Release and Installation Notes BEM 11.24.0

Document version 1: 14 October 2024.

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BEM and Toolbox Updates

To avoid any incompatibility problems and to enable all facilities, the Toolbox program you are running should have a minimum version of 3.23.1.

Changes from 11.23.3 to 11.24.0

14-Oct-24

Version 11.24.0 updates the rules for Pump Track World Championships (Class Codes PT-WC-OS-16 and PT-WC-OS-32) to the as yet unpublished requirement to have the start list order for Open Session stages based on lap times from the previous stage with the fastest rider starting last.

Changes from 11.23.2 to 11.23.3

28-Jun-23

Version 11.23.3 is a maintenance release correcting an error with sort order by plate for Single Run Pump Track inadvertently introduced in the previous upgrade.

Changes from 11.23.1 to 11.23.2

19-Jun-23

Version 11.23.2 is a feature release adding compliance with the 2023 Pump Track World Championship event format rules.

2023 Pump Track World Championship Rules event format is:

- On entry, riders allocated race numbers reflecting the current world championship ranking.
- A Seeding Run in Open Session format determines the start order for all subsequent stages.
- Start order for the Seeding Run is with from lowest to highest race number. I.e. highest ranked rider starts first.
- Race numbers are changed after the Seeding Run to reflect times from that stage with the fastest time being allocated plate 1.
- A Qualifying (Round 1) Round in Open Session format with the fastest 16 riders progressing to the Elimination Stages.
- Start order in the Qualifying and all subsequent stages are in reverse order of the Seeding Run rankings. I.e. highest plate starts first.
- Round of 16, Quarter and Semi Finals in Open Session format.
- Small and Big finals in Single Run Format.

The format is managed in BEM, RRD and Series programs with two new Class Codes.

PT-WC-OS-16	Pump Track World Championship Rules. Open Session format for Seeding run, Qualifying	
	run and knock-out stages. Small and Big Finals in one on one format.	
	Highest stage transfer from Time Run irrespective of entry numbers is Round of 16.	
PT-WC-OS-32	Modified Pump Track World Championship Rules. Open Session format for Seeding run,	
	Qualifying run and knock-out stages. Small and Big Finals in one on one format.	
	Highest stage transfer from Time Run irrespective of entry numbers is Round of 32.	

Changes in previous release from 11.22.7 to 11.23.1

21-Dec-22

Version 11.23.1 is both a feature and maintenance release with rule compliance changes for

- UCI BMX 2023 rules.
- AusCycling 2023 BMX rules.

Note that the UCI MTB Rule Changes applicable from 01.01.2023 for MTB-XCE, MTB-ENDURO and Pump Track are administrative changes only and therefore no BEM update is required.

BEM, RRD & SERIES

UCI 2023 BMX Rule Changes

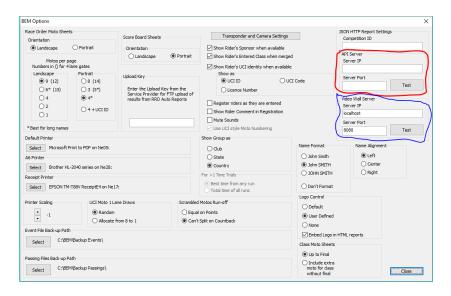
Compliance update for the UCI BMX World Cup transfer changes applicable from 01.01.2023.

AusCycling 2023 BMX Rule Changes

Compliance update for the AusCycling BMX Event Code sanctioning changes applicable from 01.01.2023.

JSON API and VideoWall

Added new controls to give separate IP and Port details for the JSON API and Moto Sheets Video Wall interfaces in BEM and RRD.



Series

Corrected a problem where Series Ranking could be shown as lowest points first instead of the highest points first when the "No Tie Break" option is selected.

Changes previous release from 11.22.4 to 11.22.7

18-Oct-22

Version 11.22.7 is both a feature and maintenance release, wrapping up changes made in beta test versions 99.22.5.0 through to 99.22.5.3 plus a couple of reliability improvements.

As the beta versions had a limited distribution, changes listed here are from 11.22.4 to 11.22.7.

BEM, RRD & SERIES

TIME TRIAL – New Facilities

In previous versions of BEM, the Time Trial provided for 1 or 2 runs (without a SuperFinal) with operator selection where there were two runs for either the best time or cumulative times to be used. With a SuperFinal there was 1 run only to qualify for the SuperFinal.

With this update, a maximum of 3 Time Trial runs are possible or 2 Runs plus SuperFinal. Note that not all Class Codes allow for 3 Time Trial runs. E.g.

- Pump Track with an Open Session format can only have 1 Time Trial run specified in BEM as the best time only from all runs is imported from BemTrain or Orbits into BEM.
- Pump Track Head to Head Dual format can only have 2 Time Trial runs, i.e. 1 each on the A and B circuits.
- Under the Class Code "TT" a new Super Final Finals Code has been added, "SF-MAX" allowing the operator to specify the Maximum number of riders to qualify for the SuperFinal from the preceding 1 or 2 Time Trial runs.

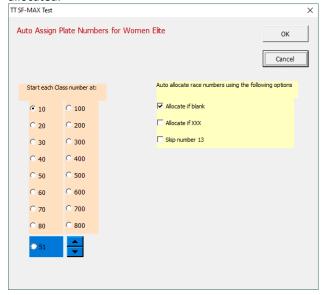
The settings available with Class Code of TT with the new Finals Code SF-MAX allow the following configuration:

- A SuperFinal will be drawn when the class meets the minimum riders for SuperFinal setting which has a range of 1 to 12. (Default of 12 per original UCI SuperFinal rules).
- The number or riders transferring to the SuperFinal will be from 1 to the maximum riders to transfer setting of 2 to 16. (Default of 5 per USA BMX requirement).
- The Finals Code of SF now allows for a lower number of riders to qualify for the SuperFinal as per the following table.

BEM Min_SuperFinal Setting	Number in Class	Number in Super Final
	Less than 12	0
12	12 to 15	6
(UCI Rule Compliant)	16 to 23	8
	24 or more	16
Less than Min_SuperFi		0
	1 to 2	1
	3 to 4	2
1 to 11	5 to 8	4
	9 to 11	6
	12 or more as per UCI rule	
	(above)	

Race Number Allocation

The existing auto Race Number Allocation has been extended, allowing start numbers up to 999 to be allocated.



- Operator generated JSON reports and JSON reports sent to the JSON API now includes a new field, "CompetitionRound" which has the round number in round specific reports, e.g. Qualifying 1, Semi Final etc and will be blank for non-round specific reports such as Full Results.
- For Class Code of TT, added selection of three start order options for the Time Trial runs matching those for MTB XCE.
- Added protective patch to avoid a debug stop should an error be returned from calls to Windows API dwMilliseconds.
- JSON reports sent to the JSON API now accept HTTP 200 as a valid response in addition to the previous HTTP 202 response.
- Update to the Riders by Country report to include the rider's UCI ID.
- Corrects a debug error when doing a rider search in Review Entries where none of the entries have data in the Last Name field.
- Corrects a debug error in Review Entries when clicking on Update Details when the First and Last Name fields are blank.
- Corrects a problem where Time Trial 2 was not always included in the race list reports.
- Default Score Code for Pump Track was wrongly specified to DNS=LANES instead of the expected DNS=OUT.
 - With this correction, the options have been expanded for Pump Track for the operator to specify either DNS=OUT or DNS=LANES.
- Corrects a fault where the Competition Round was not shown in JSON Start List reports for Pump Track Open Session elimination stages.
- Add the Competition Round in JSON Time Trial Results where there is only one TT run.

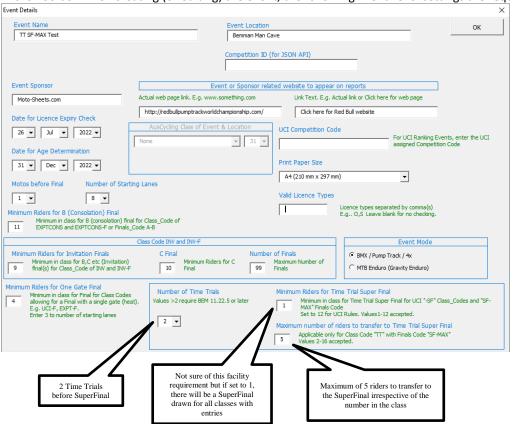
Typical Setup – USA Time Trial Requirement

The following setup is how the anticipated requirements for the USA stand-alone Time Trial event is set up to have 2 Time Trial runs with a maximum of 5 riders transferring to a Time Trial SuperFinal.

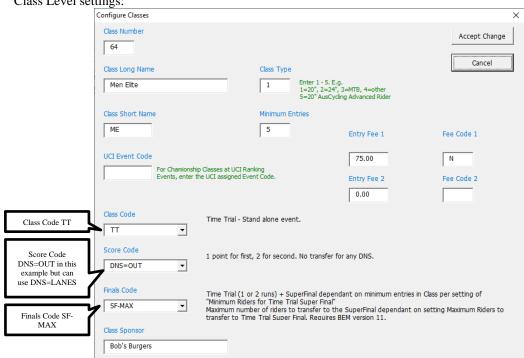
Assumption is that all categories will run under the same format.

Event Setup in the Toolbox

• In the Toolbox when creating (or editing) the event, the following Event Level settings are required:

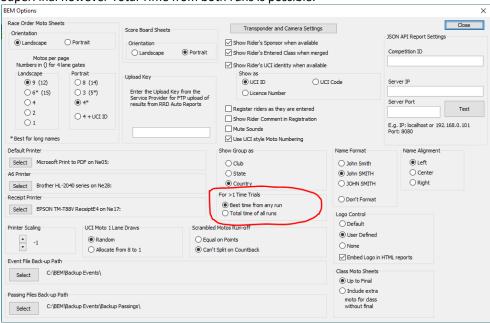


• Class Level settings:

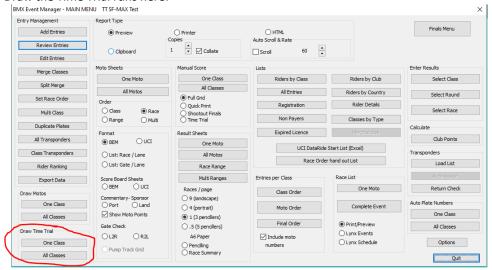


Event Setup in BEM

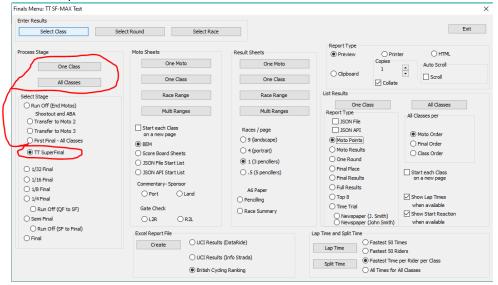
• Presumption is that the Best time from the two Time Trial runs will be used to qualify for the SuperFinal however Total Time from both runs is possible.



• Draw the Time Trial runs here:



• Draw the SuperFinal here once both Time Trial runs are scored.



Installation Procedure for the BEM version 11.24.0 Package.

Please do not proceed with the installation unless you have both your Registered User Code and the Upgrade Code applicable to this version.

Should you wish to purchase an upgrade to the 11 series or have purchased an upgrade and do not have your User or Upgrade Codes, please contact lyndon@moto-sheets.com

Open the downloaded 2c BEM 11 Production 11-24-0.zip file and save the 2c BEM 11 Production 11-24-0.msi file in any convenient location.

Any BEM installed with a version commencing with 11 MUST be removed via Control Panel, Programs and Features before installing this update.

E.g.

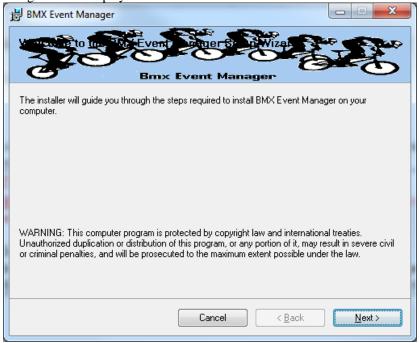
Uninstall or change a program

To uninstall a program, select it from the list and then click Uninstall, Change or Repair.

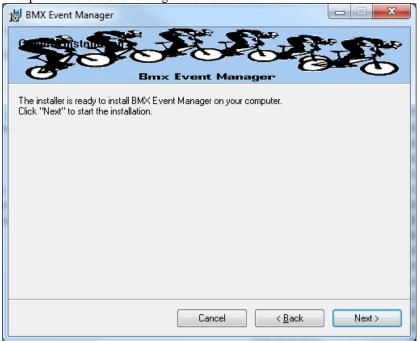


Double click on the **2c BEM 11 Production 11-24-0.msi** file saved earlier (see page 11) to start the installer.

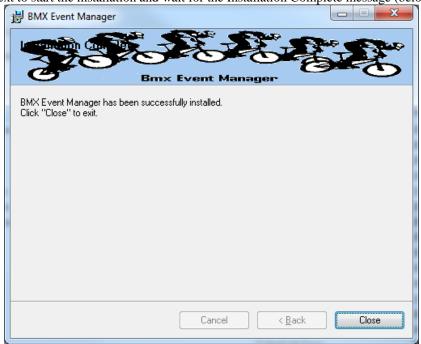
The following screen is displayed.



Click Next to proceed and the following screen is shown.



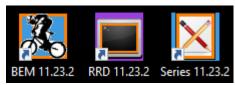
Click Next to start the installation and wait for the Installation Complete message (below).



Note that the installation is hardcoded into the folder structure: C:\BEM\Programs\Event\3.11.x\ for BEM and Series programs C:\BEM\Programs\Report\3.11.x\ for the RRD program.

If not done previously as per step 2.1 on page 27 of this document, Office 2007 and Office 2010 users should include the path C:\BEM\Programs in the Excel list of trusted locations.

The installation procedure installs the BEM, RRD and Series programs, adds the BMX Event Manager group in the Programs Menu and provides shortcuts on the Desktop.



Note: if the shortcuts are added but with default rather than the custom icons, please contact lyndon.downing@bigpond.com for assistance to resolve this issue.

Double click on the BEM icon to start the program.

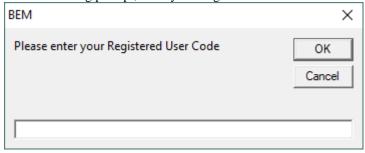
Note that the registration status at the top left of the screen will always show "Unlicenced Copy" before the language selection is made



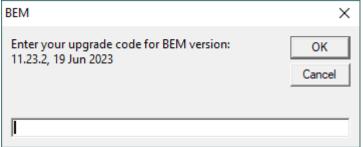
Select the required language option then click OK

If you do not have a Registered User Code or Upgrade Code for this version then please contact lyndon.downing@bigpond.com

At the following prompt, enter your Registered User Code



At the following prompt, enter your upgrade code:



The BEM version and your PC's Excel version and build details will then be shown.

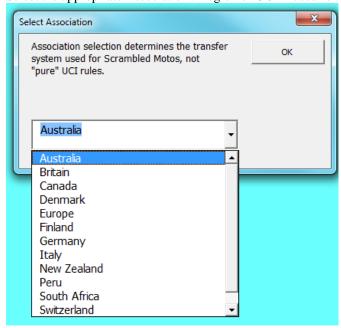
Check that your BEM version and date is as shown below.



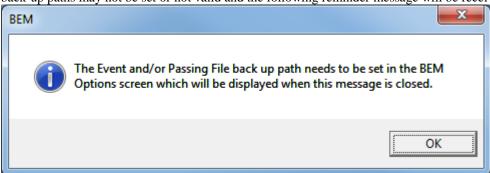
The banner also includes the Excel version and Build numbers running on your computer as a quick check that you have the latest Microsoft Office updates installed. If you do not have versions at least matching the following, there is a good chance that your version of Excel is not up to date and may result in unpredictable operation of the BEM program.

Version	V Build	Comment
11.0	8404	Excel 2003, Service Pack 3+
(12.0	6762	Excel 2007, Service Pack 2+
14.0	7268	Excel 2010, Service Pack 2+

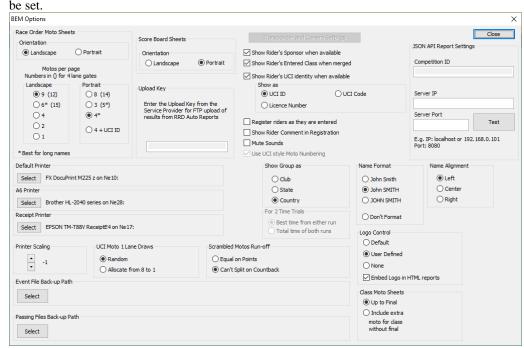
Select the appropriate Association / Region or UCI if used for other than the listed Associations.



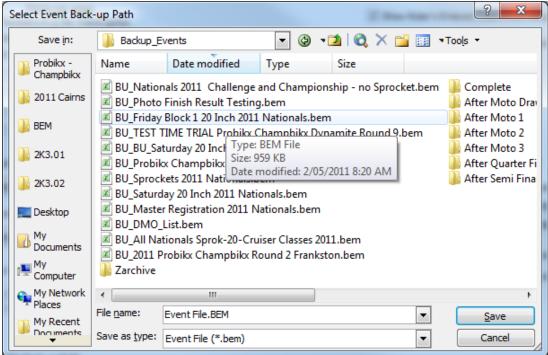
Note that the first time the BEM program is run as a first installation, the Event Files and Passing Files back-up paths may not be set or not valid and the following reminder message will be received.

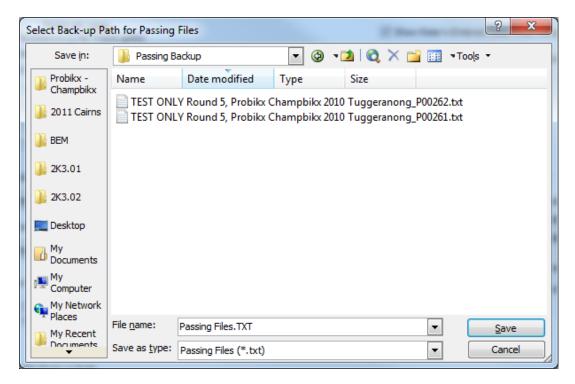


Note that the Event File Back-up Path and Passing Files Back-up Path are blank and need to

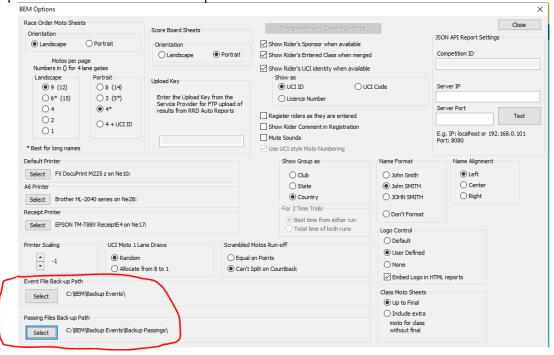


If you recoded the settings from an earlier version BEM installation restore those settings now. To select the paths, click on respective **Select** button, navigate to the required back up folder and then click on the **Save** button.





Options screen shown with the Back-up Paths selected.



Once the Event File Back-up and Passing File Back-up paths are selected and the Scrambled Motos Run-off setting is made you can close the options screen and select an Event File.

NOTE: settings for the SportsLists **Upload Key** and JSON API **Competition ID** can only be made once an event file is opened.

Earlier Changes

Changes from 11.22.3 to 11.22.4

28-June-2022

BEM, RRD & SERIES

- Correction to the building of the Race List when two Time Trial / Pump Track Qualification stages are specified.
 - Note that scoring was not impacted by the issue being corrected.
- Update to the Time Trial Start List (moto sheet) printed format to use heavier lines between each rider as some printers do not consistently print the faint lines in the previous print template.

Changes from 11.22.2 to 11.22.3

09-Jun-22

BEM

• Introduces a new Class Code PT-PART for the processing of the Pump Track Participation category where in a similar vein to the PART Class Code for BMX scrambled motos, riders are not scored with placings, only shown as Finish, DNF or DNS.

When the Qualification/Time Trial round(s) are drawn, categories with PT-PART will also draw a Final Run for all riders in the Finals round. I.e. no rider is eliminated from the Qualification stage.

RRD & SERIES

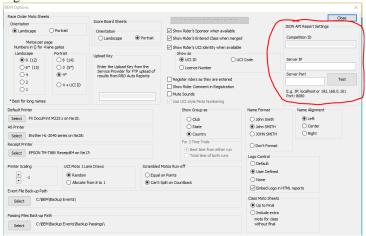
Alignment with BEM changes for the new Class Code.

Changes from 11.22.1 to 11.22.2

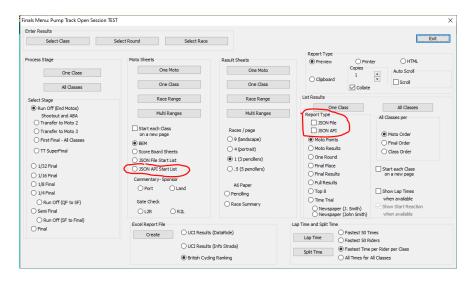
31-May-22

BEM

- For Pump Track events, change the stage name from Time Trial to Qualifying for alignment with the stage name in UCI Rule 4.6.008.
- Add new facility to send Json Start List and Result Reports to the JSON API for subsequent distribution to scoreboards and live stream graphics.
 - o Interface settings and the event specific Competition ID added to the BEM Options screen together with a Test connection button.



 JSON API Start List option added to the Moto Sheets group and JSON API selection added to the Report Type group in List Results on the Finals Menu.



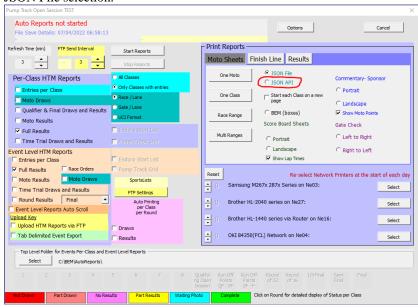
Json report format updated to include the event specific Competition ID and for Pump Track, change Time Trial heading to Qualifying.

RRD

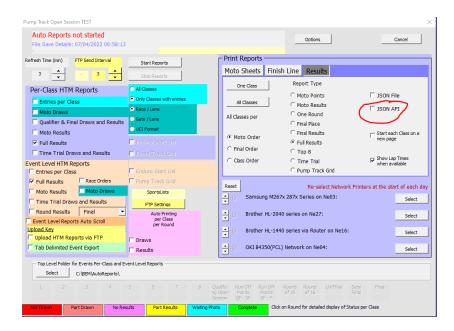
- Json report format changes for operator generated reports updated to the new format with the Competition ID while maintaining the existing format for SportsLists upload.
- Add new facility to send Json Start List and Result Reports to the JSON API from the Auto Reports Moto Sheets and Results tabs and from the Reports menu.

Note that the interface settings for the JSON API are only made in BEM and inherited by RRD.

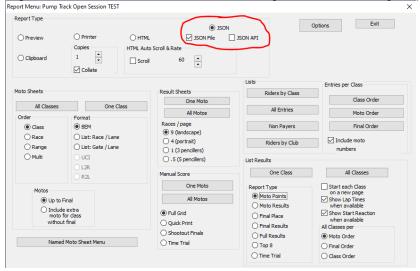
O Auto Reports – Moto Sheets tab, added JSON API option in addition to the existing JSON File selection.



 Auto Reports – Results tab, added JSON API option in addition to the existing JSON File selection.



o Report Menu – added JSON File and JSON API options to the JSON report type.



SERIES

Alignment with BEM changes.

Changes from 11.21.0 to 11.22.1

BEM

- Introduces a new feature to run Mountain Bike Cross Country Eliminator (XCE) format events in conformance with UCI MTB 2022 rules.
 - Configured in BEM with a new Class Code of MTB-XCE and Score Code of XCE
- Adds a new option for Pump Track Open Session format events to limit the number of riders transferring from the Timed Stage to 16.
 - Note that while this is not in conformance with UCI Pump Track Rules, the format has been requested for use at World Championship qualifier events.
 - To avoid confusion with the current Pump Track Open Session Class Code, two new Class Codes have been introduced:

PT-OS-32 UCI compliant rules and identical function to the existing PT-OS Class Code. PT-OS-16 "Red Bull" Open Session variant limiting transfer from the Timed Runs to 16 riders.

RRD & SERIES

Alignment with BEM for the new Class Codes.

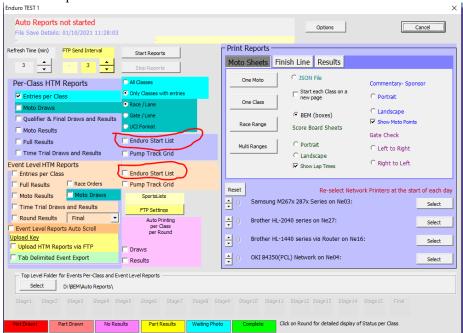
Changes from 11.21.7 to 11.22.0

BEM

- Update for compliance with UCI BMX 2022 rules.
- Update for compliance with AusCycling BMX 2022 rules.
- Introduces a new feature to run MTB Enduro events with BEM. Rule compliance is based on UCI Rules, Part 4 Mountain Bike Chapter V with flexibility to adapt to association specific requirements. Configured in BEM with new Class Code of MTB-ENDURO.
 - o Design caters for a maximum of 15 timed stages per event.
 - Individual transponder settings used for each timed stage allowing for a mixture of gate / photocell and loop start.
 - o Time penalties and reason for the penalty can be added per rider per stage.
 - o New Enduro specific print, HTM and Json reports added.
- Added a new selection option of Licence Number to the existing display of rider's UCI ID or UCI Code in selected reports.
- Changes for the different data format delivered by Timing and Scoring for Gate Start Transponder numbers from the Smart and Desktop decoders.
 With this understand the Start Gate Transponder entered in REM new uses the same format for both
 - With this update, the Start Gate Transponder entered in BEM now uses the same format for both decoder types, i.e. 00-09991, 00-09992 or 00-09993
- Correct the import of lap times in Orbits results format where the decimal part of the time is other than 3 digits.
- Re-format Pump Track Open Session JSON start list reports for alignment with RRD.
- Make provision for race range JSON start lists.
- Correction to UCI DataRide results report for Pump Track events.
- Changed Pump Track stage labels Round 1 and Round 2 to the more meaningful **Round of 32** and **Round of 16**.
- Updated event database in preparation for the AusCycling Advanced Rider feature.

RRD

- Add a new selection option of Licence Number to the existing display of rider's UCI ID or UCI Code in selected reports.
- Make provision for race range JSON start lists.
- Re-format Pump Track Open Session JSON start list reports to be in Time Trial start list format.
- Align Auto Reports JSON file names for Open Session start lists to a common format.
- Added a new report selection in Auto Reports in both Per-Class and Event Level reports for Enduro Start List reports.



- Correction to the operator generated Enduro Start List reports to match the Time Trial Start List format.
- Correction to an omission in earlier builds to the generic category selection user-form which could result in a program error with some operator generated reports from the Report Menu.
- Auto report file names for single stage Pump Track results change from Stage Round 1, Stage Round 2 to Stage Round of 32, Stage Round of 16.
- Corrected a bug with operator generated round reports for Pump Track Open Session results where the wrong format report was being generated.
- Update for compatibility with MTB Enduro changes in BEM.
- Update Json report files used for SportsLists for Enduro.
- Removes unexpected and unwanted operator warning for a class with 0 entries when Event Level Time Trial Draws and Results is selected.

SERIES

- Add a new selection option of Licence Number to the existing display of rider's UCI ID or UCI Code in selected reports.
- Alignment with BEM feature changes.

Operating System Requirements

The recommended PC environment is:

Operating System: 32 or 64 bit versions of Windows XP, Vista (OK but best avoided if possible), Windows 7 and for Windows 8 & 8.1 and Windows 10, full versions, not the RT tablet versions.

If you are using BEM in a networked environment to run transponder timing or the RRD program, use of the Professional rather than the Home versions of Windows are strongly recommended.

Microsoft Office: Office 2003, 2007 or Office 2010.

Note that BEM does not run on Office 2013, 2016 or Office 365 as Microsoft have not maintained full backwards compatibility with Office 2010, 2007 and 2003 versions.

For new PCs that come pre-installed with an Office version later than 2010, the following options are suggested.

- 1. If you don't have a specific requirement for the new facilities in the pre-installed version Office and haven't paid the licence fee for that:
 - a. Totally remove Office from the PC.
 - b. Buy and install a legitimate version of Office 2010 from eBay or from a download retailer such as <a href="https://www.ecrater.com.au/p/30522352/microsoft-office-2010-pro-plus-32-64-bit?gps=1&id=115926669379&keywords=&gclid=CjwKCAjwm4rqBRBUEiwAwaWjjK60coZew 2EOxi9W eodOHFfGc8FKc4vya1IbS3VT41eix1YEFxqnBoCRJgQAvD BwE or https://theunitysoft.com/product/office2010proplus/?gclid=EAIaIQobChMI07_I7NXN4AIVGK6 WCh2pWwWhEAYYBCABEgJcpvD BwE

Typically a legitimate licence is available for around \$10 - \$30, significantly cheaper than the Office 365 / 2016 licence that Microsoft would like you to purchase.

- 2. If you need to keep the pre-installed Office version on the PC with either Win7, Win8 or Win 10.
 - a. Do a partial installation of Office 2010 installing only Excel 2010 which will happily co-exists with later Office versions.
 - b. To get BEM to open with Office 2010 when you also have later Office versions installed then either:
 - i. Open Excel 2010 before clicking on the BEM icon.
 - ii. Set up your own shortcuts to BEM, RRD, Series and Toolbox that direct to Office 2010. Note that in some PCs, particularly non-english language versions of Windows, the path to Office14 Excel may be different to this example.

Typical Shortcut Target when Office 2010 is a 32bit installation

BEM

 $"C:\Program\ Files\ (x86)\Microsoft\ Office\Office14\EXCEL.EXE"\ "C:\BEM\Programs\Event\3.11.x\Bem2K3.xls"$

RRE

"C:\Program Files (x86)\Microsoft Office\Office14\EXCEL.EXE" "C:\BEM\Programs\Report\3.11.x\Rrd2K3.xls"

Series

"C:\Program Files (x86)\Microsoft Office\Office14\EXCEL.EXE" "C:\BEM\Programs\Event\3.11.x\Series2K3.xls"

Toolbox

 $"C:\label{lem:condition} "C:\label{lem:condition} "C:\label{lem:condi$

BemTrain

"C:\Program Files (x86)\Microsoft Office\Office14\EXCEL.EXE" "C:\BEM\Programs\BemTrain\BemTrain.xls"

Typical Shortcut Target when Office 2010 is a 64bit installation

BEM

 $"C:\label{lem:condition} In the lem of the$

RRD

 $"C:\Program Files\Microsoft Office\Office14\EXCEL.EXE" "C:\BEM\Programs\Report\3.11.x\Rrd2K3.xls"$

Series

 $"C:\Program\ Files\Microsoft\ Office\Office\14\EXCEL.EXE"\ "C:\BEM\Programs\Event\3.11.x\Series\2K3.xls"$

Toolbox

 $"C:\Program\ Files\Microsoft\ Office\AEXCEL.EXE"\ "C:\BEM\Programs\Toolbox\BEM_Toolbox\3.xls"$

BemTrain

 $"C:\Program\ Files\Microsoft\ Office\Office\All EXCEL.EXE"\ "C:\BEM\Programs\Bem\Train\Bem\Train\All Em\Train\All Em\Tra$

To add these shortcuts to the start menu, copy and paste or create the shortcuts in the following 'Hidden' folder:

C:\Users\username\AppData\Roaming\Microsoft\Windows\Start Menu\Programs

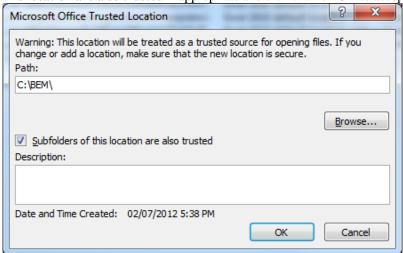
Now open Start Menu > All apps and locate the shortcut(s) you placed. Right-click on it and select Pin to Start.

The following preparatory actions if not already implemented from earlier releases of BEM will avoid compatibility problems.

- Download and install the latest applicable Office 2003 / 2007 / 2010 service packs and updates.
 This is very important as there is a history of unpredictable operation should the latest Microsoft updates not be installed.
- 2. For users running Office 2007 and Office 2010.
 - 2.1. Include the C:\BEM path and any other locations where you save BEM files in the list of Excel Trusted Locations.

Method:

- 2.1.1. Open Excel.
- 2.1.2. Select **File** then **Options**.
- 2.1.3. Select Trust Center.
- 2.1.4. Click on **Trust Center Settings...** button.
- 2.1.5. Click on **Add new location...** button and add any required paths and select the **Subfolders of this location are also trusted** if appropriate and then click on OK to accept and close the dialog



2.1.6. . • Click on OK to close each of the dialogs until back in Excel which now can be closed.