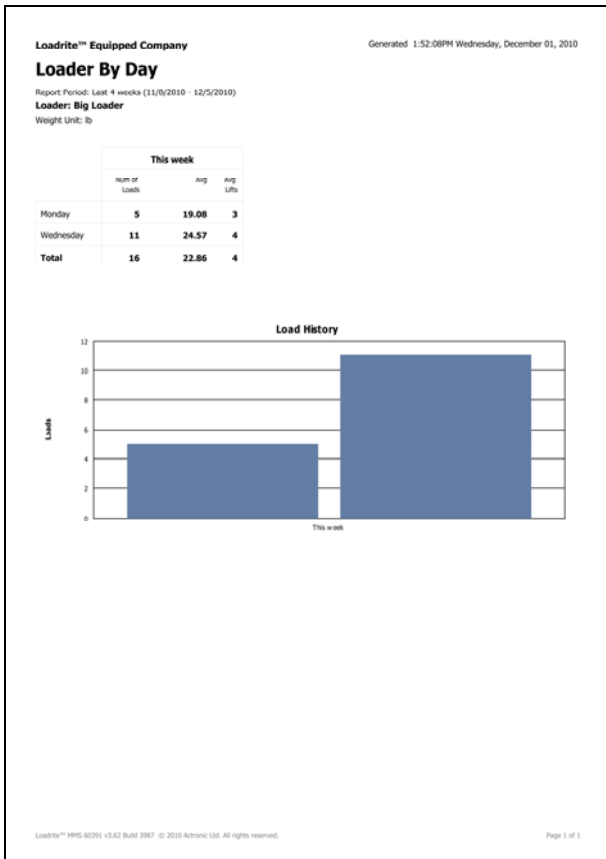
4.4.3. Loader by Day Report

The *Loader by Day* report is an overview report that shows how much the specified loader has loaded, on a daily basis for the previous 4 weeks (default).

Customizable Values

- ▶ Loader
- ▶ Weight Unit
- ▶ Report Period

Example Report



Report Contents

Item	Description
Number of Loads	The number of loads completed for the day.
Average Weight	The average weight of all loads for the day.
Average Lifts	The average number of lifts made per load for the day.
Load History	A bar graph which displays the number of lifts per day for the selected period.

4.4.4. Loader by Hour Report

The *Loader by Hour* report shows how much the specified loader has loaded, on an hourly basis for any one day.

Customizable Values

- ▶ Report Period
- ▶ Loader
- ▶ Weight Unit

Example Report

Loadrite™ Equipped Company		Generated 1:29:40PM Wednesday, December 01, 2010			
Loader By Hour					
Report Period: Today (12/1/2010)					
Loader: Big Loader					
Time	Num Loads	Avg Load Time	Avg Lifts / Load	Avg Load Weight (lb)	Total Weight (lb)
9:00 am	11	0:00:48	4	24.57	270.32
Total	11	0:00:48	4	24.57	270.32

Loadrite™ MMS 40391 v3.62 Build 2006 © 2010 Actronic Ltd. All rights reserved. Page 1 of 1

Report Contents

Item	Description
Number of Loads	The number of loads completed for the hourly period.
Average Load Time	The average time taken for each load.
Average Lifts/Load	The average number of lifts made per load.
Average Weight	The average weight of each load.
Total Weight	The total weight loaded for the hourly period.

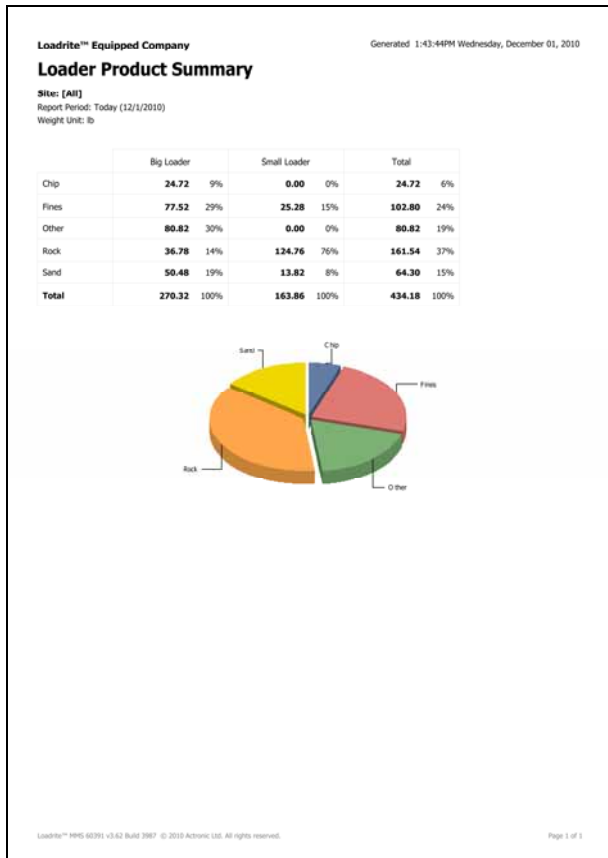
4.4.5. Loader Product Summary Report

The *Loader Product Summary* report shows how much of product each loader at a site has loaded, during the specified period. The report includes a pie graph showing the total amount of each product loaded at the site.

Customizable Values

- ▶ Site
- ▶ Report Period
- ▶ Weight Unit

Example Report



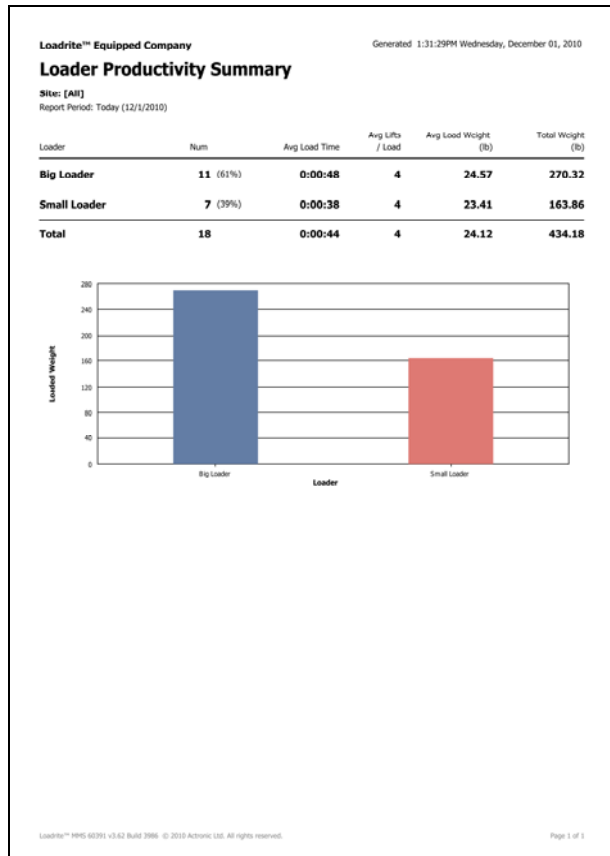
4.4.6. Loader Productivity Summary Report

The *Loader Productivity Summary* report is an overview of the productivity of each loader at one or all sites, during the specified period..

Customizable Values

- ▶ Site
- ▶ Report Period
- ▶ Weight Unit

Example Report



Report Contents

Item	Description
Site	The name of the site that the data relates to.
Loader	The name of the loader.
Number of Loads	The number of loads completed by the loader.
Average Load Time	The average time taken for each load.
Average Lifts/Load	The average number of lifts made per load.
Average Load Weight	The average weight of each load.
Total Load Weight	A bar graph The total weight loaded
Bar Graph	A bar graph which displays the total weight lifted by each loader.

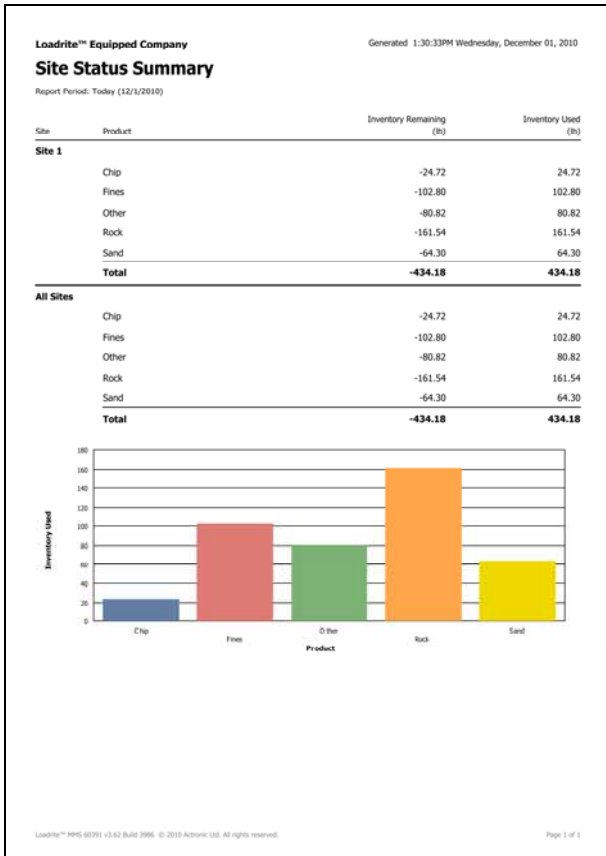
4.4.7. Site Status Summary Report

The *Site Status Summary* report gives a numeric and graphical overview of the amount of product weighed and product remaining, during the specified period. The information is displayed individually for each site, and for the organization as a whole.

Customizable Values

- ▶ Report Period
- ▶ Weight Unit

Example Report



Report Contents

Item	Description
Site	The name of the site that the data relates to. The total information for all sites is displayed under the heading All Sites .
Product	The name of the product weighed.
Inventory Remaining	The amount of the product remaining in the stockpile.
Inventory Used	The amount of the product used.
Bar Graph	A bar graph which displays the total weight lifted by each loader.

4.4.8. Stockpile Summary Report

The *Stockpile Summary* report shows the current stockpile amount, and also the amount of product added to and removed from each stockpile, during the specified period. The information is displayed individually for each site, or for the organization as a whole.

IMPORTANT: The *Stockpile Summary* report relies on accurate information collected from the *Direction* (DIR) selected on the LOADRITE™ Indicator, and also values that have been entered manually into LOADRITE™ MMS.

Customizable Values

- ▶ Site
- ▶ Report Period
- ▶ Weight Unit

Example Report

Loadrite™ Equipped Company				Generated: 1:30:56PM Wednesday, December 31, 2010
Stockpile Summary				
Site: [A82]				
Report Period: Today (12/1/2010)				
Product: Chip				
Date	To		Weight	(#)
12/1/2010		Start Weight	0.00	
12/1/2010	12/1/2010	Loaded	-24.72	
Remaining Weight at End of Period			-24.72	
Total Weight Loaded during Period			24.72	
Product: Fines				
Date	To		Weight	(#)
12/1/2010		Start Weight	0.00	
12/1/2010	12/1/2010	Loaded	-102.80	
Remaining Weight at End of Period			-102.80	
Total Weight Loaded during Period			102.80	
Product: Other				
Date	To		Weight	(#)
12/1/2010		Start Weight	0.00	
12/1/2010	12/1/2010	Loaded	-80.82	
Remaining Weight at End of Period			-80.82	
Total Weight Loaded during Period			80.82	
Product: Rock				
Date	To		Weight	(#)
12/1/2010		Start Weight	0.00	
12/1/2010	12/1/2010	Loaded	-161.54	
Remaining Weight at End of Period			-161.54	
Total Weight Loaded during Period			161.54	
Product: Sand				
Date	To		Weight	(#)
12/1/2010		Start Weight	0.00	
12/1/2010	12/1/2010	Loaded	-64.30	

Loadrite™ Equipped Company		Generated: 1:30:56PM Wednesday, December 31, 2010
Stockpile Summary		
Site: [A82]		
Report Period: Today (12/1/2010)		
Remaining Weight at End of Period		-64.30
Total Weight Loaded during Period		64.30

Report Contents

Item	Description
Site	The name of the site that the data relates to. The total information for all sites is displayed under the heading All Sites .
Product	The name of the product weighed.
Date	The start date, or only date for the function.
To	The end date for the function.
Function (untitled)	The function performed, for example Loaded, Added, Returned . If the weight displayed in the Weight column is the start weight, then the function will be Start Weight .
Weight	Either the start weight or the total weight for the function during the specified period.
Remaining Weight at End of Period	The weight of the stockpile at the end of the specified period.
Total Weight Loaded during Period	The weight removed from the stockpile at the end of the specified period.

4.5. HOW DO I EXPORT A REPORT?

You can export any report to your computer or network. The available export formats include:

- ▶ Crystal Reports (.rpt)
- ▶ Adobe Acrobat (.pdf)
- ▶ Microsoft Excel (.xls)
- ▶ Microsoft Excel Data Only (.xls)
- ▶ Microsoft Word (.doc)
- ▶ Rich Text Format (.rtf)

Menu Path:

➤ *Main Menu > Productivity*

- 1) In the **Productivity Reports** section, select the report that you would like to export. The report will display in the **Content** section.

- 2) Click .

The *Export Report* window will display.

- 3) Navigate your computer or network to locate the destination folder for the archived records.
- 4) Click **OK**.
The selected report is saved in the selected format.

4.6. HOW DO I EMAIL A REPORT?

You can email any report using the default email software on your computer.

Menu Path:

➤ *Main Menu > Productivity*

- 1) In the **Productivity Reports** section, select the report that you would like to email. The report will display in the **Content** section.

- 2) Click **Email Report**.

An email will open with the subject as the name of the selected report. The report will be attached to the email as a PDF file.

4.7. HOW DO I PRINT A REPORT?

You can print any report to your local or network printer.

Menu Path:

➤ *Main Menu > Productivity*

- 1) In the **Productivity Reports** section, select the report that you would like to print. The report will display in the **Content** section.

- 2) Click .

The *Print* window will display.

- 3) Select your preferred printer, then click **Print**.
The report is printed by the selected printer.

4.8. HOW DO I DELETE A REPORT?

You can delete any report, including sample reports.

WARNING: If you delete a report, it cannot be recovered. However, you can recreate the report.

Menu Path:

➤ *Main Menu > Productivity*

- 1) In the **Productivity Reports** section, select the report that you would like to delete. The report will display in the **Content** section.
- 2) Click **Remove Report**. The *Confirm* window will display.
- 3) Click **OK**. The selected report is deleted.

4.9. HOW DO I IMPORT REPORTS?

You can import reports which have previously been exported. LOADRITE™ MMS comes with a sample set of reports which must be imported before they can be viewed (see "How do I practice using MMS with example data and reports?" on page 2-11).

Menu Path:

➤ *Main Menu > Productivity > Import Report Definitions*

- 1) The *Import Report Definitions* dialog box will open. Navigate your computer or network to locate the report file.
- 2) Select the report file, then click **Open**. The *Confirm* window will display.
- 3) Click **OK**. The reports are imported into MMS and are listed in the **Productivity Reports** section.

4.10. HOW DO I EXPORT REPORTS?

You can export all reports which are currently in LOADRITE™ MMS.

Menu Path:

➤ *Main Menu > Productivity > Export Report Definitions*

- 1) The *Export Report Definitions* dialog box will open. Navigate your computer or network to locate the folder where the reports file is to be saved.
- 2) Navigate your computer or network to locate the destination folder for the exported file.
- 3) Either select a file to overwrite, or enter a new file name in the **File name** box.
- 4) Click **Save**. The reports file is exported to the selected folder.

5. BROWSE DATA

The *Browse Data* section allows you to interact with the data records received from your LOADRITE™ Indicators and stored in your main database. By default, *all* data records are listed in the **Browse Data** section. You can filter, edit and manage most data records.

Menu Path:

➤ *Main Menu > Browse Data*

Date / Time	Qty	Operator	Product	Function	Amount	Weight	Volume	Location	Status
12/18/2011 12:01:28 p.m.	100	1	Ag Loader	1	1200000	0	0	Earl Hedges	Loaded
12/18/2011 12:51:34 p.m.	100	1	Ag Loader	Other	1200000	0	17.8	Earl Hedges	Loaded
12/18/2011 12:54:36 p.m.	100	1	Ag Loader	Other	1200000	0	0	Earl's Trucking	Loaded
12/18/2011 12:54:33 p.m.	100	1	Ag Loader	Sand	1000	1	5.84	Earl's Trucking	Loaded
12/18/2011 12:54:49 p.m.	100	1	Ag Loader	Sand	1000	1	5.82	Earl's Trucking	Loaded
12/18/2011 12:55:02 p.m.	100	1	Ag Loader	Sand	1000	1	6.4	Earl's Trucking	Loaded
12/18/2011 12:55:10 p.m.	100	1	Ag Loader	Sand	1000	1	5.88	Earl's Trucking	Loaded
12/18/2011 12:55:20 p.m.	100	1	Ag Loader	Sand	1000000	0	22.44	Earl's Trucking	Loaded
12/18/2011 12:56:00 p.m.	100	1	Ag Loader	Free	1200000	0	0	West Contractors	Loaded
12/18/2011 12:56:07 p.m.	100	1	Ag Loader	Free	1000	1	5.9	West Contractors	Loaded
12/18/2011 12:56:18 p.m.	100	1	Ag Loader	Free	1000	1	5.76	West Contractors	Loaded
12/18/2011 12:56:21 p.m.	100	1	Ag Loader	Free	1000	1	5.18	West Contractors	Loaded
12/18/2011 12:56:46 p.m.	100	1	Ag Loader	Free	1000	1	5.78	West Contractors	Loaded
12/18/2011 12:56:52 p.m.	100	1	Ag Loader	Free	1000000	0	23.6	West Contractors	Loaded
12/18/2011 12:57:17 p.m.	100	1	Ag Loader	Free	1200000	0	0	West Contractors	Loaded
12/18/2011 12:57:22 p.m.	100	1	Ag Loader	Free	1000	1	7.36	West Contractors	Loaded
12/18/2011 12:57:31 p.m.	100	1	Ag Loader	Free	1000	1	7.72	West Contractors	Loaded
12/18/2011 12:57:44 p.m.	100	1	Ag Loader	Free	1000	1	5.7	West Contractors	Loaded
12/18/2011 12:57:50 p.m.	100	1	Ag Loader	Free	1000	1	5.36	West Contractors	Loaded
12/18/2011 12:58:00 p.m.	100	1	Ag Loader	Free	1000000	0	27.24	West Contractors	Loaded
12/18/2011 12:58:02 p.m.	100	1	Ag Loader	Sand	1200000	0	0	Carl-Son	Loaded
12/18/2011 12:58:07 p.m.	100	1	Ag Loader	Sand	1000	1	1.44	Carl-Son	Loaded
12/18/2011 12:58:12 p.m.	100	1	Ag Loader	Sand	1000000	0	5.44	Carl-Son	Loaded
12/18/2011 1:00:20 p.m.	100	1	Ag Loader	Other	1200000	0	0	None	Charger
12/18/2011 1:00:28 p.m.	100	1	Ag Loader	Other	1000	1	6.1	None	Charger
12/18/2011 1:00:41 p.m.	100	1	Ag Loader	Other	1000	1	4.46	None	Charger
12/18/2011 1:00:50 p.m.	100	1	Ag Loader	Other	1000	1	5.84	None	Charger
12/18/2011 1:00:58 p.m.	100	1	Ag Loader	Other	1000	1	6.75	None	Charger
12/18/2011 1:01:10 p.m.	100	1	Ag Loader	Other	1000	1	7.08	None	Charger
12/18/2011 1:01:20 p.m.	100	1	Ag Loader	Other	1000	1	6.26	None	Charger
12/18/2011 1:01:37 p.m.	100	1	Ag Loader	Other	1000	1	5.7	None	Charger
12/18/2011 1:01:51 p.m.	100	1	Ag Loader	Other	1000	1	6.26	None	Charger
12/18/2011 1:02:04 p.m.	100	1	Ag Loader	Other	1000	1	6.24	None	Charger
12/18/2011 1:02:13 p.m.	100	1	Ag Loader	Other	1000	1	5.1	None	Charger
12/18/2011 1:02:22 p.m.	100	1	Ag Loader	Other	1000	1	6.94	None	Charger
12/18/2011 1:02:32 p.m.	100	1	Ag Loader	Other	1000	1	5.72	None	Charger
12/18/2011 1:02:46 p.m.	100	1	Ag Loader	Other	1000	1	5.86	None	Charger
12/18/2011 1:03:00 p.m.	100	1	Ag Loader	Other	1000	1	5.9	None	Charger

Data Record Status

Color	Description
Black text; white background	Current data record.
Grey text; white background	Deleted data record.
Black and brown text; yellow background	A record containing one or more edited values. The values which have been edited are shown with brown text.

5.1. HOW DO I FIND DATA RECORDS?

LOADRITE™ MMS includes several powerful tools to help you locate specific records from the data imported from your LOADRITE™ Indicators.

5.1.1. View Settings



Menu Path:

➤ *Main Menu > Browse Data > View Settings*

If you want to...	Then...
move a column left	select the name of the column in the Modify Columns section, then click Move Up .
move a column right	select the name of the column in the Modify Columns section, then click Move Down
show a column	select the checkbox next to the column name.
show all columns	click Show All .
hide a column	clear the checkbox next to the column name.
hide all columns	click Hide All .
show all columns that are currently hidden, while hiding all columns currently showing	click Invert .
show all active data records	select the Show active records checkbox.
hide all active data records	clear the Show active records checkbox.
show all deleted data records	select the Show Deleted records checkbox.
hide all deleted data records	clear the Show Deleted records checkbox.

▶ To hide the **View Settings** section, click **Hide**.

5.1.2. Filter Records

You can easily filter the data records that are displayed to match specific information. The **Filter Records** section contains options laid out in a Boolean logic format. By selecting one or more options from each field, you can reduce the number of data records displayed to view the exact information that you require.



Menu Path:

➤ *Main Menu > Browse Data > Filter Records*

How do I add a filter?

- 1) In the **Show records where** drop-down box, select the column that you would like to filter the data records by. Depending on the column selected, other fields may display.
- 2) Select the appropriate options from each field to reduce the number of data records displayed.
 - ▶ You can select one option from each drop-down box.
 - ▶ You can select one or more options from each combo-box. To select multiple options, press and hold **CTRL** while selecting options.
- 3) Complete the following:

If you want to...	Then...
filter the results by another column	<ul style="list-style-type: none"> ▶ in the And drop-down box, select the column that you would like to filter the data records by. Depending on the column selected, other fields may display. ▶ Go back to step 2.
save the filter	<ul style="list-style-type: none"> ▶ click Save as ▶ In the Save filter as field, type a name for the filter. ▶ Click OK. The filter is saved.

How do I load a filter?

- 1) Click **Load Filter**.
A list of previously saved filters will display.
- 2) Select a filter from the list of filters.
The list of data records will be filtered according to the selected filter.

How do I stop using a filter?

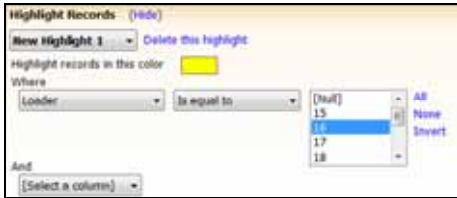
- 1) Click **Filter:**.
A list of previously saved filters will display. The active filter will be marked as selected (●).
- 2) Complete the following:

If you want to...	Then...
use a different filter	<ul style="list-style-type: none"> ▶ Select the filter that you would like to use. The list of data records will be filtered according to the selected filter.
stop using a filter	<ul style="list-style-type: none"> ▶ Click Reset Filter. All data records will display unfiltered.

5.1.3. Highlight Records

You can help make certain records easier to locate by specify rules that highlight data records that match specific criteria. You can set an unlimited number of highlight rules in an unlimited number of colors.

The **Highlight Records** section contains options laid out in a Boolean logic format. By selecting one or more options from each field, you can specify the exact data criteria that you would like to highlight.



Menu Path:

➤ *Main Menu > Browse Data > Highlight Records*

How do I add a highlight rule?

- 1) In the **Highlight records in this color** field, click the color square. The *Color* window will display.
- 2) Select the color that you would like to use for this highlight rule, then click **OK**. The *Color* window will close and the color square will now display the selected color.
- 3) In the **Where** drop-down box, select the column that the highlight rule is to match the data records by. Depending on the column selected, other fields may display.
- 4) Select the appropriate options from each field to specify the criteria for data records to be highlighted.
 - ▶ You can select one option from each drop-down box.
 - ▶ You can select one or more options from each combo-box. To select multiple options, press and hold **CTRL** while selecting options.
- 5) Complete the following:

If you want to...	Then...
add another column to the highlight rule	<ul style="list-style-type: none"> ▶ in the And drop-down box, select the column that you would like to match the data records by. Depending on the column selected, other fields may display. ▶ Go back to step 4.
save the highlight rule	<ul style="list-style-type: none"> ▶ click Save as ... ▶ In the Save highlight as box, type a name for the highlight rule. ▶ Click OK. The highlight rule is saved.

How do I activate/inactivate a highlight rule?

- 1) Click **Highlight**. A list of previously saved highlight rules will display. Active highlight rules will be marked as selected (✓).
- 2) Complete the following:

If you want to...	Then...
use a highlight rule	<ul style="list-style-type: none"> ▶ Select the highlight rule that you would like to activate. The list of data records will be highlighted according to the active highlight rules.
stop using a highlight rule	<ul style="list-style-type: none"> ▶ Select the highlight rule that you would like to inactivate. The list of data records matching the highlight rule will no longer be highlighted.

5.1.4. Find/Replace Records

The *Find/Replace Records* function is used to search for a specific record or set of records using the value of one column as the search criteria. Depending on the type of column searched for, you can then replace the column value of one or more of the search results with a new value.

You can only replace values for the following columns:

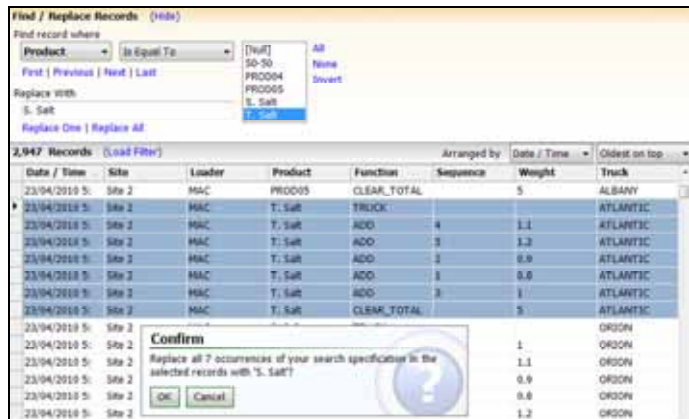
- ▶ Data 1
- ▶ Data 2
- ▶ Data 3
- ▶ Data 4
- ▶ Data 5
- ▶ Data 6
- ▶ Data 7
- ▶ Data 8
- ▶ Loader
- ▶ Notes
- ▶ Operator
- ▶ Product
- ▶ Site
- ▶ Tare

Menu Path:

➤ *Main Menu > Browse Data > Find/Replace Records*

Example Find and Replace

If you would like to change the product listed in the **Product** column in several data records from **T. Salt** to **S. Salt**, first search for all records with the product **T. Salt**, then select the records you would like to change, and replace the product with **S. Salt**.



How do I find a record?

Tip: To automatically select all applicable fields for the value that you would like to find or replace, double-click a matching column value in a displayed data record.

- 1) In the **Find record where** drop-down box, select the column containing the value that you would like to find or replace. Depending on the column selected, other fields may display.
- 2) Select the appropriate options from each field to specify the records that you would like to find.
 - ▶ You can select one option from each drop-down box.
 - ▶ You can select one or more options from each combo-box. To select multiple options, press and hold **CTRL** while selecting options.

3) Complete the following:

If you want to...	Then...
find the <i>first</i> record matching the specified criteria	click First .
find the <i>previous</i> record matching the specified criteria	click Previous .
find the <i>next</i> record matching the specified criteria	click Next .
find the <i>last</i> record matching the specified criteria	click Last .

How do I replace a record?

Tip: Only records that are currently displayed can be replaced. If you have a filter loaded, some records may not be available to be replaced.

- 1) Find one or more records.
- 2) In the **Replace with** field, enter the value that is to replace the value that you searched for.

If you want to...	Then...
replace the value in <i>one</i> record	<ul style="list-style-type: none"> ▶ select the record to be replaced ▶ Click Replace one. The record is updated.
replace the value in <i>more than one</i> record	<ul style="list-style-type: none"> ▶ press and hold CTRL while you select the records to be replaced ▶ Click Replace all. The selected records are updated.
replace the value in <i>all</i> records currently displayed	<ul style="list-style-type: none"> ▶ click Replace all. All records currently displayed which match the search criteria are updated.

How do I undo replacements in a data record?

Right-click the data record, then click **Revert entire record to original values**. All replacements made to the data record are undone.

5.2. HOW DO I ADD A NEW DATA RECORD?

You can add a new data record to the LOADRITE™ MMS database. This option is useful for manually entering bulk shipments of product deliveries, or correcting the data collected from the LOADRITE™ Indicator caused by operator errors.

You can add the following types of data record:

- ▶ Add to Stockpile
- ▶ Return to Stockpile
- ▶ Add Truck
- ▶ Add Bucket (automatic)
- ▶ Add Bucket (manual entry)
- ▶ Clear Load (automatic)
- ▶ Clear Load (manual entry)

5.2.1. Add to Stockpile

You can manually update the stockpile values in LOADRITE™ MMS as a result of new bulk product deliveries to the site. The weights entered here can come from weighbridges, belt scales or order docket values.

Note: If the product you are adding to the stockpile was originally loaded out from the same stockpile, for example, material being returned by a spreader truck, you should instead add a *Return to Stockpile* record.

Menu Path:

➤ *Main Menu > Browse Data > Add a Record*

- 1) Select **Add to Stockpile**.
The *Add to Stockpile* screen will display.



- 2) In the **Date** box, select the date for the record from the drop-down calendar.
- 3) In the **Time** box, select or enter the time for the record.
- 4) In the **Site** box, select the site for the record from the drop-down box.
- 5) In the **Product** box, select the product for the record from the drop-down box.
- 6) In the **Weight** box, enter the weight of the product added to the stockpile.
- 7) Click **OK**.
The record is added to the database.

5.2.2. Return to Stockpile

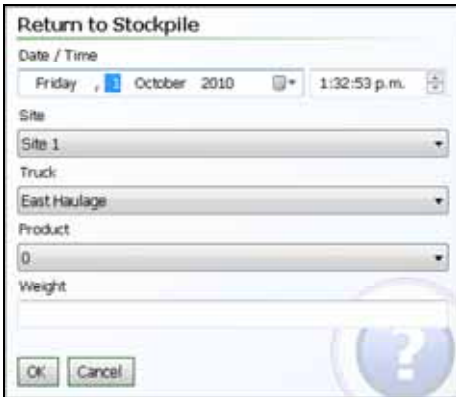
You can manually update the stockpile values in LOADRITE™ MMS when product is returned to the site, for example, material being returned by a spreader truck. The weights entered here can come from weighbridges, belt scales or order docket values.

Note: If the product you are adding to the stockpile is the result of a new order that has not previously been loaded out of the stockpile, you should instead add a *Add to Stockpile* record.

Menu Path:

➤ *Main Menu > Browse Data > Add a Record*

- 1) Select **Return to Stockpile**.
The *Return to Stockpile* screen will display.



- 2) In the **Date** box, select the date for the record from the drop-down calendar.
- 3) In the **Time** box, select or enter the time for the record.
- 4) In the **Site** box, select the site for the record from the drop-down box.
- 5) In the **Truck** box, select the truck or wagon for the record from the drop-down box.

Tip: By selecting the correct truck or wagon that is returning the product, the truck/wagon usage calculations will be updated to take account of the material being returned.

- 6) In the **Product** box, select the product for the record from the drop-down box.
- 7) In the **Weight** box, enter the weight of the product being returned to the stockpile.
- 8) Click **OK**.
The record is added to the database.

5.2.3. Add Truck

You can manually add a *TRUCK* record in LOADRITE™ MMS if the operator forgets to change the **Truck ID** or press **Clear** when loading.

Note: The fields on the *Add Truck* screen will default to match the data record selected on the *Browse Data* screen.

Example - Missing TRUCK Record

In the below example, the loader operator didn't select the ID of the new truck 2043 after loading truck 2044. The result is that the load for truck 2043 is allocated to truck 2044.

8 Records (Filter: Un-named Filter Clear Filter)		Arranged by		Date / Time	Oldest on top		
Date / Time	Site	Loader	Product	Function	Sequence	Weight	Truck
21/07/2009 12:51:56 p.	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		10500	2047
21/07/2009 12:51:56 p.	Site 1	Bob's Loader	T. Salt	TRUCK			2044
21/07/2009 1:00:07 p.m	Site 1	Bob's Loader	T. Salt	ADD	1	1560	2044
21/07/2009 1:00:45 p.m	Site 1	Bob's Loader	T. Salt	ADD	2	1210	2044
21/07/2009 1:00:50 p.m	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		2770	2044
21/07/2009 1:01:15 p.m	Site 1	Bob's Loader	T. Salt	ADD	1	1120	2044
21/07/2009 1:01:21 p.m	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		1120	2044

The following rules must be observed when adding the *TRUCK* record:

- ▶ The *CLEAR_TOTAL* record immediately prior to the *ADD* record must be selected before the new *TRUCK* record is added. This is indicated by the arrow in the above example.
- ▶ The **Time** value must be after the selected *CLEAR_TOTAL* record (1:00:50pm), but before the next *ADD* record (1:01:15pm), for example **1:01:00pm**.
- ▶ All records that have the incorrect Truck ID (2044) must now be updated to the new Truck ID (2043) by editing directly or using the *Find/Replace Records* function.

Once corrected, the above data records will appear as in the following example:

9 Records (Filter: Un-named Filter Clear Filter)		Arranged by		Date / Time	Oldest on top		
Date / Time	Site	Loader	Product	Function	Sequence	Weight	Truck
21/07/2009 12:51:56 p.	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		10500	2047
21/07/2009 12:51:56 p.	Site 1	Bob's Loader	T. Salt	TRUCK			2044
21/07/2009 1:00:07 p.m	Site 1	Bob's Loader	T. Salt	ADD	1	1560	2044
21/07/2009 1:00:45 p.m	Site 1	Bob's Loader	T. Salt	ADD	2	1210	2044
21/07/2009 1:00:50 p.m	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		2770	2044
21/07/2009 1:01:00 p.m	Site 1	Bob's Loader	T. Salt	TRUCK	0	0	2043
21/07/2009 1:01:15 p.m	Site 1	Bob's Loader	T. Salt	ADD	1	1120	2043
21/07/2009 1:01:21 p.m	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		1120	2043
21/07/2009 1:01:21 p.m	Site 1	Bob's Loader	T. Salt	TRUCK			2052



Menu Path:

➤ *Main Menu > Browse Data > Add a Record*

- 1) Select **Add Truck**.
The *Add Truck* screen will display.



- 2) In the **Date** field, select the date for the record from the drop-down calendar.
- 3) In the **Time** field, select or enter the time for the record.
- 4) In the **Site** field, select the site for the record from the drop-down box.
- 5) In the **Operator** field, select the operator for the record from the drop-down box.
- 6) In the **Loader** field, select the loader for the record from the drop-down box.
- 7) In the **Product** field, select the product for the record from the drop-down box.
- 8) For each Data Field, select the value for the record from the drop-down box.

Tip: Each Data Field may be listed using its assigned name, or as *Data n*, where *n* is the number of the Data Field.

- 9) In the **Tare** box, enter the tare value for the record.
- 10) Click **OK**.
The record is added to the database.

5.2.4. Add Bucket

You can add an automatic *Add* record or manual *Add* record in LOADRITE™ MMS if the operator forgets to press **Add** when loading. When the record has been added, the sequence numbers of all *ADD* and *SUBTRACT* records within the load are updated, and the total weight of the *CLEAR_TOTAL* record is updated.

Menu Path:

➤ *Main Menu > Browse Data > Add a Record*

1) Complete the following:

If you want to...	Then...
add a bucket with most of the fields automatically set by LOADRITE™ MMS	<ul style="list-style-type: none"> ▶ Select Add Bucket (Automatic). The <i>Add Bucket (Automatic)</i> screen will display. ▶ Click OK. The <i>Add Bucket</i> screen will display. ▶ In the Bucket Weight box, enter the weight of the bucket for the record, then click OK. The Confirm screen will display. ▶ Click OK. The record is added to the database one second prior to the currently selected record.
add a bucket by manually entering all values	go to step 2.

2) Select **Add Bucket (Manual Entry)**. The *Add Bucket (Manual Entry)* screen will display.

- 3) In the **Date** field, select the date for the record from the drop-down calendar.
- 4) In the **Time** field, select or enter the time for the record.

- 5) In the **Site** field, select the site for the record from the drop-down box.
- 6) In the **Operator** field, select the operator for the record from the drop-down box.
- 7) In the **Loader** field, select the loader for the record from the drop-down box.
- 8) In the **Product** field, select the product for the record from the drop-down box.
- 9) In the **Sequence** field, enter the sequence number for the record within the load.
- 10) In the **Weight** field, enter the weight of the bucket.
- 11) For each Data Field, select the value for the record from the drop-down box.

Tip: Each Data Field may be listed using its assigned name, or as *Data n*, where *n* is the number of the Data Field.

- 12) In the **Tare** box, enter the tare value for the record.
- 13) Click **OK**.
The record is added to the database.

5.2.5. Clear Load

You can add an automatic *CLEAR_TOTAL* record or manual *CLEAR_TOTAL* record in LOADRITE™ MMS if the operator forgets to press **Clear** when loading. When the record has been added, the sequence numbers and weights of all *ADD*, *SUBTRACT* and *CLEAR_TOTAL* records following the record are updated so that the one load is effectively split into two loads.

Note: The fields on the *Clear Load* screen will default to match the data record selected on the *Browse Data* screen.

Example - Missing CLEAR_TOTAL record

In the below example, the loader operator correctly selected the ID of the new truck, but they didn't press **Clear** so there is a missing *CLEAR_TOTAL* record.

Date / Time	Site	Loader	Product	Function	Sequence	Weight	Truck
21/07/2009 11:48:53 a.	Site 1	Bob's Loader	T. Salt	TRUCK			2058
21/07/2009 11:58:40 a.	Site 1	Bob's Loader	T. Salt	ADD	1	1850	2058
21/07/2009 11:59:10 a.	Site 1	Bob's Loader	T. Salt	ADD	2	2430	2058
21/07/2009 11:59:52 a.	Site 1	Bob's Loader	T. Salt	ADD	3	1480	2058
21/07/2009 12:00:24 p.	Site 1	Bob's Loader	T. Salt	ADD	4	1610	2058
21/07/2009 12:01:00 p.	Site 1	Bob's Loader	T. Salt	TRUCK	0	0	2033
21/07/2009 12:01:58	Site 1	Bob's Loader	T. Salt	ADD	5	1620	2033
21/07/2009 12:02:51 p.	Site 1	Bob's Loader	T. Salt	ADD	6	1200	2033
21/07/2009 12:03:22 p.	Site 1	Bob's Loader	T. Salt	ADD	7	980	2033
21/07/2009 12:03:33 p.	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL		11170	2033

The following rules must be observed when adding the *CLEAR_TOTAL* record:

- ▶ The *ADD* record immediately prior to the *TRUCK* record must be selected before the new *CLEAR_TOTAL* record is added. This is indicated by the arrow in the above example.
 - ▶ The **Time** value must be after the selected *ADD* record (12:00:24pm), but before the next *TRUCK* record (12:01:00pm), for example 12:00:30pm.
 - ▶ The **Weight** value must be the sum of the preceding *ADD* records, in this case **7370** (1850 + 2430 + 1480 + 1610).
- ▶ Delete the *CLEAR_TOTAL* record, then add a new *CLEAR_TOTAL* record.
 - ▶ The **Weight** value must be the sum of the preceding *ADD* records, in this case **3800** (1620 + 1200 + 980).

Once corrected, the above data records will appear as in the following example:

Date / Time	Site	Loader	Product	Function	Sequence	Weight	Truck
21/07/2009 11:48:53 a.	Site 1	Bob's Loader	T. Salt	TRUCK			2058
21/07/2009 11:58:40 a.	Site 1	Bob's Loader	T. Salt	ADD	1	1850	2058
21/07/2009 11:59:10 a.	Site 1	Bob's Loader	T. Salt	ADD	2	2430	2058
21/07/2009 11:59:52 a.	Site 1	Bob's Loader	T. Salt	ADD	3	1480	2058
21/07/2009 12:00:24 p.	Site 1	Bob's Loader	T. Salt	ADD	4	1610	2058
21/07/2009 12:00:24 p.	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL	0	7370	2058
21/07/2009 12:01:00 p.	Site 1	Bob's Loader	T. Salt	TRUCK	0	0	2033
21/07/2009 12:01:58 p.	Site 1	Bob's Loader	T. Salt	ADD	5	1620	2033
21/07/2009 12:02:51 p.	Site 1	Bob's Loader	T. Salt	ADD	6	1200	2033
21/07/2009 12:03:22 p.	Site 1	Bob's Loader	T. Salt	ADD	7	980	2033
21/07/2009 12:03:33 p.	Site 1	Bob's Loader	T. Salt	TRUCK			2042
21/07/2009 12:03:33 p.	Site 1	Bob's Loader	T. Salt	CLEAR_TOTAL	0	3800	2033



Menu Path:

➤ *Main Menu > Browse Data > Add a Record*

1) Complete the following:

If you want to...	Then...
add a <i>Clear Total</i> record with all of the fields automatically set by LOADRITE™ MMS	<ul style="list-style-type: none"> ▶ Select Clear Load (Automatic). The <i>Clear Load (Automatic)</i> screen will display. ▶ Click OK. The Confirm screen will display. ▶ Click OK. The record is added to the database one second prior to the currently selected record.
add a <i>Clear Total</i> record by manually entering all values	go to step 2.

2) Select **Clear Load (Manual Entry)**.
The *Clear Load (Manual Entry)* screen will display.

- 3) In the **Date** field, select the date for the record from the drop-down calendar.
- 4) In the **Time** field, select or enter the time for the record.
- 5) In the **Site** field, select the site for the record from the drop-down box.
- 6) In the **Operator** field, select the operator for the record from the drop-down box.
- 7) In the **Loader** field, select the loader for the record from the drop-down box.
- 8) In the **Product** field, select the product for the record from the drop-down box.
- 9) In the **Weight** field, enter the weight **of the bucket**.

- 10) For each Data Field, select the value for the record from the drop-down box.

Tip: Each Data Field may be listed using its assigned name, or as *Data n*, where *n* is the number of the Data Field.

- 11) In the **Tare** box, enter the tare value for the record.
- 12) Click **OK**.
The record is added to the database.

5.3. HOW DO I EDIT A DATA RECORD?

You can edit most data record values in the LOADRITE™ MMS database. This option is useful for correcting the data collected from the LOADRITE™ Indicator caused by operator errors.

You can edit values in the following columns:

- ▶ Data 1
- ▶ Data 2
- ▶ Data 3
- ▶ Data 4
- ▶ Data 5
- ▶ Data 6
- ▶ Data 7
- ▶ Data 8
- ▶ Loader
- ▶ Notes
- ▶ Operator
- ▶ Product
- ▶ Site
- ▶ Tare

Tip: If the record requires extensive changes, or the values cannot be edited directly, you may need to delete the incorrect record and add a new one.

Menu Path:

➤ *Main Menu > Browse Data*

If you want to...	Then...
edit a value	<ul style="list-style-type: none"> ▶ select the value to be edited. ▶ Enter the new value, then press Enter.
undo a single edit	<ul style="list-style-type: none"> ▶ select the value that has been edited. ▶ Right-click the value, then select Revert [Column Name] to the original value.
undo all edits in a record	<ul style="list-style-type: none"> ▶ right-click the record containing the edits, then select Revert entire record to the original values.
undo all edits in multiple records	<ul style="list-style-type: none"> ▶ select the records that have been edited. ▶ Right-click one of the selected records, then select Revert selected records to the original values.

5.4. HOW DO I DELETE A RECORD?

Any data record can be deleted if required. Deleted records will not appear in report calculations, but can be restored if required. Records can also be *permanently* deleted from the database, after which they *cannot* be restored.

- ▶ For information on showing and hiding deleted records, see "View Settings" on page 5-38.

Menu Path:

➤ *Main Menu > Browse Data*

5.4.1. Deleting a record

- 1) Select the record or records to be deleted.
 - ▶ To select multiple records, press and hold **CTRL** while selecting.
- 2) Right-click the selected record, then click **Delete the selected record**. The *Confirm* window will display.
- 3) Click **OK**.
The record will be deleted.

5.4.2. Restoring a deleted record

- 1) Select the record or records to be restored.
 - ▶ To select multiple records, press and hold **CTRL** while selecting.
- 2) Right-click the deleted record, then click **Restore selected record**. The *Confirm* window will display.
- 3) Click **OK**.
The record is restored.

5.4.3. Permanently deleting a record

CAUTION: Records which have been permanently deleted cannot be restored. We recommend that you archive data records before permanently deleting them.

- 1) Ensure that the records to be permanently deleted are displayed in the **Browse Data** section.

Tip: All records dated prior to the records you are permanently deleting will also be deleted. Use a filter to ensure that records that you do not want to permanently delete, are not displayed.

- 2) Click **Permanently Delete Records**.
The **Permanently Delete Records** section will be displayed.



- 3) In the **Permanently delete all records that are** drop-down box, select the appropriate option that will include only the data records that you want to permanently delete.
 - ▶ To specify the exact date prior to which data records will be deleted, select **Prior To ...**, then enter a date a time.
- 4) Click **OK**.
The *Confirm* window will display.
- 5) Click **OK**.
All displayed records matching the criteria will be permanently deleted.

5.5. HOW DO I PRINT A DOCKET?

A docket can be printed or reprinted for any load at any time, as long as the *CLEAR_TOTAL* data record is current.

- ▶ To set up docket printing, see "Setup Docket Printing" on page 6-72.

Menu Path:

➤ *Main Menu > Browse Data*

- 1) Search for the data records relating to the load that you would like to print.
- 2) Select the *CLEAR_TOTAL* record for the load.
- 3) Right-click the *CLEAR_TOTAL* record, then select **Print docket**.
The *Confirm* window will display.
- 4) Click **OK**.
The docket is printed.

5.6. HOW DO I IMPORT A DATA FILE?

You can import a data file that has been created by a LOADRITE™ Data Module or previously exported from LOADRITE™ MMS.

CAUTION: LOADRITE™ MMS will give precedence to the records in the imported file. This means that where a record exists in both the file and the database, the record in the file will overwrite the record in the database.

- ▶ For automatic importing of data files, see "How do I enable automatic-importing of data?" on page 6-71.

Menu Path:

➤ *Main Menu > Browse Data > Import/Retrieve Archive*

- 1) The *Open* dialog box will open. Navigate your computer or network to locate the folder containing the archive file.
- 2) Select the archive file, then click **Open**.
The *Confirm* window will display.
- 3) Click **OK**.
The data records in the archive file are imported to the database.

5.6.1. Which data files can be imported?

The following types of data file can be imported in to the LOADRITE™ MMS database:

File Type	Description
LOADRITE™ Export File (.lrx)	This file type is created by LOADRITE™ MMS when exporting records, and is in a format unique to LOADRITE™ MMS. Note: .lrx is the only file format which can be automatically-imported using FTP.
LOADRITE™ Archive File (.lra)	This file type is created by LOADRITE™ MMS when archiving records, and is in a format unique to LOADRITE™ MMS.
Logdata.txt File (.txt)	This file type can be created by LOADRITE™ MMS when exporting records, or other LOADRITE™ products such as LOADRITE™ LD941 Reader.
LOADRITE™ EDP File (.edp)	This file type is created by LOADRITE™ MMS Data Connections when data is encountered, so that the file can be imported when the Data Connection is inactive.

5.7. HOW DO I EXPORT A DATA FILE?

Any data records in the LOADRITE™ MMS database can be exported to a file for use within other applications, such as Microsoft® Excel.

The exported file can be in one of the following formats:

- ▶ Comma Separated Variable File (.csv)
- ▶ Logdata.txt File (.txt)
- ▶ LOADRITE™ Export File (.lrx)



- ▶ For information on automatic-exporting of data files, see "How do I enable automatic-exporting of data?" on page 6-69.

Menu Path:

➤ *Main Menu > Browse Data > Export Records*

- 1) Ensure that the records to be exported are displayed in the **Browse Data** section.

Tip: Use a filter to ensure that records that you do not want to export are not displayed.

- 2) Click **Select another file**.
The Save As dialog box will open.
- 3) Navigate your computer or network to locate the destination folder for the exported file.
- 4) Either select a file to overwrite, or enter a new file name in the **File name** box.
- 5) Select the file type from the **Save as type** drop-down box, then click **Save**.
- 6) Complete the following to select the format of the exported file:
 - ▶ For information on exported data file formats, see "Appendix B - Exported Data File Formats" on page 9-75.

If you want to...	Then...
export in the 3 Data Fields format (required for some models of LOADRITE™ Weighing System)	select 3 .
export in the 5 Data Fields format (required for some models of LOADRITE™ Weighing System)	select 5 .
include all Data Fields in the export file	select All Data Fields .

- 7) If you want to open the exported file after exporting it, select **Open file after exporting** option; otherwise clear the **Open file after exporting** option.
- 8) Click **OK**.
The displayed data records are exported to the selected folder.

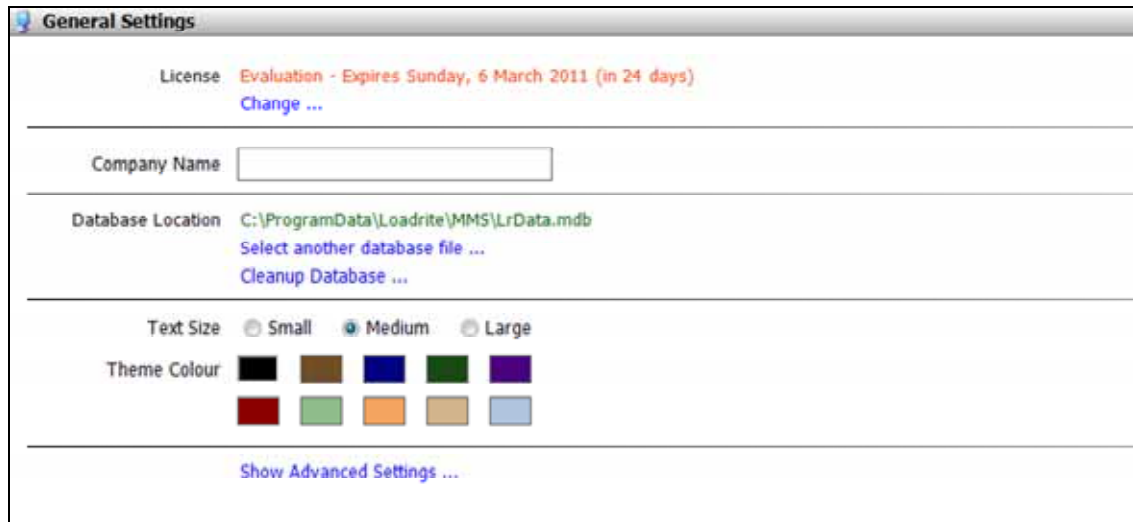
6. CHANGE SETTINGS

The *Change Settings* section allows you customize LOADRITE™ MMS to meet the needs of your operation.

Note: Changes that you make to the settings are automatically saved; there is no **Save** button.

6.1. GENERAL SETTINGS

The *General Settings* section allows you to customize parts of LOADRITE™ MMS that affect all areas.




Menu Path:


➤ *Main Menu > Change Settings > General Settings*

6.1.1. How do I enter a license key?

- 1) In the **License** section, click **Change**.
The *Activate LOADRITE™ MMS* window will display.
- 2) Contact your LOADRITE™ distributor and give them the unique Authorisation Code that is displayed.

Tip: Click  to copy the Authorisation Code. You can then paste it in an email or letter to be sent to your LOADRITE™ distributor.

- 3) When you receive your License Key from your LOADRITE™ distributor, enter it in the **License Key** box, then click **Activate >**.

Tip: If you are able to copy the License Key from an email or document, click  to paste it in the **License Key** box.

LOADRITE™ MMS will start.

6.1.2. How do I change the company name?

The company name will be printed under the report title on all reports and is displayed in the top-right corner of LOADRITE™ MMS.

- ▶ In the **Company Name** box, enter the name of your company or operation.

6.1.3. How do I select and manage the database?

The database file contains all data records and configuration settings. We recommend that you repair and compact the database on a regular basis.

How do I change the LOADRITE™ MMS database?

WARNING:

- i) Do not change the database file after you have configured settings and Data Fields, as these settings will not be included in the new database file.
- ii) The new database must be a Microsoft® Access® MDB file with an identical structure to the default example database.

- 1) Click **Select another database file**.
The *Open* dialog box will open.
- 2) Navigate your computer or network to locate the folder containing the database file.
- 3) Select the database file, then click **Open**.
The database will be loaded into LOADRITE™ MMS.

How do I repair and compact the database?

- 1) Click **Cleanup Database**.
LOADRITE™ MMS will repair and compact the database.
- 2) Click **OK**.

6.1.4. How do I change the look and feel of LOADRITE™ MMS?

You can change the font size and color theme of LOADRITE™ MMS to match your requirements. All changes will take effect immediately.

How do I change the font size?

Complete the following:

If you want ...	Then...
a small font size	in the Text Size section, select Small .
a medium font size	in the Text Size section, select Medium .
a large font size	in the Text Size section, select Large .

How do I change the color theme?

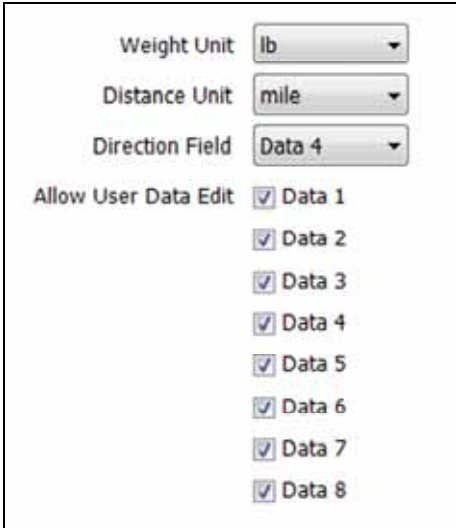
In the **Theme Color** section, select the color that you would like to apply as your LOADRITE™ MMS theme.



6.1.5. How do I change the units of measurement?

WARNING: The units of measurement selected in LOADRITE™ MMS must be exactly the same as the units of measurement selected on all Indicators.

- 1) Click **Show Advanced Settings**.
The **Advanced Settings** fields will display.



- 2) Select the unit of weight that you want LOADRITE™ MMS to use from the **Weight Unit** drop-down box.
- 3) Select the unit of distance that you want LOADRITE™ MMS to use from the **Distance Unit** drop-down box.

6.1.6. How do I change the Direction field?

You can change the Data field used to determine the stock direction in reports. The default value for the **Direction Field** is Data 4.

- 1) Click **Show Advanced Settings**.
The **Advanced Settings** fields will display.
- 2) Select the data field that you want LOADRITE™ MMS to use as the direction field from the **Direction Field** drop-down box.

6.1.7. How do I restrict access to the Data Field tabs?

You can choose which Data Field tabs are to be available on the *Setup Data Fields* screen. By hiding a data field tab, the Data Field information cannot be viewed or edited.

CAUTION: The Data Fields selected in LOADRITE™ MMS must be exactly the same as the Data Fields selected on all Indicators.

- 1) Click **Show Advanced Settings**.
The **Advanced Settings** fields will display.
- 2) Complete the following:

If you want...	Then...
a Data Field tab to be available on the <i>Setup Data Fields</i> screen	select the corresponding Data checkbox. For example, to display the <i>Data 2</i> tab, select the Data 2 checkbox.
a Data Field tab to be hidden on the <i>Setup Data Fields</i> screen	clear the corresponding Data checkbox. For example, to hide the <i>Data 2</i> tab, clear the Data 2 checkbox.

6.1.8. How do I increase the performance of data record processing?

You can increase the performance of data record processing by removing the requirement for MMS to check for duplicate records.

CAUTION: If you remove the requirement for MMS to check for duplicate records, then you may need to regularly repair your database by clicking **Cleanup database**.

- 1) Click **Show Advanced Settings**.
The **Advanced Settings** fields will display.
- 2) Complete the following:

If you...	Then...
want MMS to check for duplicate data records	select the Always Check For Duplicates checkbox.
<i>do not</i> want MMS to check for duplicate data records	clear the Always Check For Duplicates checkbox.

6.2. SETUP USER LOGINS

User logins are used to securely access reports (*Remote Reporting*) from a computer that does not have LOADRITE™ MMS installed on it.

WARNING: If no user logins are created, *Remote Reporting* will not be secure. To ensure that *Remote Reporting* is restricted to authorized users, create at least one user login.

- ▶ For more information, see "How do I view reports from a remote computer?" on page 4-26.

Menu Path:

➤ *Main Menu > Change Settings > Setup User Logins*

How do I add a user login?

- 1) Click **Add new user**.
The *Add new user* window will open.
- 2) In the **User Name** box, enter the user name to be used when logging in to *Remote Reporting*.
- 3) In the **Password** box, enter the password to be used when logging in to *Remote Reporting*.
- 4) Click **OK**.
The user login is created and listed on the *Setup User Logins* screen.

How do I edit a user login?

- 1) Click **Edit** next to the name of the user login that you want to edit.
The *Edit user* window will open.
- 2) In the **User Name** box, enter the user name to be used when logging in to *Remote Reporting*.
- 3) In the **Password** box, enter the password to be used when logging in to *Remote Reporting*.
- 4) Click **OK**.
The user login is updated.

How do I delete a user login?

WARNING: If all user logins are deleted, *Remote Reporting* will not be secure.

- 1) Click **Remove** next to the name of the user login that you want to delete.
The *Confirm* window will open.
- 2) Click **OK**.
The user login is deleted and removed from the *Setup User Logins* screen.

6.3. SETUP DATA FIELDS

The *Setup Data Fields* screen is used to configure site-specific information and fields, including:

- ▶ Data 1
- ▶ Data 2
- ▶ Data 3
- ▶ Data 4
- ▶ Data 5
- ▶ Data 6
- ▶ Data 7
- ▶ Data 8
- ▶ Loader
- ▶ Operator
- ▶ Product
- ▶ Site

WARNING:

- i) The fields configured on the *Setup Data Fields* screen in LOADRITE™ MMS must be exactly the same as the fields set on all Indicators, otherwise data records will be incorrect.
- ii) Some data field values are used in certain reports, therefore if the data field value is changed, the reports which use it will be affected.

Menu Path:

➤ *Main Menu > Change Settings > Setup Data Fields*

6.3.1. Site

How do I change the title used to refer to sites?

- 1) Click the **Site** tab.
The *Site* screen will display.
- 2) In the **Title** box, enter the title to be used to refer to your sites, for example, the column name on the *Browse Data* screen, and the title used in reports that refer to sites.
If you enter a name other than **Site**, then **(Site)** will be appended to the new title.

How do I add a site?

- 1) Click **Add**.
The *Add New Site* window will display.
- 2) In the **ID** box, enter a unique ID number to be used for the site. The ID must be between **0** and **9999**.
- 3) In the **Description** box, enter the name or a description of the site.
- 4) Click **OK**.
The *Confirm* window will display.
- 5) Complete the following:

If you want to...	Then...
add another site	<ul style="list-style-type: none"> ▶ click OK. The <i>Add New Site</i> window will display. ▶ Go back to step 2.
finish adding sites	Click Cancel . The sites are saved.

How do I edit a site?

- 1) Select the site to be edited, then click **Edit**.
The *Edit Site* window will display.
- 2) In the **ID** box, enter a unique ID number to be used for the site. The ID must be between **0** and **9999**.
- 3) In the **Description** box, enter the name or a description of the site.
- 4) Click **OK**.
The site is saved.

How do I delete a site?

- 1) Select the site to be deleted, then click **Delete**.
The *Confirm* window will display.
- 2) Click **OK**.
The site is deleted.

6.3.2. Operator

How do I change the title used to refer to operators?

- 1) Click the **Operator** tab.
The *Operator* screen will display.
- 2) In the **Title** box, enter the title to be used to refer to your operators, for example, the column name on the *Browse Data* screen, and the title used in reports that refer to operators.
If you enter a name other than **Operator**, then **(Operator)** will be appended to the new title.

How do I include or exclude operator data when uplinking to a LOADRITE™ Indicator?

Complete the following:

If you want to...	Then...
include operator information when uplinking to a LOADRITE™ Indicator	select the Upload to LOADRITE™ Indicator checkbox.
exclude operator information when uplinking to a LOADRITE™ Indicator	clear the Upload to LOADRITE™ Indicator checkbox.

How do I set whether the LOADRITE™ Indicator will prompt for a description when an operator is added on an Indicator?

Complete the following:

If you...	Then...
want to be prompted for a description when an operator has added on a LOADRITE™ Indicator	select the Prompt for new descriptions checkbox.
don't want to be prompted for a description when an operator has added on a LOADRITE™ Indicator	clear the Prompt for new descriptions checkbox.

How do I add an operator?

- 1) Click **Add**.
The *Add New Operator* window will display.
- 2) In the **Name** box, enter the name of the operator. This name will be used when the operator logs into a LOADRITE™ Indicator.
- 3) In the **Description** box, enter a description for the operator.
- 4) In the **Password** box, enter a password for the operator. This password will be used when the operator logs into a LOADRITE™ Indicator.
- 5) Click **OK**.
The *Confirm* window will display.



6) Complete the following:

If you want to...	Then...
add another operator	<ul style="list-style-type: none"> ▶ click OK. The <i>Add New Operator</i> window will display. ▶ Go back to step 2.
finish adding operators	Click Cancel .

How do I edit an operator?

- 1) Select the operator to be edited, then click **Edit**.
The *Edit Operator* window will display.
- 2) In the **Name** box, enter the name of the operator. This name will be used when the operator logs into a LOADRITE™ Indicator.
- 3) In the **Description** box, enter a description for the operator.
- 4) In the **Password** box, enter a password for the operator. This password will be used when the operator logs into a LOADRITE™ Indicator.
- 5) Click **OK**.
The operator is saved.

How do I delete an operator?

- 1) Select the operator to be deleted, then click **Delete**.
The *Confirm* window will display.
- 2) Click **OK**.
The operator is deleted.

6.3.3. Loader

It is very important for data accuracy and reporting purposes, that all loaders are set to the site that they are based at.

Example

In the example below, data downloaded from Small Loader will be assigned to Site 2:

Row	ID	Description	Site	Type
1	2090	Big Loader	Site 1	L-Series 2180
2	2095	Small Loader	Site 2	L-Series 2180

If Small Loader moves to Site 3, it is important to change the site that Small Loader is assigned to *before* downloading data collected at Site 3. If that is not done, then data collected by Small Loader at Site 3 will be assigned to Site 2.

Row	ID	Description	Site	Type
1	2090	Big Loader	Site 1	L-Series 2180
2	2095	Small Loader	Site 3	L-Series 2180

In the example above, if data is downloaded into the database with Small Loader at Site 2, this existing data will not change when Small Loader is moved to Site 3.

How do I change the title used to refer to loaders?

- 1) Click the **Loader** tab.
The *Loader* screen will display.
- 2) In the **Title** box, enter the title to be used to refer to your loaders, for example, the column name on the *Browse Data* screen, and the title used in reports that refer to loaders.
If you enter a name other than **Loader**, then **(Loader)** will be appended to the new title.

How do I set whether the LOADRITE™ Indicator will prompt for a description when a loader is added on an Indicator?

Complete the following:

If you...	Then...
want to be prompted for a description when a loader has added on a LOADRITE™ Indicator	select the Prompt for new descriptions checkbox.
don't want to be prompted for a description when a loader has added on a LOADRITE™ Indicator	clear the Prompt for new descriptions checkbox.

How do I add a loader?

Note: The site that a loader is associated with must be added to LOADRITE™ MMS before the loader can be added.

- 1) Click **Add**.
The *Add New Loader* window will display.
- 2) In the **ID** box, enter a unique ID number to be used for the loader. The ID must be between **0** and **9999**.
- 3) In the **Description** box, enter a description for the loader.
- 4) Select the site that the loader is based at, from the **Site** drop-down box.
- 5) Select the type of LOADRITE™ Indicator installed in the loader, from the **Type** drop-down box.
- 6) Click **OK**.
The *Confirm* window will display.
- 7) Complete the following:

If you want to...	Then...
add another loader	<ul style="list-style-type: none"> ▶ click OK. The <i>Add New Loader</i> window will display. ▶ Go back to step 2.
finish adding loaders	Click Cancel .

How do I edit a loader?

- 1) Select the loader to be edited, then click **Edit**.
The *Edit Loader* window will display.
- 2) In the **ID** box, enter a unique ID number to be used for the loader. The ID must be between **0** and **9999**.
- 3) In the **Description** box, enter a description for the loader.
- 4) Select the site that the loader is based at, from the **Site** drop-down box.
- 5) Select the type of LOADRITE™ Indicator installed in the loader, from the **Type** drop-down box.
- 6) Click **OK**.
The loader is saved.

How do I delete a loader?

- 1) Select the loader to be deleted, then click **Delete**.
The *Confirm* window will display.
- 2) Click **OK**.
The loader is deleted.

6.3.4. Product

How do I change the title used to refer to products?

- 1) Click the **Product** tab.
The *Product* screen will display.
- 2) In the **Title** box, enter the title to be used to refer to your products, for example, the column name on the *Browse Data* screen, and the title used in reports that refer to products.
If you enter a name other than **Product**, then **(Product)** will be appended to the new title.

How do I include or exclude product data when uplinking to an Indicator?

Complete the following:

If you want to...	Then...
include product information when uplinking to a LOADRITE™ Indicator	<ul style="list-style-type: none"> ▶ select the Upload to LOADRITE™ Indicator checkbox. ▶ Select the type of upload from the Upload Type drop-down box.
exclude product information when uplinking to a LOADRITE™ Indicator	clear the Upload to LOADRITE™ Indicator checkbox.

How do I set whether the Indicator will prompt for a description when a product is added on an Indicator?

Complete the following:

If you...	Then...
want to be prompted for a description when a product has added on a LOADRITE™ Indicator	select the Prompt for new descriptions checkbox.
don't want to be prompted for a description when a product has added on a LOADRITE™ Indicator	clear the Prompt for new descriptions checkbox.

How do I add a product?

- 1) Click **Add**.
The *Add New Product* window will display.
- 2) In the **Name** box, enter the name of the product.
- 3) In the **Description** box, enter a description for the product.
- 4) In the **Volume** box, enter the volume conversion factor for the product.
- 5) Select the type of product from the **Type** drop-down box. The type of product is used for reporting purposes.
- 6) Click **OK**.
The *Confirm* window will display.
- 7) Complete the following:

If you want to...	Then...
add another product	<ul style="list-style-type: none"> ▶ click OK. The <i>Add New Product</i> window will display. ▶ Go back to step 2.
finish adding products	Click Cancel .

How do I edit a product?

- 1) Select the product to be edited, then click **Edit**.
The *Edit Product* window will display.
- 2) In the **Name** box, enter the name of the product.
- 3) In the **Description** box, enter a description for the product.
- 4) In the **Volume** box, enter the volume conversion factor for the product.
- 5) Select the type of product from the **Type** drop-down box. The type of product is used for reporting purposes.
- 6) Click **OK**.
The product is saved.

How do I delete a product?

- 1) Select the product to be deleted, then click **Delete**.
The *Confirm* window will display.
- 2) Click **OK**.
The product is deleted.

6.3.5. Customizable Data Fields

The LOADRITE™ Weighing System allows for multiple customizable data fields (depending on your model of Indicator). Data fields are used to record information against each weigh to help track and monitor weighing data. For example, data fields may be configured to record a customer, truck, event ID, loading direction, contract, contractor or docket number against the weight data.

The tabs for the data fields are named **Data 1**, **Data 2**, **Data 3**, etc.

Note: The below procedures can be used for all data field tabs. *Data n* is used to represent either Data 1, Data 2, Data 3, etc.

How do I change the title used to refer to the data field?

- 1) Click the **Data n** tab.
The *Data n* screen will display.
- 2) In the **Title** box, enter the title to be used to refer to the data field, for example, the column name on the *Browse Data* screen, and the title used in reports that refer to products.

How do I include or exclude *Data n* when uplinking to a LOADRITE™ Indicator?

Complete the following:

If you want to...	Then...
include <i>Data n</i> information when uplinking to a LOADRITE™ Indicator	<ul style="list-style-type: none"> ▶ select the Upload to LOADRITE™ Indicator checkbox. ▶ Select the type of upload from the Upload Type drop-down box.
exclude <i>Data n</i> information when uplinking to a LOADRITE™ Indicator	clear the Upload to LOADRITE™ Indicator checkbox.

How do I set whether the MMS will prompt for a description when a *Data n* is added on an Indicator?

Complete the following:

If you...	Then...
want to be prompted for a description when a <i>Data n</i> is added on a LOADRITE™ Indicator	select the Prompt for new descriptions checkbox.
don't want to be prompted for a description when a <i>Data n</i> is added on a LOADRITE™ Indicator	clear the Prompt for new descriptions checkbox.
	Note: The product name entered on the Indicator will be used for both the product name and product description in MMS.

How do I add a *Data n*?

- 1) Click **Add**.
The *Add New Data n* window will display.
- 2) In the **Name** box, enter the name of the *Data n*.
- 3) In the **Description** box, enter a description for the *Data n*.
- 4) Click **OK**.
The *Confirm* window will display.
- 5) Complete the following:

If you want to...	Then...
add another <i>Data n</i>	<ul style="list-style-type: none"> ▶ click OK. The <i>Add New Data n</i> window will display. ▶ Go back to step 2.
finish adding <i>Data n</i>	Click Cancel .

How do I edit a *Data n*?

- 1) Select the *Data n* to be edited, then click **Edit**.
The *Edit Data n* window will display.
- 2) In the **Name** box, enter the name of the *Data n*.
- 3) In the **Description** box, enter a description for the *Data n*.
- 4) Click **OK**.
The *Data n* is saved.

How do I delete a *Data n*?

- 1) Select the *Data n* to be deleted, then click **Delete**.
The *Confirm* window will display.
- 2) Click **OK**.
The *Data n* is deleted.

6.3.6. Uplink File

The Uplink file is used to install or update configuration and data fields on each Indicator in your organization. You can easily export an Uplink file to your computer or network and then upload the data to an Indicator via *LOADRITE™ Toolbox 2.0 (or higher)*. The uplink file contains the following data fields:

- ▶ Operator
- ▶ Product
- ▶ Data 1
- ▶ Data 2
- ▶ Data 3
- ▶ Data 4
- ▶ Data 5
- ▶ Data 6
- ▶ Data 7
- ▶ Data 8

How do I export data fields to an uplink file?

- 1) Click **Export Data Fields to Preformatted Uplink File**, in the bottom-right corner of the *Setup Data Fields* screen.
The *Export all Data Fields to* dialog box will open.
- 2) Navigate your computer or network to locate the destination folder for the uplink file.
- 3) Either select a file to overwrite, or enter a new file name in the **File name** box.
- 4) Click **Save**.
The uplink file is saved on your computer or network.

6.4. SET UP AUTO-ARCHIVE/EXPORT

Automatic-Archiving regularly removes older records from your database and stores them separately. We recommend that your database is archived regularly to speed up the operation of LOADRITE™ MMS and prevent old data from distorting reports.

The archived data can be automatically exported by FTP or email to another location for security purposes.

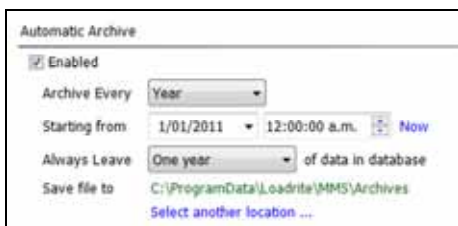
Tip: It is good practice to archive your entire database prior to importing data. If a problem occurs, you can restore the database from the archived file.

Menu Path:

➤ *Main Menu > Change Settings > Setup Auto-Archive/Export*

6.4.1. How do I enable automatic-archiving of data?

- 1) In the **Automatic Archive** section, select **Enabled**.
The *Automatic Archiving* functionality will be enabled.



- 2) In the **Archive Every** drop-down box, select how regularly you would like data to be archived.
- 3) Complete the following:

If you want to...	Then...
specify a start date and time to begin archiving	<ul style="list-style-type: none"> ▶ in the Starting from drop-down calendar, select the date from which you would like archiving to take place. ▶ In the Starting from combo-box, enter or select the time from which you would like archiving to take place.
start archiving now	click Now . The Starting from fields will update to the current date and time.

- 4) In the **Always Leave** drop-down box, select the amount of data that you would like left in the database when archiving occurs. For example, select **Two month** if you would like to ensure that there is always the last two month's data in the database.
- 5) Complete the following:

If you want to...	Then...
change the location where records are archived	<ul style="list-style-type: none"> ▶ click Select another location. The <i>Browse For Folder</i> window will open. ▶ Navigate your computer or network to locate the destination folder for the archived records. ▶ Click OK.
keep the currently specified location for archived records	continue to step 6.

6.4.2. How do I enable automatic-exporting of data?

- 1) In the **Automatic Export** section, select **Enabled**.
The *Automatic Exporting* functionality will be enabled.



- 2) In the **Export Every** drop-down box, select how regularly you would like data to be exported.
- 3) Complete the following:

If you want to...	Then...
specify a start date and time to begin exporting	<ul style="list-style-type: none"> ▶ in the Starting from drop-down calendar, select the date from which you would like exporting to take place. ▶ In the Starting from combo-box, enter or select the time from which you would like exporting to take place.
start exporting now	click Now . The Starting from fields will update to the current date and time.

- 4) In the **Export as a** drop-down box, select the type of file the exported data should be saved as.

Note: If you want to automatically-import the file at a later date, ensure that you select **LOADRITE™ Export File**. For information on all exported data types,.

- 5) Complete the following:

If you want ...	Then...
a new file to be created for each export	select Create a new file .
the new file to replace the previous file each export	select Replace file .
the new data to be added to the existing file each export	select Append to file .
	Note: If you selected LOADRITE™ Export File in the Export as a drop-down box, you will not be able to select Append to file .

- 6) Complete the following:

If you want to...	Then...
change the location where records are exported	<ul style="list-style-type: none"> ▶ click Select another location. The <i>Browse For Folder</i> will open. ▶ Navigate your computer or network to locate the destination folder for the exported records. ▶ Click OK.
keep the currently specified location for exported records	continue to step 7.

7) Complete the following:

If you want to...	Then...
send a copy of the exported file via email	<ul style="list-style-type: none"> ▶ in the Email to field, enter the email address. ▶ Click Send test email. The <i>Confirm</i> window will open. ▶ Click OK. A test email will be sent to the email address entered in the Email to field. If the test email is not received, confirm that the email address has been entered correctly, then try again.
send a copy of the exported file via FTP (File Transfer Protocol)	<ul style="list-style-type: none"> ▶ in the FTP Server box, enter the FTP address. ▶ In the User Name box, enter the user name for the FTP address. ▶ In the Password box, enter the password for the FTP address. ▶ Click Test Connection. The <i>Confirm</i> window will open. ▶ Click OK. The FTP settings will be tested. If the test is unsuccessful, confirm that the settings been entered correctly, then try again.

6.5. SET UP AUTO IMPORT

Automatic-importing regularly imports records into your database. The data which is imported may be from other sites in your operation.

Menu Path:

➤ *Main Menu > Change Settings > Setup Auto-Import*

6.5.1. How do I enable automatic-importing of data?

- 1) In the **Automatic Import** section, select **Enabled**.
The *Automatic Importing* functionality will be enabled.
- 2) In the **Check for new files every** drop-down box, select how regularly you would like data to be imported.
- 3) Complete the following:

If you want to...	Then...
specify a start date and time to begin importing	<ul style="list-style-type: none"> ▶ in the Starting from drop-down calendar, select the date from which you would like importing to take place. ▶ In the Starting from combo-box, enter or select the time from which you would like importing to take place.
start importing now	click Now . The Starting from fields will update to the current date and time.

- 4) Complete the following:

If you want to...	Then...
import data from your computer or network	<ul style="list-style-type: none"> ▶ select Import from folder. ▶ Click Select another location. The <i>Browse For Folder</i> will open. ▶ Navigate your computer or network to locate the destination folder for the exported records. ▶ Click OK.
import data from a FTP (File Transfer Protocol) site	<ul style="list-style-type: none"> ▶ select Import from FTP. ▶ In the FTP Server box, enter the FTP address. ▶ In the User Name box, enter the user name for the FTP address. ▶ In the Password box, enter the password for the FTP address. ▶ Click Test Connection. The <i>Confirm</i> window will open. ▶ Click OK. The FTP settings will be tested. If the test is unsuccessful, confirm that the settings been entered correctly, then try again.

6.6. SETUP DOCKET PRINTING

Docket Printing allows LOADRITE™ MMS to print dockets directly to an office printer (see "How do I print a docket?" on page 5-54).

If *Automatic Docket Printing* is enabled, then docket information will be sent to the office printer via a radio connection each time a load has been completed and the operator has used the *CLEAR* function.

Dockets will *not* include the following information:

- ▶ Recall
- ▶ Timeout
- ▶ New Weight
- ▶ New Target
- ▶ Long Total

Menu Path:

➤ *Main Menu > Change Settings > Setup Docket Printing*

6.6.1. How do I set up docket printing?

1) Complete the following:

If you want...	Then...
the date and time to be included on the docket	select the Print Date / Time option.
the company name to be included on the docket	select the Print Company Name option.
the loader details to be included on the docket	select the Print Loader ID and Description option.
include Add events on the docket	select the Print Adds option.
include Subtract events on the docket	select the Print Subs option.
include Zero events on the docket	select the Print Zeros option.
include Split (subtotal) events on the docket	select the Print Subtotals option.
include the unit of measurement on the docket	select the Print Units option.
the <i>Data n</i> information to be included	select the Print Data n option.

2) Select the default printer from the **Printer** drop-down box.

- ▶ To change the printer settings, click **Change these settings**.
The Windows® *Page Setup* window will open for you to change the settings.

3) In the **Number of Copies** box, select or enter the number of copies to print for each docket.

4) If you want to change the text settings, click **Select another font**.
The Windows® *Font* window will open for you to change the settings.

5) Click **Print a Test Docket** to print a docket using the settings you have selected, then click **OK**.
The *Automatic Docket Printing* settings will be tested. If the test is unsuccessful, confirm that the settings been entered correctly, then try again.

Note: The test docket will be printed with a black border so you can evaluate the margin settings. The border will *not* be printed on normal dockets.

6) If you want dockets to be automatically printed on the office printer each time an operator uses the *CLEAR* function, select **Enable Auto Docket Printing**.
The *Automatic Docket Printing* functionality will be enabled.

7. LOG MESSAGES

LOADRITE™ MMS keeps a record of all major activities and events for diagnostic purposes. Events recorded include all data connections and error messages.

Menu Path:

➤ *Main Menu > Browse Data*



8. APPENDIX A - METRIC CALCULATIONS

Metric	Calculation	Data Source	Report
Load Count / Return Count	The total number of loads that have both a TRUCK and CLEAR TOTAL	Database	Key Productivity Indicators
Loaded Weight	The sum of the all CLEAR_TOTAL records with the DIR value set to OUT	Database	Key Productivity Indicators Loader Productivity Summary Loader by Day Loader by Hour Loader Product Summary Stockpile Summary
Returned Weight	The sum of the all CLEAR_TOTAL records with the DIR value set to IN	Database	Key Productivity Indicators Stockpile Summary
Average Lifts / load	The average number ADD and CLEAR TOTAL records per Load	Database	Key Productivity Indicators Loader Productivity Summary Loader by Day Loader by Hour
Load Rate	The amount of product loaded out / the amount of time, in hours, that it took to load that material	Database	
Average Load Rate	The average of the Load rate	Database	Key Productivity Indicators
Load Time	The time difference between the TRUCK record and CLEAR_TOTAL record for an individual truck load	Database	Key Productivity Indicators Loader Productivity Summary Loader by Hour
Inventory Remaining	(The sum of the CLEAR_TOTAL values with DIR=IN, plus Add to Stockpile and Return to Stockpile values) minus (The sum of the CLEAR TOTAL values with DIR=OUT)	Database	Site Status Summary
Inventory Used	The sum of the CLEAR_TOTAL values with DIR=OUT	Database	Site Status Summary
Start Weight	At the 1 st date of the report (The sum of the CLEAR_TOTAL values with DIR=IN, plus Add to Stockpile and Return to Stockpile values) minus (The sum of the CLEAR TOTAL values with DIR=OUT)	Database	Stockpile Summary

9. APPENDIX B - EXPORTED DATA FILE FORMATS

When you export data records, or configure automatic-exporting of data records, you can choose from several file formats.

Note: The format required may depend on the model of LOADRITE™ Weighing System that you are using. If you are not sure which format you should be exporting, see your LOADRITE™ Distributor.

3 Data Fields (Logdata.txt)

ID#, PROD#, WEIGHT, SEQ#, FUNCTION, TOTAL, LONG_TOTAL, TIME, DATE, Data1, Data2, Data3, TARE.

5 Data Fields (Logdata.txt)

ID#, PROD#, WEIGHT, SEQ#, FUNCTION, TOTAL, LONG_TOTAL, TIME, DATE, Data1, Data2, Data3, Data4, Data5, TARE.

All Data Fields (Logdata.txt)

All data fields are included: DATE, TIME, SITEDESC, OPERATORID, OPERATORDESC, LOADERID, LOADERDESC, PRODUCTID, PRODUCTDESC, FUNCTION, SEQUENCE, WEIGHT, Data1, Data1Desc, Data2, Data2Desc, Data3, Data3Desc, Data4, Data4Desc, Data5, Data5Desc, TARE, NOTES.

LOADRITE™ Export File (Logdata.lrx)

Note: .lrx is the only file format which can be automatically-imported using FTP.

All data fields are included: DATE, TIME, SITEDESC, OPERATORID, OPERATORDESC, LOADERID, LOADERDESC, PRODUCTID, PRODUCTDESC, FUNCTION, SEQUENCE, WEIGHT, Data1, Data1Desc, Data2, Data2Desc, Data3, Data3Desc, Data4, Data4Desc, Data5, Data5Desc, TARE, NOTES.



10. APPENDIX C - GLOSSARY

A

Archive

A backup of data which can be restored to MMS if required.

Auto-

Abbreviated form of "Automatic". For example, "Auto-Archive", "Auto-Docket".

Automatic

To occur without attendance. For example, when using "Automatic Archiving", MMS software will archive data at a set time without the need of a computer administrator.

- ▶ See also *Auto-*.

B

Bar Graph

A data chart of rectangular bars with each length proportional to the value that it represents.

C

Cellular Modem

Used to transfer live payload data from the LOADRITE™ Indicator to the office.

Company Name

The name of the company that is using the LOADRITE™ weighing system.

Cycle Time

A time-based metric used to track how long a particular task takes. For example, Load Cycle Time is the length of time it takes to load a truck; Yard Cycle Time is the amount of time a vehicle is in the yard.

The Load Cycle Time is calculated as the time difference between (1) when the operator uses the Clear function, and (2) when the next Truck is selected.

MMS Productivity reports can include information on the *Average Cycle Time*.

D

Data Connection

The method of connection between a Indicator and a PC running MMS software.

- ▶ Methods include *FTP Data Connection, LOADRITE™ Data Module Connection, Network Connection, Radio Connection*.

Data Field

Customizable fields that allow you to label your weighing data to help you track and monitor your output, for example, by truck, customer, or docket.

Data Module

A memory device which connects to the Indicator to store payload and related data. The Data Module can then be connected to a PC running MMS software to transfer the data for the creation of productivity reports.

DIR

Direction. Indicates whether product is being loaded "Out" from a stockpile to a truck, or "In" from a truck to a stockpile.

- ▶ See also *In* and *Out*.

Download

The transfer of data from a LOADRITE™ Indicator to MMS via a Data Connection.

- ▶ See also *Data Connection* and *Upload*.

E

Enabled

A checkbox that when selected will enable a function.

F

Filter

To select options in order to display data which conforms to certain criteria. Used to create specific reports.

Find

A function used to search for words on a screen.

- ▶ See also *Replace*.

FTP Data Connection

The transmission of data from the Indicator to PC via a cellular modem using FTP (File Transfer Protocol).

- ▶ See also *Cellular Modem*.

I

In

The *Direction* option selected to indicate that subsequent loads are being loaded from a truck to a stockpile.

Indicator

The LOADRITE™ user interface installed in a loader or excavator which the operator uses to record bucket weights. When used with a belt scale, the term *Integrator* should be used.

Note: May also be known as *Console, Module, In-Cab Console, Loadrite, Loadrite Console, Head Unit, Clock, Computer, Scale*; however *Indicator* is the preferred term.

Integrator

The LOADRITE™ user interface installed on a conveyor belt which the operator uses to record weights. When used in a loader or excavator, the term *Indicator* should be used.

Note: May also be known as *Console, Module, Loadrite, Loadrite Console, Head Unit, Clock, Computer, Scale*; however *Integrator* is the preferred term.

L

LOADRITE™ Weighing System

Refers to the entire LOADRITE™ hardware and software weighing system installed at a site, including the Indicator, transducers, sensors, modem, MMS software, etc.

- ▶ May also be referred to as *LOADRITE™ System*.

M

Modem

A device used to transfer live payload and other data from the Indicator to a PC with MMS installed. There are two classes of modem:

- ▶ Cellular model, for example LD311
- ▶ Radio modem, for example LD100.

O

Operator

The person operating the loader.

- ▶ Also known as *Loader Driver* or *Loader Operator*.

Out

The *Direction* option selected to indicate that subsequent loads are being loaded from a stockpile to a truck.

P

Pie Graph

A circular data chart divided into segments with the arc length of each segment proportional to the value that it represents

Product

Material that comprises a load. For example, salt, coal, etc.

R

Radio Connection

The transmission of data from the Indicator to PC via radio waves.

- ▶ See also *Radio Modem*.

Radio Modem

Used to transfer live payload data from the LOADRITE™ Indicator to the office via a radio connection.

Record

Line of payload data from the database which can be filtered to create various reports

Remote PC

A PC that does not have MMS installed, but can access the remote reporting functionality. May be on-site, or off-site.

- ▶ See also *Remote Reporting*.

Remote Reporting

Functionality for remote PCs to use MMS to create and view reports via a local network or the Internet.

- ▶ See also *Remote PC*.

Replace

A function used to replace words found using the *Find* function.

- ▶ See also *Find*.

Report

Information from the database presented in a summary, detail and/or graph format. Can be displayed on-screen, exported or printed.

S

Site

The location of the operation where the LOADRITE™ weighing system is being used.

- ▶ See also *LOADRITE™ Weighing System* and *Site*.

Stockpile

Source location of product from which a load is obtained.

U

Upload

The transfer of data from MMS to a LOADRITE™ Indicator via a Data Connection.

- ▶ See also *Data Connection* and *Download*.

11. FOR MORE INFORMATION

You can view the available support options from MMS on the *Help* screen:

➤ *Main Menu > Help*

Technical Support

- ▶ For general technical support, please contact your LOADRITE™ distributor, or email LOADRITE™ Technical Support at: support@loadritescales.com
- ▶ If you would like to send your MMS configuration details to LOADRITE™ Technical Support via email, follow the instructions on the *Help* screen.

Quick Start Guide

The LOADRITE™ MMS Quick Start Guide gives an overview of installing and using MMS.

User Manual

The *LOADRITE™ MMS User Manual* contains comprehensive information on using MMS.

- ▶ You can access the *MMS User Manual* when using MMS by pressing **F1** on your keyboard.
- ▶ A printed version of the *MMS User Manual* is available for purchase from your LOADRITE™ distributor.

Release Notes

The release notes describe new MMS features and changes that may not be included in the *User Manual*. This is especially useful if you have upgraded MMS and would like information on the changes. The release notes are included as a PDF file on the MMS CD and require Adobe® Reader® to be installed on your computer.

Training Course

A training course is an excellent way to help you use your LOADRITE™ Weighing System to its fullest potential. For information on available training courses, contact your LOADRITE™ distributor.

Website

For general information on all LOADRITE™ products, visit the LOADRITE™ website: www.loadritescales.com

www.loadritescales.com

