# SERVICE WORKS GLOBAL

# QFM 3.0.2 Release Notes

What's New in QFM v3.00.02.00

September 2020

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# Contents

Contents	
Version Log	3
Release Notices	4
QFM Compatibility	4
Crystal Reports	
New Features Summary	5
New Features	
Monitored Values Enhancements	
Overview	
Introduction	
Process	
Setting Up a Monitored Value Type	
Adding a New Monitored Value Type	8
Setting Up Monitoring Parameters Against an Asset	
Single (Upper) Threshold Value	
Threshold Values Range	
Fault Monitoring	
Monitored Values - Asset Viewer	
Associating the Asset to Planned Maintenance Schedules	
Schedules for Triggered Activities (Remedial Events)	
Validation Rules	
Recording Monitor Values on the QFM app	
Triggered Activity Generation	
Reset and Increment Rules	
System Configuration	27
Software Licence	27
User Profile	
Dynamic Form Setup	28
Dynamic Forms Enhancements	30
Overview	30
Introduction	30
Adding a New Form	
Importing a Form	
Searching for an Existing Form	
Support for TLS1.2 Email Processing Protocol	36
Overview	36
L AVELVIEW	.30



37
37
37
39
40
40
41
42
43
43
44
45
46
46
46
47
49
49
50
50
50
52
56
56
57
59
59
61
63



# **Version Log**

Version #	Summary of Revision	Date	Author
1.0	First edition v3.00.02.00	04/09/2020	MR



# **Release Notices**

# **QFM** Compatibility

The QFM 3.00.02.00 release is compatible with the following QFM software:

QFM WFS: 3.0.1Mobile App: 3.0.1Mobile server 3.0.1

• Desktop Version: 164.08.09

In order for this release to perform at an optimum level, Service Works strongly recommends that client organisations upgrade to these software versions or later.

# **Crystal Reports**

Please note that clients wishing to upgrade to v3.00.01.37 and above will be required to upgrade Crystal Runtime to 13.0.27. For users with multiple installations on the same machine, all instances will require an upgrade to v3.00.01.37. Please speak to your SWG Account Manager to discuss specific requirements or to raise any concerns.

Additionally, clients who wish to upgrade to 64bit will also require all custom Crystal Reports to be updated. SWG will upgrade all standard reports within the core product and provide clear directions to users who have additional custom reports not maintained by SWG.

Furthermore, whilst 32bit does not currently require Crystal Reports to be upgraded, it is recommended that Crystal Reports which use TTX are upgraded, as these are no longer supported by SAP and SWG cannot guarantee future 32bit runtimes will be backward compatible.



# **New Features Summary**

The QFM v3.00.02.00 release includes a range of new features. A summary is provided below, with further details on the following page.

# **Monitored Values Enhancements**

Enhancements to QFM Asset Monitored Values provide an improved solution for organisations to monitor and manage Assets through the collection of key monitor readings. A fully automated end-to-end process, used in conjunction with physical inspections, enables mobile users running the QFM app to collect required readings via customised forms. Readings can be validated against allowed boundaries and QFM may be configured to generate automatic remedial jobs to react to the readings if they fall outside these boundaries, improving safety and preventing asset failure.

# **Dynamic Forms Enhancements**

The Dynamic Forms screen is enhanced to support an improved initial user experience by incorporating upgraded start-up options and navigation to existing forms. This more efficient and streamlined design also improves system performance.

# Support for TLS1.2 Email Processing Protocol

The QFM Workflow Scheduler notification feature can now use TLS1.2 encryption protocol to connect to the SMTP server when sending email notifications.

### Visit Remarks Appended in Chronological Order

Users are now able to determine the order in which Visit Remarks are added to the main Remarks window in the Event screen (via an administrative setting). The sequence can be set to chronological order (newest remarks at the top of the list) or reverse order (newest Remarks at the bottom of the list).

#### General Improvements to Event Director

A number of behind the scenes improvements have been made to Event Director, enhancing system performance.

### Data Scoping for Event and Visit List Reports

Two new QFM Event and Visit List Reports are added, which include any Data Scoping filters that are applied to a user's QFM profile. Data Scoping restricts the records that a user has access to, for example by a particular site, contractor of self-service user.

# Enhanced Filtering for Dynamic Form Lists in Report Centre

Dynamic Forms now supports extended filtering of collected data in List Reports, including the ability to filter on the responses to specific form questions. This enables greater analysis and manipulation of data collected during surveys, inspections or audits.

#### **Bookings with Integrated Floor Plans**

This new feature integrates the Bookings module with the QFM Space application, allowing users to view floor plans before booking a desk or meeting room. During the process of selecting an area to book, users now have the ability to view the desk or room on a floor plan and can also 'zoom in' to focus on a particular area or view the wider floor.

# Bookings Search - Default Value for Booking Time Period

A minor change to the default value for the booking time period selection field, in the Book a Room screen.



# **New Features**

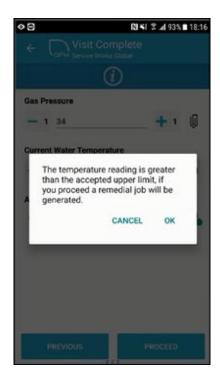
Details of QFM v3.00.02.00 enhancements are provided in this section.

# **Monitored Values Enhancements**

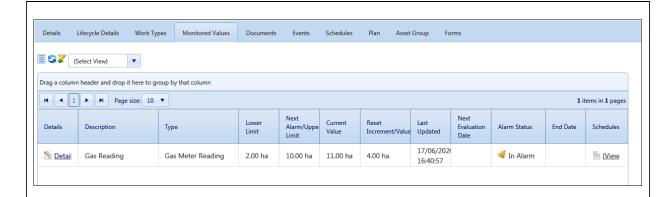
# **Overview**

QFM Asset Monitored Values provides a system for organisations to monitor and manage Assets through the collection of key monitor readings. Used in conjunction with Dynamic Forms, Planned Maintenance Schedules and the QFM app, this provides a fully automated end-to-end solution.

Operatives using the QFM app can collect asset readings via customised forms, whilst typically carrying out a routine inspection. These readings can then be validated against allowed boundaries. Where readings breach boundaries, alarms are triggered and remedial jobs can be automatically generated and passed back out to contactors to fix the fault.







#### Features and benefits include:

- Improved asset performance by quickly facilitating remedial work if a fault occurs.
- Provides richer functionality allowing clients to collect and update core asset information.
- Supports a safer working environment by reducing the time equipment can be in fault.
- Can be used as a fully automated process in conjunction with physical asset inspections for an improved maintenance regime.

# Introduction

Enhancements to QFM Asset Monitored Values provide an improved solution for organisations to monitor and manage Assets through the collection of key monitor readings. A fully automated end-to-end process, used in conjunction with physical inspections, enables mobile users running the QFM app to collect required readings via customised forms. Readings can be validated against allowed boundaries and QFM may be configured to generate automatic remedial jobs to react to the readings if they fall outside these boundaries, improving safety and preventing asset failure.

A typical example would be to monitor the operating condition of a particular asset, such as a water boiler, by recording the pressure. Should the pressure reading breach a pre-determined range, this would automatically trigger the generation of a remedial job to enable an engineer to attend and fix the issue.

# **Process**

QFM Monitored Values enhancements enable organisations to use a fully automated end-to-end asset monitoring process, which is summarised below:

- Set up Monitored Value Type
   A classification for the monitoring of a particular Asset. (Once set up, it can be used for many different QFM Assets).
- Create a Monitored Value for an Asset
   Define the condition values to be monitored, including current value and tolerance thresholds.



#### Link an Asset Monitored Value to a Planned Maintenance Schedule

Associate a Monitored Value with a Planned Maintenance Schedule so that if an alarm is triggered as a result of a captured value breaching a threshold or the Asset developing a fault, a remedial QFM Event (triggered activity) can be automatically generated and sent to a contractor so that they can attend to the Asset.

#### • Create a Dynamic Form to capture Asset values

Dynamic Forms enable the collection of key monitor readings via the QFM app.

## Execute the Dynamic Form on the Mobile

The form is integrated with the Visit workflow and sent to an engineer's mobile device running the QFM app.

### Record the Asset values on the Mobile then return these to QFM Web

The engineer records the monitor readings on the form in the QFM app. Data is passed back to the QFM database to update the corresponding Monitored Value which will trigger remedial action if outside of tolerance thresholds.

# Generate a Triggered Activity (remedial Event)

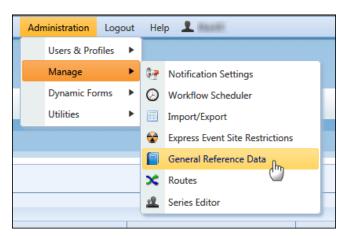
A triggered activity, in this case a remedial QFM Event, is automatically generated and sent to a contractor so that they can attend to the Asset.

# **Setting Up a Monitored Value Type**

A Monitored Value Type is a standalone classification for the monitoring of a particular entity, e.g. a monitoring specification for the temperature of a motor. Once set up, it can be associated with (used for) many different QFM Assets.

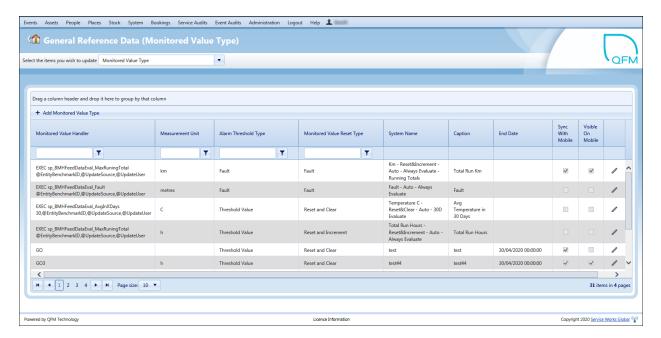
# Adding a New Monitored Value Type

1. Go to the General Reference Data screen (Administration > Manage > General Reference Data).

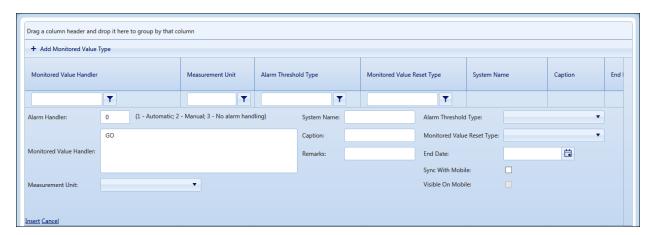


2. In the Monitored Value Type screen, select





3. Enter the following details.



#### **Alarm Handler**

- **1 Automatic.** When an alarm is raised, associated activities will be triggered automatically, i.e. Events automatically raised.
- 2 Manual. When an alarm is raised, any follow up processing must be done manually.
- 3 No Alarm Handling. Alarm Processing will be skipped.

#### **Monitored Value Handler**

Should only be used for customised feeds/integrations where the values are being automatically derived from a configured source, e.g. email.

#### **Measurement Unit**

Unit of measurement being monitored.

#### **System Name**

Internal System Name used to identify the Monitored Value Type. This must be unique and once set, cannot be changed.



### Caption

Display Name used to identify the Monitored Value Type. This must be unique but can be changed.

#### Remarks

Any related notes.

### **Alarm Threshold Type**

Threshold Value - a single threshold value, i.e. upper limit.

Range - a threshold value range, i.e. upper and lower limits.

Fault - fault monitoring.

# **Monitored Value Reset Type**

Reset and Clear - when a new reading is taken the existing reading is cleared.

Reset and Increment - when a new reading is taken the existing reading is incremented.

#### **End Date**

Date when the MV Type will become disabled.

### Sync With Mobile

Enables this MV type to be used on the QFM app. i.e. the data is sent to a mobile device.

#### Visible On Mobile

Enables the data for this MV Type to be visible on a mobile device running the QFM app.

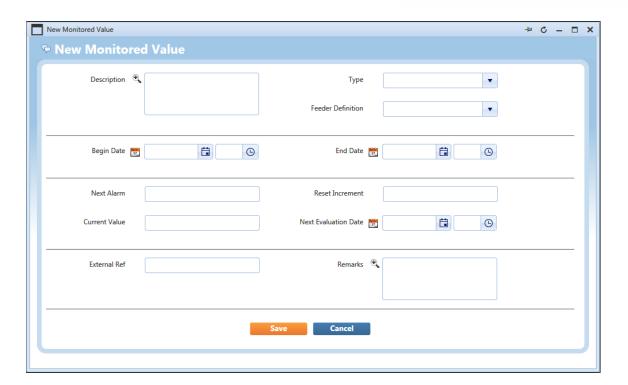
# **Setting Up Monitoring Parameters Against an Asset**

Monitoring details need to be added to an Asset via the Asset Viewer screen - Monitored Values tab. The capture fields in this screen change according to the value you select in the **Type** field. The Monitored Value Type you select will be one of;

- Threshold Value a single threshold value, i.e. upper limit.
- Range a threshold value range, i.e. upper and lower limits.
- Fault fault monitoring, i.e. Yes or No.

Select -Add Monitored Value





# Single (Upper) Threshold Value

Add the details as follows:

#### **Description**

A description of the monitoring parameters for this Asset.

#### Type

Select a Monitored Value Type. In this instance, the Type you select should be for a <u>single (upper)</u> threshold value.

#### **Feeder Definition**

Select a unit of measurement from the drop-down list. (Feeder Definitions can be added and maintained in the General Reference Data screen).

### **Begin Date**

Date and time when monitoring is to start.

# **End Date**

Date and time when monitoring is to end.

# **Next Alarm**

This value is the point at which an alarm is to be raised.

- If the Next Alarm Value is breached by a current value fed into the system either manually or automatically this will result in the monitored value going into alarm status.
- If a schedule is associated to the alarm this will affect the planned activities. An alert can be raised to the user that a plan needs to reviewed or a reactive event can be automatically generated and assigned to a contractor to attend to.



 If a Reset Incremement has been defined then the Next Alarm value will be automatically calculated and updated following an alarm.

**Reset Value** (This field is enabled if the 'Monitored Value Reset Type' is 'Reset and Clear'). Defining a Reset Value enables QFM to recalculate the Current Value value following a breach of the monitored value. If the Next Alarm value is breached, the Current Value field is automatically updated with the Reset Value, once the monitored value is reset.

**Reset Increment** (This field is enabled if the 'Monitored Value Reset Type' is 'Reset and Increment'). Defining a Reset Increment enables QFM to recalculate the Next Alarm value following a breach of the monitored value. If the Next Alarm value is breached, the Next Alarm field is automatically updated with the total of both the Current Value and the Reset Increment, once the monitored value is reset.

#### **Current Value**

This is the current monitored value. This is recorded when the monitored value is set up. Thereafter it should be maintained either manually or automatically via a recording added to the QFM app.

# Last Updated

The date/time when the Monitored Value was last updated.

#### **Next Evaluation Date**

Can be left blank.

A date defined will be when QFM will evaluate the monitored value. This field may be used by scheduled alarm processing to see whether the alarm status should be evaluated. For some implementations of Monitored Values this date can be set as part of the processing of data feeds. If it is set, then it will update the Current Value field by calculating Asset monitored values between the Last Evaluation Date and the Next Evaluation Date to identify an average value.

If a date is entered then monitoring will next take place on this date, (if the Next Alarm value is breached in between time then it will be ignored).

#### **External Ref**

Free format text. Can be used to reference with external monitoring systems providing data feeds.

### Remarks

Any related notes.

### **Monitored Values History**

Select View to display historical Monitored Values data.

Select



when you have added all the details.

# Threshold Values Range

Add the details as follows:

### Description

A description of the monitoring parameters for this Asset.

#### Type

Select a Monitored Value Type. In this instance, the Type you select should be for a <u>threshold values</u> <u>range</u>.



#### **Feeder Definition**

Select a unit of measurement from the drop-down list. (Feeder Definitions can be added and maintained in the General Reference Data screen).

### **Begin Date**

Date and time when monitoring is to start.

#### **End Date**

Date and time when monitoring is to end.

#### **Lower Limit**

Sets the lower threshold for a tolerance range. Following a recording of the monitored value, if this limit is breached then an alarm will be triggered.

# **Upper Limit**

Sets the upper threshold for a tolerance range. Following a recording of the monitored value, if this limit is breached then an alarm will be triggered.

**Reset Value** (This field is enabled if the 'Monitored Value Reset Type' is 'Reset and Clear'). Defining a Reset Value enables QFM to recalculate the Current Value following a breach of the monitored value. If the Upper or Lower Thresholds are breached, the Current Value field is automatically updated with the Reset Value, once the monitored value is reset.

**Reset Increment** (This field is enabled if the 'Monitored Value Reset Type' is 'Reset and Increment'). Defining a Reset Increment enables QFM to recalculate the Upper Limit and Lower Limit values following a breach of the monitored value. If the Upper or Lower Thresholds are breached, the Upper Limit field is automatically updated with the total of both the Current Value and the Reset Increment, once the monitored value is reset. The Lower Limit is automatically updated to the previous value of the Upper Limit.

#### **Current Value**

This is the current monitored value. This is recorded when the Monitored Value is set up. Thereafter it should be maintained either manually or automatically via a recording added to the QFM app.

#### Last Updated

The date/time when the Monitored Value was last updated.

#### **Next Evaluation Date**

Can be left blank.

A date defined will be when QFM will evaluate the monitored value. This field may be used by scheduled alarm processing to see whether the alarm status should be evaluated. For some implementations of Monitored Values this date can be set as part of the processing of data feeds. If it is set, then it will update the Current Value field by calculating Asset monitored values between the Last Evaluation Date and the Next Evaluation Date to identify an average value.

If a date is entered then monitoring will next take place on this date, (if the Next Alarm value is breached in between time then it will be ignored).

#### **External Ref**

Free format text. Can be used to reference with external monitoring systems providing data feeds.

#### Remarks

Any related notes.



### **Monitored Values History**

Select View to display historical Monitored Values data.

Select Save when you have added all the details.

# **Fault Monitoring**

Add the details as follows:

#### **Description**

A description of the monitoring parameters for this Asset.

### **Type**

Select a Monitored Value Type. In this instance, the Type you select should be for fault monitoring.

### **Feeder Definition**

Select a unit of measurement from the drop-down list. (Feeder Definitions can be added and maintained in the General Reference Data screen).

#### **Begin Date**

Date and time when monitoring is to start.

#### **End Date**

Date and time when monitoring is to end.

### **External Ref**

Free format text. Can be used to reference with external monitoring systems providing data feeds.

# Remarks

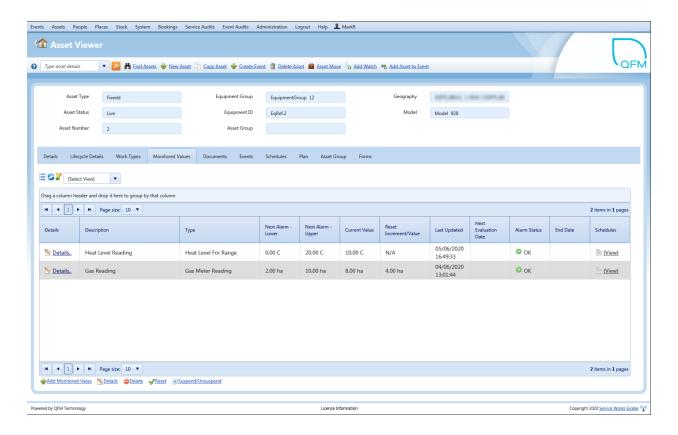
Any related notes.

Select Save when you have added all the details.

# **Monitored Values - Asset Viewer**

Once Monitored Value details are added to the Asset Viewer, they are displayed in the Monitored Values tab where they can be maintained.





### **Alarm Status**

Each Asset Monitored Value shows an Alarm Status, (for Geography (Services) this is shown in the Site Explorer, Monitored Values screen).

Alarm Statuses are as follows:

- 🦁 OK
  - Monitored Values within threshold.
- In Alarm
   Monitored Values have breached threshold.
- In Process
   QFM Event being raised following threshold breach.
- Suspended
   Monitored Values process suspended.



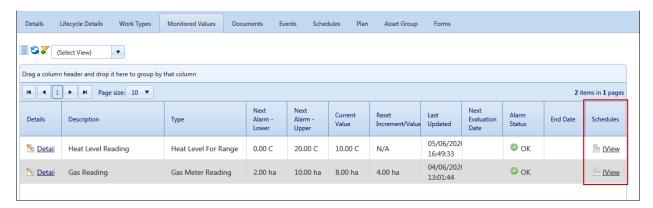
# **Associating the Asset to Planned Maintenance Schedules**

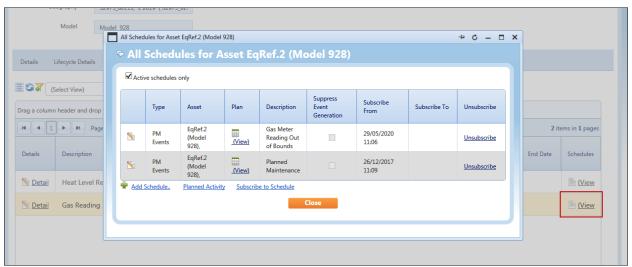
Once the Monitored Value details are set up on the Asset, the Asset should be associated with a Planned Maintenance Schedule so that if an alarm is triggered as a result of a captured value breaching a threshold or the Asset developing a fault, a remedial QFM Event (triggered activity) can be automatically generated and sent to a contractor so that they can attend to the Asset.

The Asset may also be associated with a different Planned Maintenance Schedule to automatically generate a QFM Event for the initial inspection, where the Dynamic Form will be used to capture Asset readings/data. Alternatively, the initial Event can be reactive (manually generated).

Schedules associated with a Monitored Value can be accessed from the **Schedules** column in the Monitored Values tab of the Asset Viewer.

In the examples shown below, the 'Gas Reading' Monitored Value is associated with two Schedules; one to generate the initial Event for the inspection and collection of the reading ('Planned Maintenance' Schedule) and the other to generate remedial Events for triggered activities ('Gas Meter Reading Out of Bounds' Schedule).







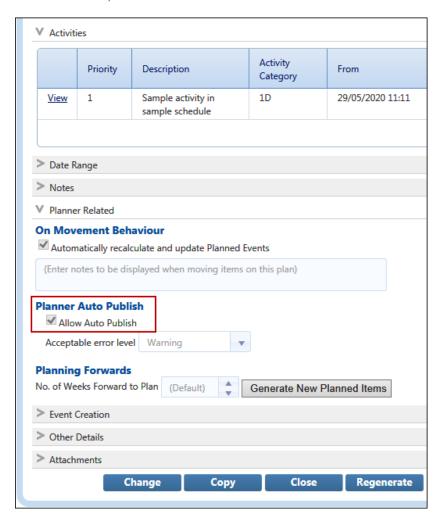
# **Schedules for Triggered Activities (Remedial Events)**

Schedules for Monitored Values triggered activities, i.e. a Schedule to generate remedial Events as a result of an alarm, should be created using the standard method. There are a small number of particular attributes which should be applied, however. These are described below.

#### **Schedule Attributes**

The Schedule should be set to 'Auto Publish', to enable QFM to automatically convert triggered activities into QFM Events (remedial).

In the Schedule, select **Allow Auto Publish** in the Planner related section.

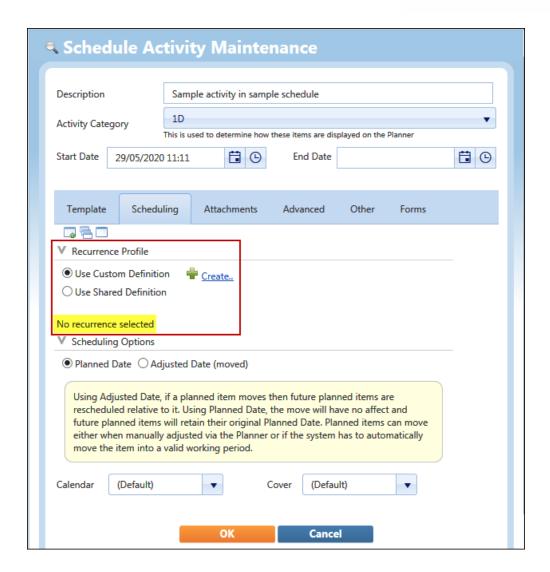


# **Schedule Activity Attributes**

The Schedule Activity should not have a Recurrence Profile applied, as the purpose is to generate ad-hoc Events (remedial) when required.

In the Schedule Activity, ensure that a Recurrence Profile is <u>not</u> selected in the Scheduling tab, Recurrence Profile section.



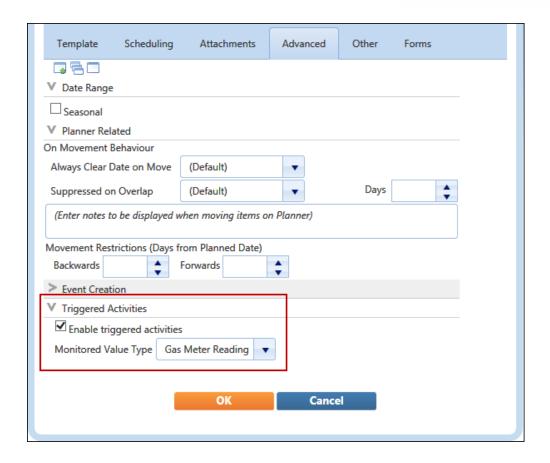


The Schedule Activity should be enabled to process Triggered Activities and be linked to the appropriate Monitored Value Type.

In the Advanced tab, Triggered Activities section;

- Select Enable triggered activities.
- Select the appropriate Monitored Value Type to link with this Schedule Activity.

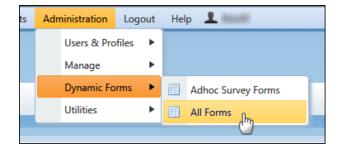




# **Setting Up a Dynamic Form for Data Gathering**

QFM Dynamic Forms enable the collection of key monitor readings in order to manage Assets for monitoring and maintenance purposes. Forms have been enhanced to allow these activities and details of the changes are shown below.

The Dynamic Forms screen is available from the Administration menu (Administration > Dynamic Forms > All Forms).



The main changes are made to Panel Controls. This is where form questions and response types are defined.





New Panel Controls are detailed as follows:



# • Minimum Value

For a Threshold Values Range, you can select the Monitored Value Type and the Lower Limit.

## Maximum Value

For a Threshold Values Range, you can select the Monitored Value Type and the Upper Limit.



#### Value

You can select to populate the form with the Current Monitored Value recorded for the Asset.

 Synchronize
 Select to update the Current Value recorded for the Asset with the new value captured on the form.

These selections are made in Variable Mode, which allows you to select the Monitored Value variables set up for the Asset. You can switch to Value Mode, which allows you to add values manually.

# **Validation Rules**

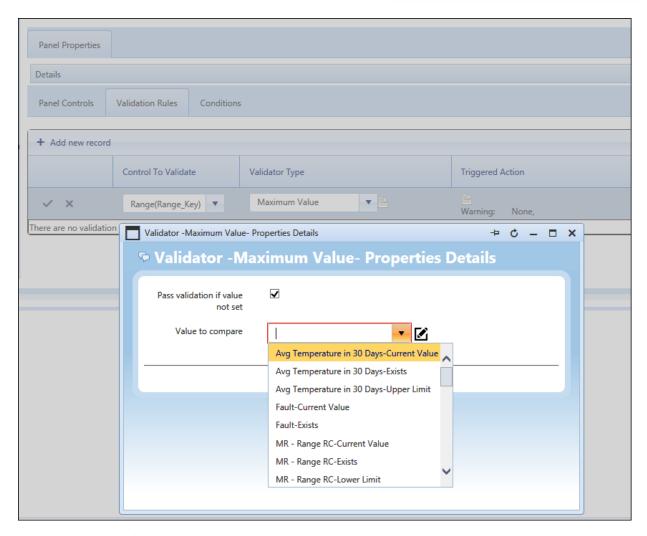
Changes are made to Dynamic Forms Validation Rules to allow the selection of Monitored Value Variables against the Validator Types of 'Compare', 'Minimum Value' and 'Maximum Value'.

Validation Rules are typically used to trigger validation warnings/messages. For Forms linked to Monitored Values, this may be to advise that a remedial Event will be generated, if a value is entered which breaches a Monitored Value Limit.

For example, when using manual number selections in the form (Panel Controls) for Min and Max Values, rather than referencing the Monitored Value variables for lower and upper limits, you can add a Validator in the Validation Rules tab and link it to the Monitored Value variables which is able to generate a message (and trigger a remedial Event). An example of this is shown below.

In this case, manually adding number values to the Min and Max Values settings in Panel Controls controls the range of numbers an operative is allowed to enter on the form, and adding a Validator (in the Validation Rules tab) which links to the Monitored Value variables, controls the generation of warnings/messages and triggered activities.





Using the Variable Mode, allows you to select the Monitored Value variables set up for the Asset. (You can switch to Value Mode, which allows you to add values manually).

# **Recording Monitor Values on the QFM app**

The Dynamic Form enhancements enable customised forms to be pushed through to an operative's mobile device, allowing them to record the monitor readings on the form in the QFM app. These custom forms can be integrated into QFM Visit workflows at different points, according to requirements. Examples are shown below.

In this screen graphic, the Monitor Value form is displayed after a standard inspection Visit has been completed.





There are two values to capture; 'Gas Pressure' and 'Current Water Temperature'. Configuration of these forms allows for an acceptable value range to be specified, so that for example, the operative can only enter a value between a pre-determined range, e.g. 1 - 100. This is in addition to alarm thresholds (upper and lower) which set the tolerance for acceptable readings and trigger an alarm if these are breached.

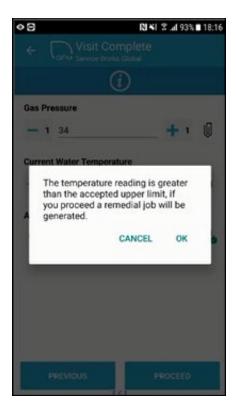
In this example, the 'Gas Pressure' Monitor Value has a lower threshold of **10** and an upper threshold of **60**. 'Current Water Temperature' has a lower threshold of **20** and an upper threshold of **80**.

In this screen graphic, the 'Gas Pressure' reading of **34** added is within the acceptable tolerance and so will not trigger an alarm. The 'Current Water Temperature' reading of **87** has breached the acceptable tolerance and so will trigger an alarm.





Once the form is signed and the **PROCEED** button is selected, a warning message is displayed, as shown below.



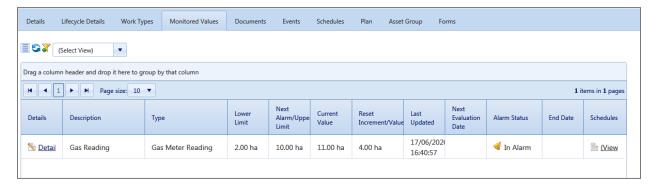


If **OK** is selected then the data is passed back to the QFM database to update the corresponding Monitored Value. The current values are updated and in this example, an alarm will be triggered for the 'Current Water Temperature' reading which will automatically generate a remedial QFM Event.

# **Triggered Activity Generation**

Once the new data is returned to the QFM database, an alarm will be triggered for any readings outside of the acceptable tolerance; this can be a lower limit or a range.

In the example below, the Asset Monitored Value Alarm Status is In Alarm, showing that the tolerance threshold has been breached.



The Alarm Status will move to process once a remedial QFM Event is automatically generated.

The Planned Maintenace Schedule defines the remedial Event details including instructions, priority, contractor etc. It can be configured to automatically notify the pre-defined contractor and the QFM Resource Scheduler can be configured to automatically allocate a Visit to an operative's mobile device.

The operative will receive the remedial Visit on their device which provides job details and instructions pre-defined in the Planned Maintenace Schedule.





### **Reset and Increment Rules**

This section explains the way in which Monitored Values are reset and incremented when the Current Value breaches a Threshold Value or Range. It applies to Monitored Values with the following attributes:

- Alarm Threshold Type of Threshold Value or Range
- Monitored Value Reset Type of Reset and Increment

#### **Threshold Value**

Defining a Reset Increment enables QFM to recalculate the **Next Alarm** value following a breach of the monitored value. If the **Next Alarm** value is breached (i.e. the **Current Value** is greater than the **Next Alarm** value), then the Monitored Value will go into 'In Alarm' status. Following remedial action and after the **Current Value** is reset with the latest reading, the **Next Alarm** field is automatically updated with the total of both the **Current Value** and the **Reset Increment**. The Monitored Value will now go into 'OK' status.

#### Range

Defining a Reset Increment enables QFM to recalculate the **Upper Limit** and **Lower Limit** values following a breach of the monitored value. If the **Current Value** breaches the **Upper Limit** or **Lower Limit**, then the Monitored Value will go into 'In Alarm' status. Following remedial action and after the **Current Value** is reset with the latest reading, the **Upper Limit** field is automatically updated with the total of both the **Current Value** and the **Reset Increment**. The **Lower Limit** is automatically updated to the previous value of the **Upper Limit**. The Monitored Value will now go into 'OK' status.



Licence Information

# **System Configuration**

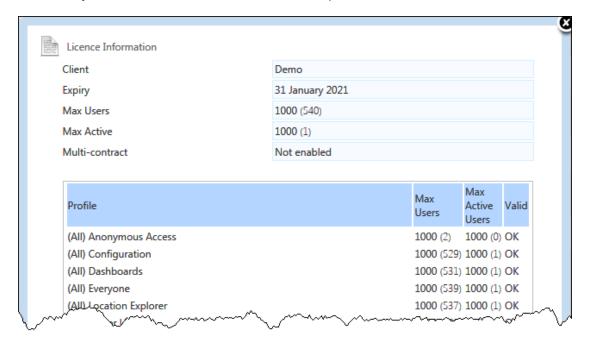
There are a number of administrative processes which need to be correctly configured in order to enable the new Monitored Values features.

# **Software Licence**

The ability to use the new Monitored Values features with the QFM app is available under a separate QFM software licence; **(FM) Mobile Asset Data Collection**.

(RB) Normal	1000 (529) 1000 (1) OK
(RB) Selfservice	1000 (529) 1000 (1) OK
(FM) Mobile Asset Data Collection	1000 (529) 1000 (1) OK
(Survey) Event Audit	1000 (529) 1000 (1) OK
(Survey) Services Audit	1000 (529) 1000 (1) OK

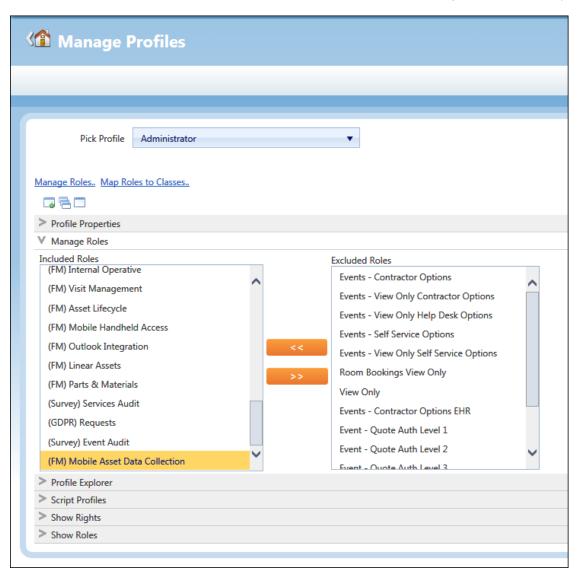
You can establish the features included in the licence by selecting at the foot of each QFM screen. This link opens a Licence Information window showing a list of all licenced functionality for the datatabse, as shown in the example below.





# **User Profile**

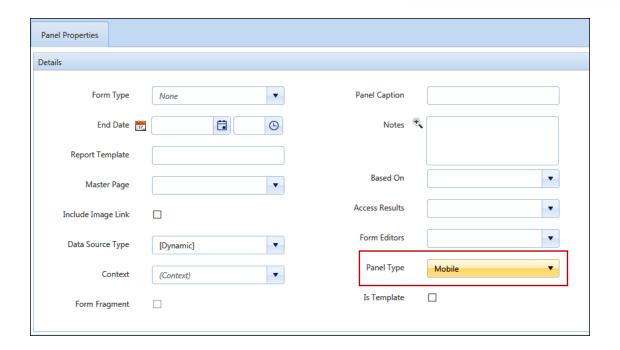
In order to use the new Monitored Values features with the QFM app, the **(FM) Mobile Asset Data Collection** Role must be added to the Profile to which users are attached. (Refer to the example below).



# **Dynamic Form Setup**

When setting up a new Dynamic Form for to capture Monitored Values on the QFM app, the **Panel Type** must be set for **Mobile** only.



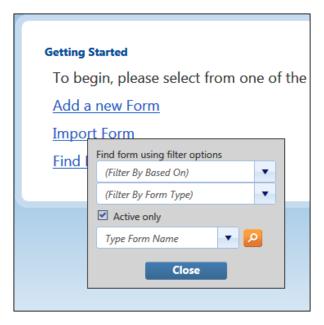




# **Dynamic Forms Enhancements**

# **Overview**

The Dynamic Forms screen is enhanced to support an improved initial user experience by incorporating upgraded start-up options and navigation to existing forms.



Features and benefits include:

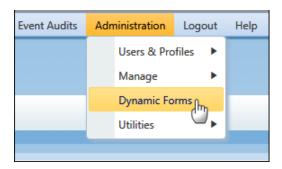
- System performance is greatly improved due to a more efficient and streamlined design.
- One single option for Dynamic Forms on the Administration menu.
- The screen renders to the resolution available and the key edit areas adjust in size to suit the available space.
- The Tree view now only loads for the active form and can be used more effectively to re-order controls.

# Introduction

Changes are made to the Dynamic Forms module to support enhanced performance and ease of use.



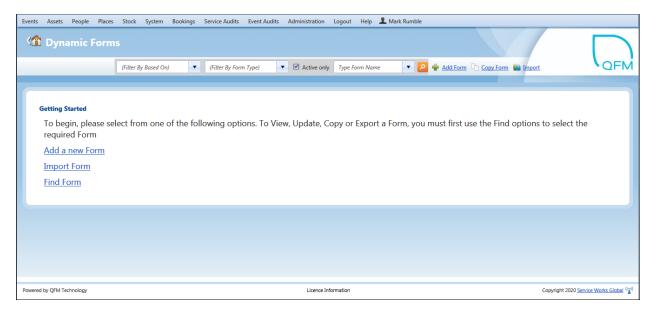
There is now a single option for Dynamic Forms on the Administration menu.



The main screen is redesigned to provide improved initial user options to add a new form, import a form (.xml survey file) or search for an existing form. The Tree view only loads for the active form and can now be used more effectively to re-order controls. The screen now renders to the resolution available and the key edit areas adjust in size to suit the available space.

These adjustments maintain ease of use and have also enabled the removal of some unnecessary background processing which improves the system performance.

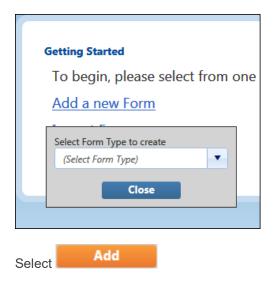
**Note:** The ability to Add a new form and Import a form are available to users with the appropriate user access rights, i.e. allowed to add a new Dynamic Form.



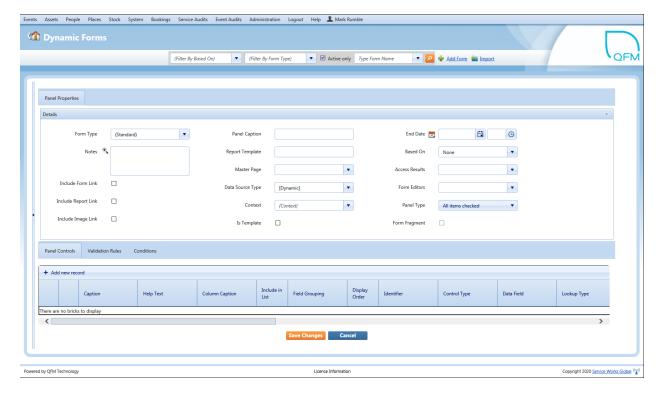
# Adding a New Form

- 1. Select the Add a new Form link.
- 2. Select a Form Type from the drop down list.





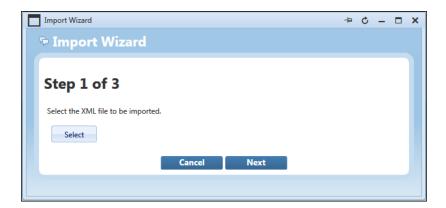
You can now add a new Dynamic Form.

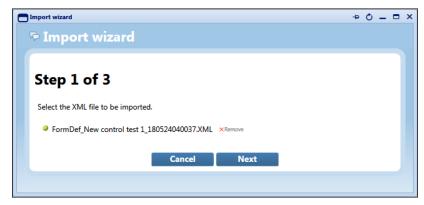


# Importing a Form

1. First, select the file to be imported then Select Next.





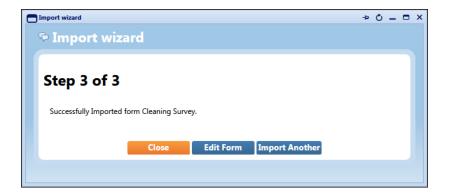


**2.** select to replace an existing form or create a new form. Select **Import**.



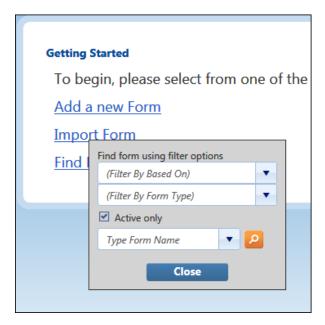
**3.** The form is confirmed as imported.





# **Searching for an Existing Form**

- 1. Select the Find Form link.
- 2. There are several attributes on which you can search.



# Based On

Filter by QFM entity.

# **Form Type**

Filter by the category of form.

### **Active Only**

Tick the box to display active forms only (i.e. forms which are not end-dated).

### **Form Name**

Select an existing from name.



- Search for a form.
- 3. Select a filter from either Based On or Form Type.
- **4.** Next, select a **Form Name**. The options available to select are restricted to those for your **Based On** or **Form Type** selection. You can remove the tick in the **Restricted** box to display all forms.

The form is automatically displayed.



## **Support for TLS1.2 Email Processing Protocol**

### **Overview**

The QFM Workflow Scheduler notification feature can now use TLS1.2 encryption protocol to connect to the SMTP server when sending email notifications. This will ensure that the Workflow Scheduler notification feature can use an O365 connection, as Microsoft is dropping support for previous TLS versions for their O365 SMTP connector.



## Visit Remarks Appended in Chronological Order

### **Overview**

The order in which Remarks added to Event Visits are updated to the main Event screen, is now available for users to define. Most recent Remarks can be added to the top of any existing Remarks, or below a list of Remarks.



\*\*:Contractor 1003\_Operative 3007 05/08/2020 16:25:00-05/08/2020 16:50:00 ( UTC+2)

Attended site. Fixed issue with equipment. Job now completed.

\*\*505716/V006:Contractor 1000\_Operative 3000 8/5/2020 3:34:00 PM-8/5/2020 3:34:00 PM ( UTC+2)

505716/V006 \*\*

Features and benefits include:

- Greater flexibility to choose the order in which Visit Remarks appear in the main Event screen.
- Easier to see the most recent updates to a QFM Event. This can be particularly important where there may be many separate notes.

### Introduction

Users are now able to determine the order in which Visit Remarks are added to the main Remarks window in the Event screen. The sequence can be set to chronological order (newest remarks at the top of the list) or reverse order (newest Remarks at the bottom of the list).

A new General Setting is added to enable administrators to define the preferred order.

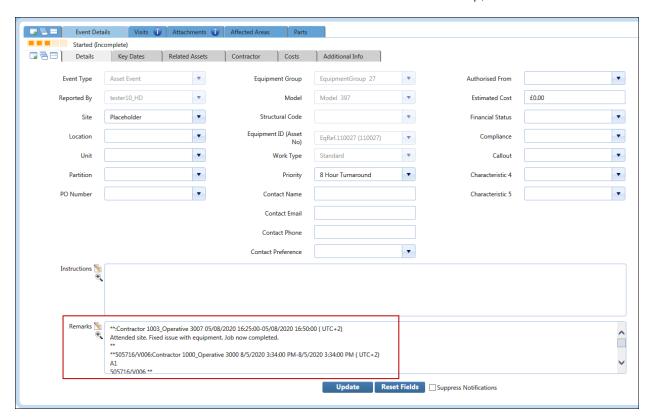
This feature applies to Visits added in the QFM web-based system and the QFM app.

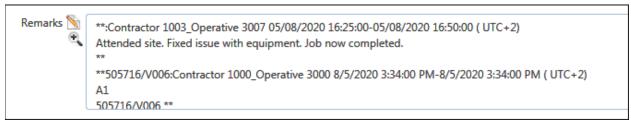
In the example below, Remarks have been added to an Event Visit.





The QFM system is configured to place Visit Remarks at the top of the main Remarks window in the Event screen. Once the Visit record is saved the Remarks are shown at the top, as shown below.







### **System Configuration**

A new General Setting, shown below, controls the order in which Visit Remarks are added to the main Remarks window in the Event screen.

**Note:** This setting is available for the Global User Class only.

General Settings are available from the Administration menu; Administration > Users & Profiles > General Settings.

#### **General Event Logging**

- Input/View
  - Put new Visit Notes at top of Event Remarks
     When set to On, the latest Visit Remarks are added to the top of the main Remarks window in the Event screen. (When set to Off Remarks are added underneath any existing Remarks).



Note: The Put new Visit Notes at top of Event Remarks setting works in conjunction with the existing Aggregate Visit Notes on to Event setting.

**Aggregate Visit Notes on to Event** controls whether Remarks added to Visits are updated to the main Event Remarks on the Event screen.

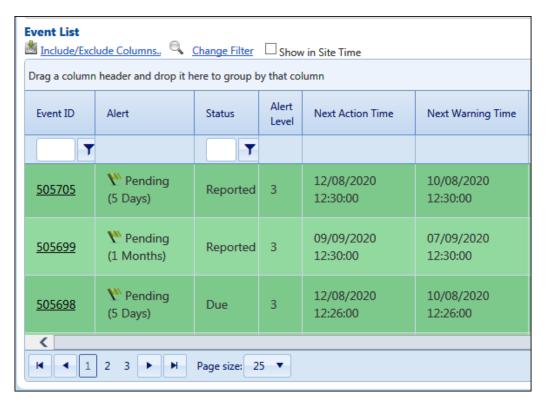
**Put new Visit Notes at top of Event Remarks** controls the order in which Visit Remarks are placed in a list (top or bottom).



### **General Improvements to Event Director**

### **Overview**

A number of behind the scenes improvements have been made to Event Director, enhancing system performance.



Features and benefits include:

- Data is now only refreshed when necessary and on demand increasing the speed of user interaction.
- Only key data columns are displayed in the main grid, when the screen is initially loaded. This
  results in improved system performance.

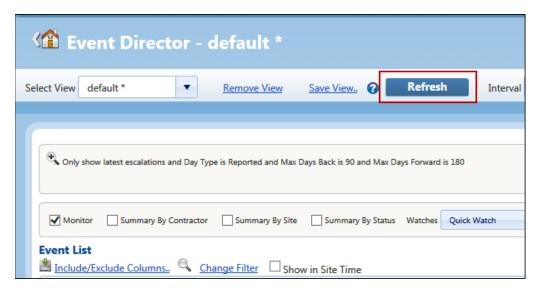


#### **Data Refresh**

A collection of minor enhancements based around the way in which the Event Director screen refreshes data, (i.e. updates between the web page and the central server) is added. By using a more efficient method for refreshing data, general system performance is improved.

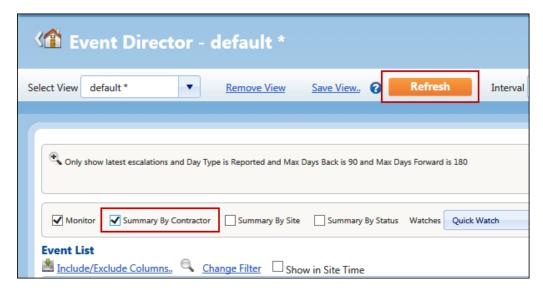
The changes mean that QFM will clearly indicate when a refresh is now required. Previously, when a filter was changed or updated and it was necessary for users to use the 'Refresh' button to apply the changes, it was not visibly obvious that a data refresh was required.

Now, the 'Refresh' button shows blue (instead of orange) by default, as shown in the example below.



When a refresh is required (e.g. a column edit or a filter edit is made), the 'Refresh' button changes to show orange, indicating that a refresh is required.

In the example below, the 'Summary By Contractor' view has been selected and therefore the 'Refresh' button shows orange, indicating a data refresh is required.

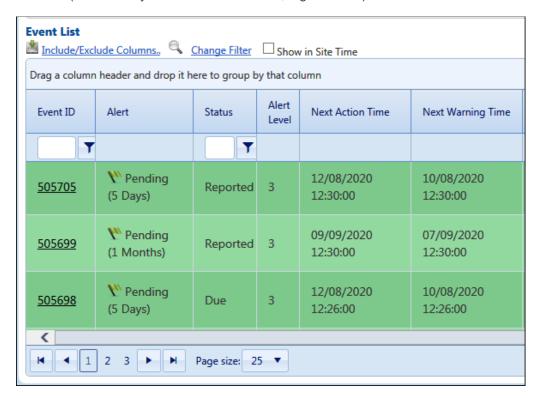


Once the user refreshes the screen, the 'Refresh' button shows blue again.



### **Data Columns**

When the Event Director page is loaded, a number of data columns from the main grid which are deemed to be less commonly used, are not initially displayed. Columns displayed in the main grid now only include those which are selected by the user (via the Include/Exclude option) plus any key mandatory columns (which the system needs to function, e.g. EventID).





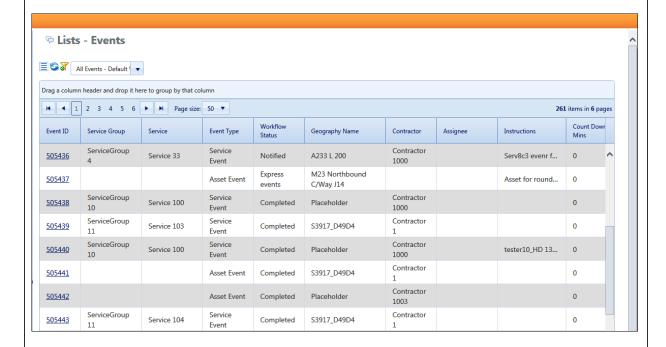
## **Data Scoping for Event and Visit List Reports**

### **Overview**

Two new QFM Event and Visit List Reports are added, which include any Data Scoping filters that are applied to a user's QFM profile.

Data Scoping restricts the records that a user has access to, for example a user with 'Contractor' access would only be able to see records (typically Events) which are assigned to them. Data Scoping for a particular site would mean that users could only see records associated with that site.

The original unfiltered Event and Visit List Reports, providing access to all records, are retained and renamed.



Features and benefits include:

- Greater flexibility to provide restricted access to QFM data via List Reports.
- Users are able to distribute reports and lists with specifically filtered and relevant data.



### Introduction

QFM List Reports are enhanced to now include any Data Scoping filters which are applied to the user's QFM profile. Data Scoping restricts the records that a user has access to, for example a user with 'Contractor' access would only be able to see records (typically Events) which are assigned to them. Data Scoping for a particular site would mean that users could only see records associated with that site.

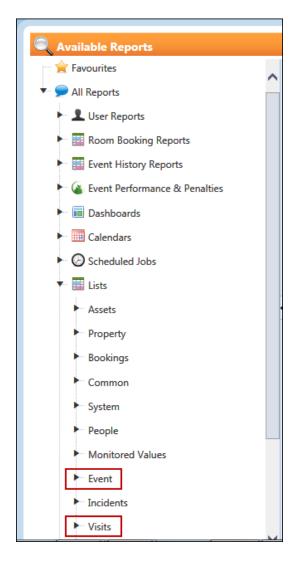
List Reports are redesigned as follows:

#### **Events**

- Events (ALL)
   Unfiltered access to all Event records.
- Events
   Event records which respect any data scoping filters applied to the user.

#### **Visits**

- Visits (ALL)
   Unfiltered access to all Visit records.
- Visits
   Visit records which respect any data scoping filters applied to the user.



The original unfiltered Event and Visit List Reports, providing access to all records, are retained and renamed.

List Reports with Data Scoping applied allows users to create links to lists and send email reports to people which contain content specific to their requirements.



### **Data Scoping Types**

Data Scoping filters can be applied in defferent ways.

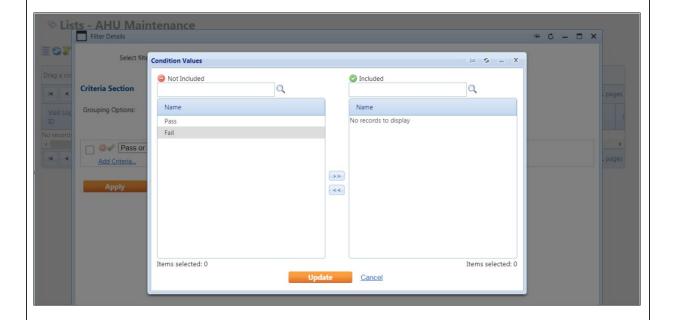
- <u>User Class Data Scoping by Region, Site and Contractor</u>; allowing users to access only the records they are allowed.
- <u>Data Scoping applied to the Self Service User Class</u>; allowing users to access only the job records they themselves have logged.
- <u>User Class Data Scoping allowing users to only view Event records from a particular status</u> onwards.
  - For example, the Contractor User Class is by default is set to 'Notified', meaning these users would not have access to any jobs assigned to them at 'Express' or 'Reported' status. This is controlled by the General Setting 'Minimum Status to View Events'.
- <u>Client Contract Data Scoping used for multi-contract databases.</u> This allows records to be assigned to a 'contract', allowing users to access only the records they are contracted to use.



## **Enhanced Filtering for Dynamic Form Lists in Report Centre**

### **Overview**

Dynamic Forms now supports extended filtering of collected data in List Reports, including the ability to filter on the responses to specific form questions. This enables greater analysis and manipulation of data collected during surveys, inspections or audits.



Features and benefits include:

- Enables the creation of pre-defined filters for information of interest, which can be saved as re-usable 'Views' to quickly access the data.
- Reference the information to trigger emails based on the data captured, for example if specific question responses require follow up action.

### Introduction

Dynamic Forms now supports extended filtering of collected data via List Reports (Report Centre). This allows you to filter on the responses to specific form questions.



This enables you to create pre-defined filters for information of interest and save these as re-usable 'Views' to quickly access the data.

You can also reference the information and trigger emails based on the data captured, for example if specific question responses require follow up action.

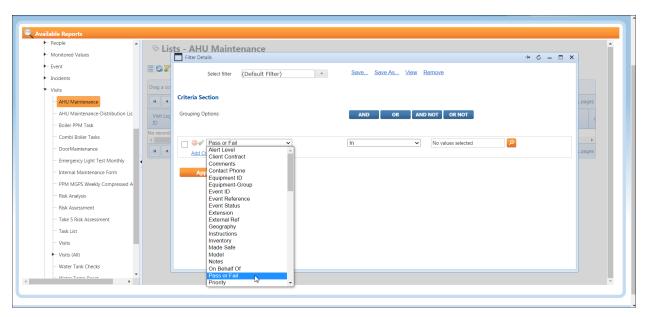
### **List Reports**

Advanced filtering is available in List Reports (Report Centre) for Events and Visits.

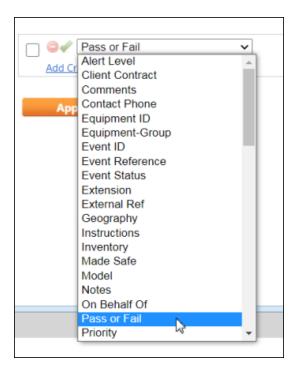
- 1. Select a List Report for Dynamic Form results.
- 2. Select the Filter control.



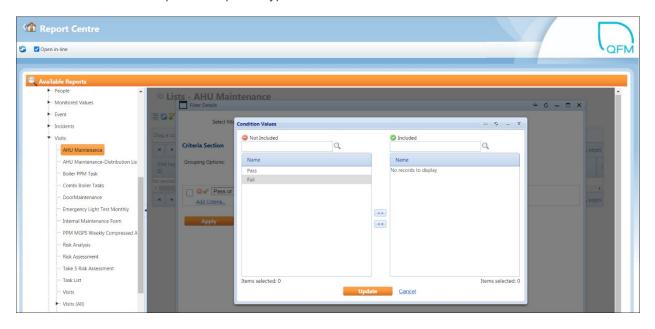
3. Select the **Add Criteria**... link then open the drop down list. In this example the 'Pass or Fail' column (question) is selected.







**4.** You can then select the specific response type to include in the filter.



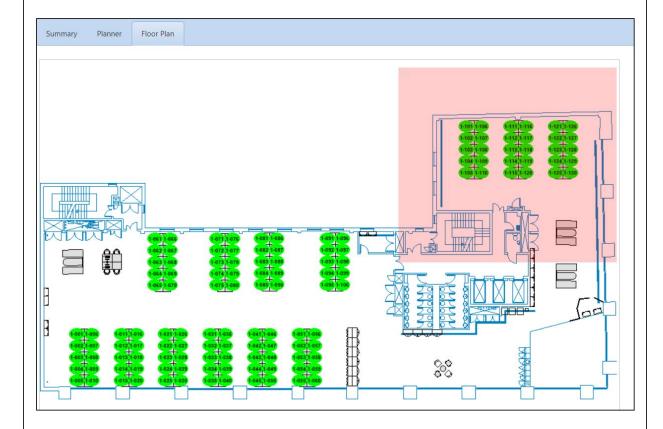


## **Bookings with Integrated Floor Plans**

### **Overview**

This new feature integrates the Bookings module with the QFM Space application, allowing users to view floor plans before booking a desk or meeting room.

During the process of selecting an area to book, users now have the ability to view the desk or room on a floor plan and can also 'zoom in' to focus on a particular area or view the wider floor.



Features and benefits include:

• Providing visual access to space plans during the booking process improves a user's ability to book their desired space.



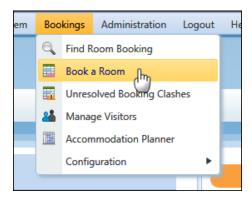
### Introduction

This new feature added to the Bookings module provides integration with the QFM Space application, allowing users to view floor plans before booking a desk or meeting room.

During the process of selecting an area to book, users now have the facility to view the desk or room on a floor plan and are also able to zoom in an out to focus on a particular area or view the wider floor. Having access to space plans during the booking process in this visual way, enhances a user's ability to make the most appropriate booking they require.

### Selecting a Desk / Room

Bookings are made in the Book a Room screen from the Bookings menu.



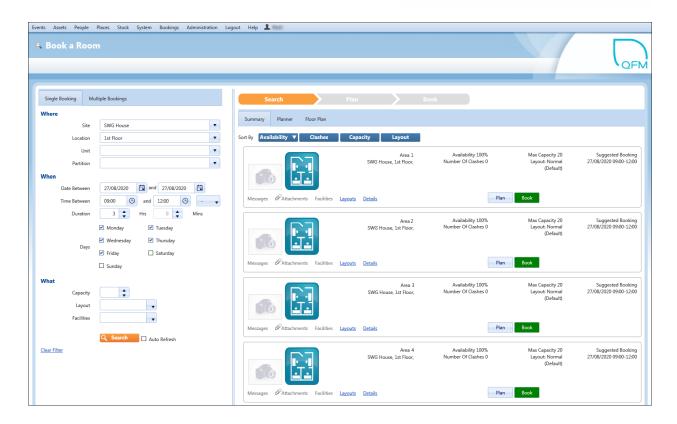
Booking search details should be added in the criteria section on the left side of the screen, as normal. Once the Search button is used, users will see two significant changes to the booking process, shown in the Summary and Floor Plan tabs.

### **Summary Tab**

In the Summary tab on the right side of the screen, a new floor plan icon is displayed for each desk/room selection option.





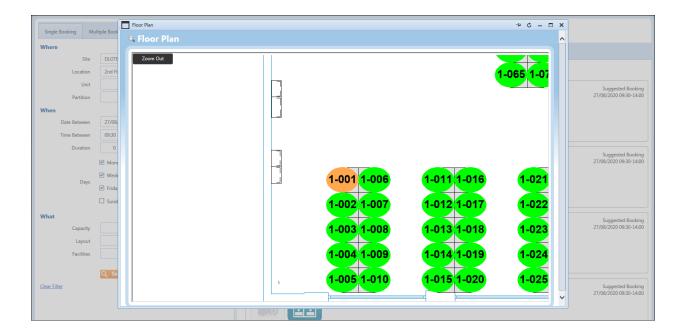


Select this icon on the required booking option to display the floor plan.



Once the icon is selected, a floor plan is displayed showing the selected option highlighted orange. Other options may be highlighted green to show they are available, and red if they are already booked. Desks or rooms not highlighted will not be available to book.





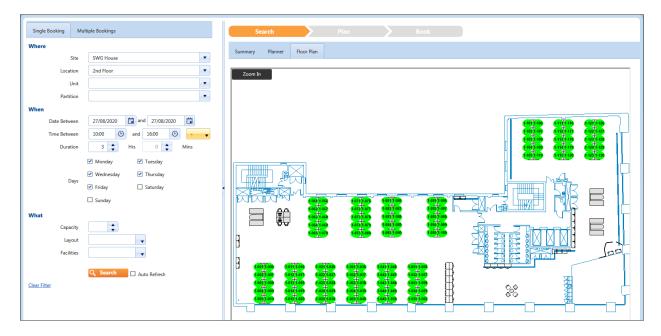
The Floor Plan window allows users to zoom out/in to alter the view.

To book this option, close the Floor Plan window then use the make the booking via the existing process.

#### Floor Plan Tab

A new Floor Plan tab is available on the right side of the screen.

If a <u>Site</u> and <u>Location</u> are selected in the booking criteria section on the left side of the screen, then a plan for the Location geography is shown in the Floor Plan tab, as shown in the example below.





This shows desks/rooms available (highlighted green) and already booked (highlighted red). Desks or rooms not highlighted will not be available to book. Bookings are made in the Summary tab via the existing process.

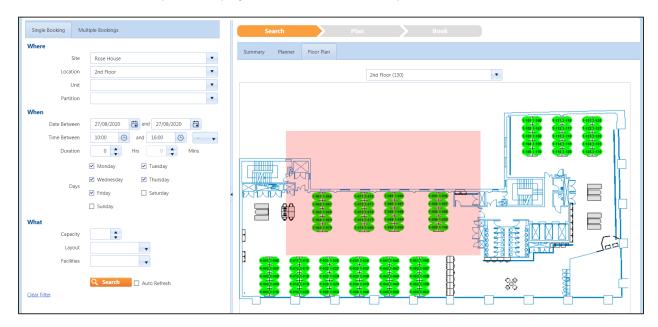
If a <u>Site</u> only is selected in the booking criteria section on the left side of the screen, then a drop down list becomes available in the Floor Plan tab, as shown in the example below.





This allows a floor plan for geography beneath the Site level, to be selected. The number of available desks/rooms is shown within brackets.

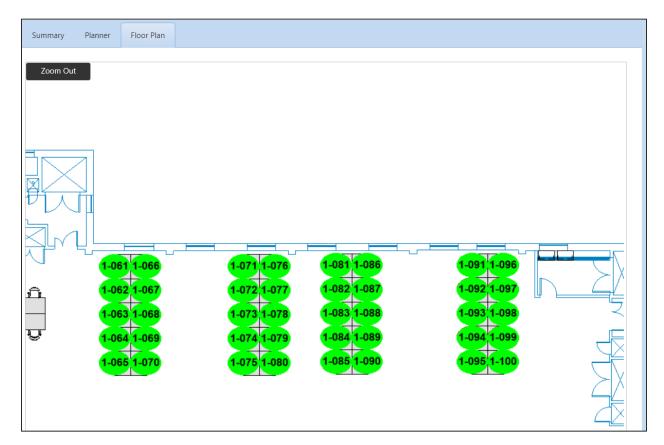
Once selected, the floor plan is displayed, as shown in the example below.



This shows desks/rooms available (highlighted green) and already booked (highlighted red). Desks or rooms not highlighted will not be available to book.



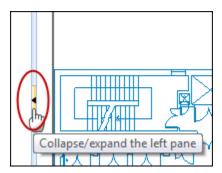
A pink shaded area may be used to select an area on which to zoom in. Simply drag the shaded area over the required portion of the plan then select it to zoom in. Location numbers are displayed when 'Zoom In' is used.



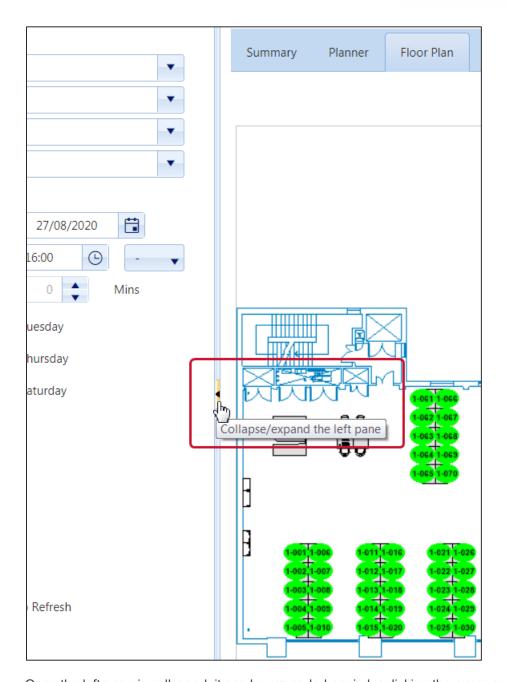
Desks and rooms may be booked in the Summary tab via the existing process.

#### **Expanding a Floor Plan**

When viewing a plan in the Floor Plan tab, the view can be expanded by collapsing the criteria pane on the left side of the screen. Simply click the arrow in the bar which separates the two panes.







Once the left pane is collapsed, it can be expanded again by clicking the arrow once more.



Licence Information

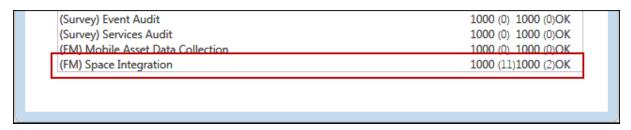
### Configuration

There are a number of administrative processes which need to be correctly configured in order to enable the new Desk Booking feature.

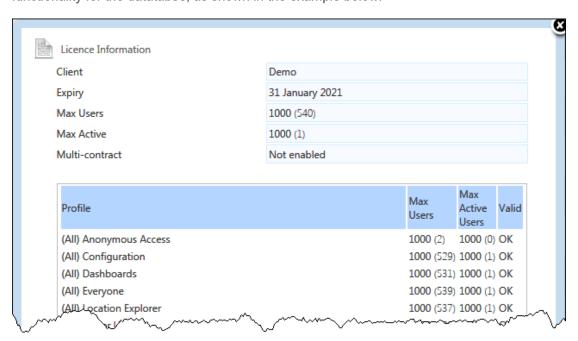
#### **Software Licence**

The ability to use the new Desk Booking feature is available under a separate QFM software licence; **(FM) Space Integration**.

Clients who upgrade to 3.0.2 will only be able to use the Bookings with Integrated Floor Plans functionality when used in conjunction with QFM Bookings and QFM Space.



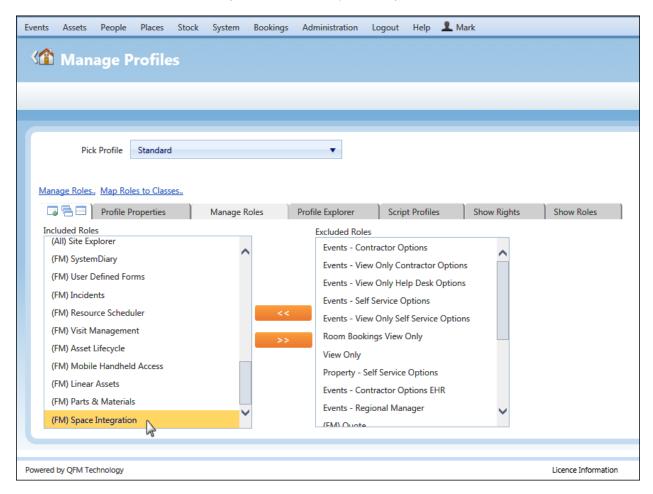
You can establish the features included in the licence by selecting at the foot of each QFM screen. This link opens a Licence Information window showing a list of all licenced functionality for the datatabse, as shown in the example below.





#### **User Profile**

In order to use the new Desk Booking feature, the **(FM) Space Integration** Role must be added to the Profile to which users are attached. (Refer to the example below).



### **General Settings**

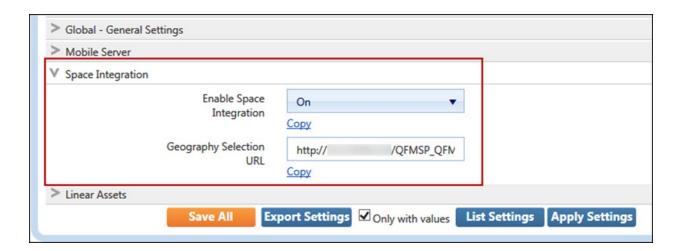
New General Settings are added to enable the use of the new Desk Booking feature, as detailed below.

#### **Global User Class**

A new **Space Integration** tab is added to the Global User Class containing two new settings, as shown in the example below.

- Enable Space Integration
  When set to On enables the use of Desk Booking functionality within the Room Booking module.
- Geography Selection URL
   Enter the default URL for the QFM Space application where floor plans are picked up.

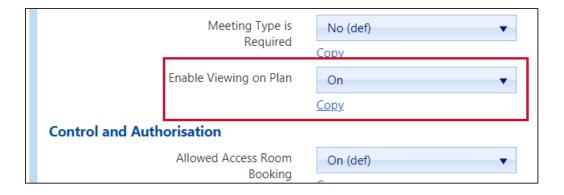




### **Settings By User Class**

A new General Setting is added for each User Class, as shown below.

• Enable Viewing on Plan
When set to On, floor plan features are enabled in the the Room Booking module.

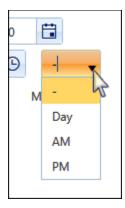




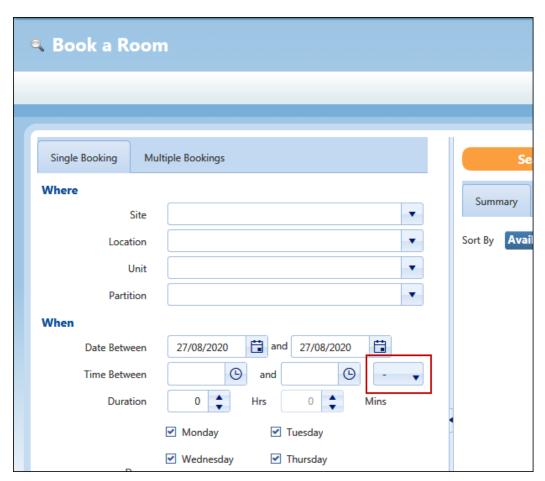
# **Bookings Search - Default Value for Booking Time Period**

### Introduction

The default value for the booking time period drop down field in now ' - '.



This allows users to choose the time range of their choice. The three other options of **Day**, **AM** and **PM** remain available to select from the list.





The four different values change the time range default values, although these times can be overwritten.





# **Known Issues**

This section details system issues which are identified in v3.00.02.00. These will be rectified at the earliest opportunity.

Please contact your SWG Account Manager for further details.

SWG Reference	Description
17276	Resource Scheduler - Auto Allocation may fail to allocate Visits when the 'End Date' is not set in Shift Calendar.
25860	Dynamic Forms - Invalid external URLs attached to Dynamic Forms can cause issues with Reports.
26739	Event Screen Survey Tab - Selected rows may remain highlighted when the user navigates to the next page.
27172	Resource Scheduler - In some cases batch confirming 200+ Visits can cause problems dispatching. Service Works recommends the maximum number of Visits to dispatch is 200.



### **QFM Installation Notices**

This release is compatible with QFM Desktop 164 versions only.

Service Works Global (SWG) does not recommend QFM is run with Internet Explorer 6, 7 or 8 browsers. Use of these lower specification browsers may result in users experiencing unstable operation, script, rendering and performance issues. SWG has no current plan to address these issues.

The Workflow Scheduler is a mandatory requirement in order to run this QFM release, as it performs essential background tasks.

SWG is not responsible for user defined reports and should a client upgrade from a non-time zone database to a time zone enabled database it is likely that their user defined reports will be affected as all times and dates will be relative to UTC not local time.

SWG strongly recommends clients review all reports against an upgraded database before relying on the output.

It is the responsibility of the client to ensure any issues are addressed, however Service Works Global may provide consultancy at the standard rates specified in the Customer Order to help the process should this be required by a client.

Please contact your SWG account manager if you need to make use of this service.

QFM includes SAP Crystal Reports runtime environment to enable users to benefit from integrated web based reporting. Clients should refer to the SAP website (www.sap.com) to understand the full strengths and capabilities of the product. SWG will make best endeavours to help support and resolve any issues that arise in this environment but as it is a third party product SWG does not provide any warranties over its abilities or functionality. SWG will aim to implement new patches to this software as they become available and are viewed as stable. It is the client's responsibility to ensure that any bespoke user reports work within the environment provided. Furthermore, extensive concurrent use of reporting within QFM can negatively impact the performance experienced by interactive users. This should be monitored and controlled accordingly.

Please note that clients wishing to upgrade to v3.00.01.37 and above will be required to upgrade Crystal Runtime to 13.0.27. For users with multiple installations on the same machine, all instances will require an upgrade to v3.00.01.37. Please speak to your SWG Account Manager to discuss specific requirements or to raise any concerns. Additionally, clients who wish to upgrade to 64bit will also require all custom Crystal Reports to be updated. SWG will upgrade all standard reports within the core product and provide clear directions to users who have additional custom reports not maintained by SWG.

Furthermore, whilst 32bit does not currently require Crystal Reports to be upgraded, it is recommended that Crystal Reports which use TTX are upgraded, as these are no longer supported by SAP and SWG cannot guarantee future 32bit runtimes will be backward compatible.

QFM utilises some 3<sup>rd</sup> party components, as listed below, in order to provide extended functionality. Use of these products may be subject to separate license agreements with the specific vendors/service providers. Use of these 3<sup>rd</sup> party components is not covered under the QFM licensing agreement with SWG. It is the client's responsibility to ensure that they have up to date licensing for these specific 3<sup>rd</sup> party products before they are used within the QFM product.

Crystal Reports (http://www.sap.com/uk/solutions/sap-crystal-solutions/query-reporting-analysis/sapcrystalreports/licensing/index.epx)

Google maps (https://developers.google.com/maps/licensing) (a business license may apply)

QFM is designed to be run on a range of devices such as tablets and smartphones. These devices may have little or no native support for certain features such as printing, Skype, Facetime, Telephony, etc. QFM does not limit the use of these features but their use is not supported under the standard QFM license agreement.



Please note that support for some Self Service user profile settings has changed. A default value of zero is no longer supported for the following administration settings applied to the Self Service user profile:

- Priority
- Worktype
- Service
- Service Group

Users with a Self Service profile will no longer be able to save events if their default values have not been updated. Client organisations upgrading to version 1.29 onwards should check these Self Service default settings to ensure they have a value other than '0', as '0' is no longer supported.

Users who use Self Service express event logging should validate that the process is unaffected. If any issues are encountered, users simply need to check the aforementioned settings and replace any values of '0'.