#### Braiins Report Object Export Import Documentation

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#### Braiins Report Object Export Import Purpose

The Braiins Admin Utils Report Object Export and Import modules are intended to allow Braiins Report Objects (Bros) to be maintained in an Excel spreadsheet.

The current versions are for UK GAAP Taxonomy based Bros.

Bros Export, Excel editing, and Bros Import are intended to replace the previous Bros Edit module.

The Bros Spreadsheet (SS) forms the “Master” definition of Bros.

#### Braiins Report Objects

Braiins Report Objects (BROs or Bros) are the means by which Braiins entity data is stored for up to 4 years, accessed, summed, and output. Bro information is also used to perform iXBRL tagging.

Bros encompass taxonomy element, dimension, and tuple information.

Bros are referenced by name, optionally with dimension member references and a tuple reference following the name. Full details are given in the “Bro Reference” section below.

Bros are organised in a multi-branch tree structure using Sets (or nodes) and Elements. An element is always a member of a set i.e. it always has a parent. A member of a set can be another set and this can continue to any depth or level, though currently Bros export and import only allow for up to 9 levels.

A Bro holds one value per year for the so called ‘Base’ Bro (the Bro referenced without any dimension or tuple references), and additional values for each dimension member reference value that has been posted.

Money values are stored as debit or credit balances.

Both sets and elements hold data, with a set often but not necessarily holding the sum of its children.

*Set and Set Member Posting Mutual Exclusivity*

Sets and Set Members are mutually exclusive re posting i.e. a Bro (whether set or element) cannot be posted to if any ancestor has been posted to, and a Set cannot be posted to if any ancestor or descendant has been posted to.

*Dimension Member Posting Mutual Exclusivity*

Posting to a Bro with and without dimension use are mutually exclusive.

*Automatic Summing*

Automatic summing is performed for Summing Type Bros (those of type Money, Integer, Decimal, and Share), both within a given Bro where the Base value for the Bro is the sum of the values with a dimension reference, and then up the Bro tree via the Sets (for both base and dimensional values, subject to allowable dimension limitations) unless stopped via a ‘No Sum Up’ property.

#### Terms to Describe Bros

Bros are described using various terms from the following list, sometimes prefixed with ‘non-‘. More detail on some of these terms is given in the Spreadsheet Columns table below.

| **Term** | **Comment** |
| --- | --- |
| Set | A Bro which is a Bro tree node. Sets usually, but not necessarily, have children which can be Sets or Elements. |
| Element | A stand-alone Bro which is a member of a Set. |
| Taxonomy Based  (or Tx based) | A Bro which is based on (directly linked to) a Taxonomy concrete element. Tx based Bros generate iXBRL tags when used via the report Generator. |
| Non-Taxonomy Based  (or Non-Tx based) | A Bro which is not taxonomy based i.e. which has no taxonomy link. Such Bros may be used by the Report Generator but will not generate an iXBRL tag. |
| By Data Type | Bros have a Data Type and sometimes the data type is used to describe a Bro e.g. a Money Bro. |
| Summing | Bros with Data Types of Money, Integer, Decimal, and Share are automatically summed by Braiins, and so are called “Summing Bros”. |
| Totalling | Summing type Bros may be designated as being Totalling Bros, of either ‘Subtotal’ or ‘Total’ type. |
| Total | A Summing, Totalling Bro of type Total. |
| RO or Report Only | An RO or Report Only Bro can only be used for reporting purposes and cannot be posted to i.e. it is a Non-Posting Bro. |
| Non-Posting | Another way of saying ‘Report Only’ |
| Posting | Not Report Only |
| Instant | A Taxonomy based Bro with Instant period. |
| Duration | A Taxonomy based Bro with Duration period. |
| StartEnd | A Taxonomy based Instant Bro which has StartEnd Period values. |
| Tuple | Taxonomy based Bros can be members of one or more tuples as per the [Tuples List](http://admin.braiins.com/utils/TuplesList.php). Tuple information is added to Bros by Bros Import and is shown in the I{nfo} Tuples column by Bros Export. Tuple TxIds are never used directly as the TxId of a Bro. |
| Standard | A standard or normal Bro which is not a Braiins Dimension Map. |
| Main | The term Main Bro is used to refer to a Standard Bro which has Braiins Dimension Map “children”. |
| Braiins Dimension Map | A Braiins Dimension Map or BD Map provides mapping to a different taxonomy element or TxId for Braiins Dimensions used with a Main Bro.  Or, from 23 April 2012, a Bro BD Map may also be used without a TxId to provide BD functionality for the Main Bro. If such a Bro Ref is used in a format no tag results.  A Bro may use only one Braiins Dimension i.e. Maps for a given Main Bro must be for just one of the Braiins Dimensions. If the hypercube for a Bro includes two Braiins Dimensions e.g. hypercube 13, OpActivities, then the Braiins Dimension which is not required must be excluded from the Bro. This does not need to be done (in fact cannot be done) for Totalling Bros for which Braiins Dimensions are automatically excluded.  Maps cannot include a TxId that is a StartEnd type  Maps cannot be made Totalling.  The hypercube (HyId), Excl Dims, Incl Dims, DiMeId, Sum To, Related, and Descr properties default to the Main Bro values but can be varied.  The Name 0-7 properties should be the same as for the Main Bro.  All other properties (columns) have no significance to Braiins Dimension Maps, and are not used by Import, apart from generating errors in some egregious cases e.g. StartEnd used with a map.  Braiins Dimension Maps must come immediately after their Main Bro in the SS. |

Bros may also be described in terms of any of their other properties, as listed in the Spreadsheet Columns table below.

#### Bro Reference

In formats and when importing/posting, Bros are referenced by name, optionally with dimension member references and a tuple reference following the name, as follows:

BroName{:DimRef...}{:<end|start>}{:T.TupRef{.#}}

where

BroName is the full Bro name, including dots between level sections

DimRef is a dimension reference as per the [Dimensions Map](http://admin.braiins.com/utils/DimensionsMap.php) "Dimension{.Dimension Member} Reference" column, which is DimensionShortName{.DimensionMemberShortName} with the ".DimensionMemberShortName" optional for the default.  
  
The DimensionShortName part can be omitted if there is a ".DimensionMemberShortName" section and if the Bro is a member of a Set and any Set level name (in left to right order) matches a DimensionShortName e.g.  
Officers.Properties:.Director1:.Chairman  
rather than  
Officers.Properties:Officers.Director1:Officers.Chairman  
  
There can be any number of colon separated DimRefs. Only one rule applies about their order:  
- A Braiins Dimension reference, if used, must come first. (This is because use of a Braiins Dimension reference can change the applicable allowable dimensions i.e. what is allowable for the other dimension references.)  
  
Other than that, dimension references can be in any order.  
  
Dimension references are converted to DiMeIds for DB storage and processing.  
  
Validity checks are applied to DimRef uses e.g. versus the Bro's allowable dimensions, potentially as modified for global options, etc.  
  
Mux checks also apply.

:<end|start>  
:end or :start can optionally be used to specify end or start (closing or opening) period for SumEnd, PostEnd, or Acc type StartEnd Instant Bros, and only for such Bros.  
  
The default is end.  
  
start is always RO.  
  
end is RO for SumEnd Bros

:T.TupRef.#  
is a tuple reference where

* The "T." acts as a visual reminder that this is a tuple reference. (It is not necessary syntactically.)
* TupRef is the short name for a tuple as per the [Tuples List](http://admin.braiins.com/utils/TuplesList.php)
* {.#} is an optional instance number from 1 upwards to refer to a specific tuple instance.  
    
  The '.#' should not be used in an import/posting unless to update a previous tuple in an Update type import, as new sequential instance numbers are allocated automatically otherwise.  
    
  To the RG, with '.#' means a specific tuple instance, and without '.#' means all the instances i.e. loop for all instances.
* The combination of the tuple and the Bro's taxonomy element must be a valid tuple pair as per the Tuples List, giving a unique TuMeId.
* For a Tuple Bro, inclusion of a tuple reference is mandatory for importing/posting. For the RG, reference to a numeric Tuple Bro without any tuple reference means the sum of the tuples. For a string Tuple Bro it gives an empty (false) result.

#### Export

The Braiins Admin Utils Bros Export module creates a tab delimited text file Admin/www/utils/tmp/BrosUK-Gaap-yyy-mm-dd\_HH\_MM.txt with a link to the file, of all Bros in the Braiins UK-GAAP database, for all the columns listed in the Spreadsheet Columns table below.

The file may be imported into Excel using just Ctrl A, Copy, Paste.

#### Import

The Braiins Admin Utils Bros Import module reverses the Export process, taking data from the Excel spreadsheet (while ignoring ‘I’ or Info columns), to rebuild the Bros database tables, replacing all previous database entries.

Bros are imported in the order in which they appear in the SS.

Import first checks the SS data for validity, and does not start on rebuilding the Bros database tables unless no errors are found.

The Braiins Admin Utils module “Build Bro, Tuple & Zone Structs” (BuildStructs.php) should be run after an Import to create the Bro, Tuple, and Zone “Structs” used internally by Braiins.

#### Editing

All columns in the SS may be edited subject to the restrictions described in the following table of the spreadsheet columns, though editing ‘I’ or Info columns without a background colour achieves nothing as Import ignores these columns.

Bros may be deleted just by removing the row, though if the Bro is a Set, all Set members (children) will also need to be deleted.

Bros may be moved if due attention is paid to Sets, both children and parents.

A new Bro may be added by inserting a row into the SS and completing just the relevant columns without bothering about Info columns.

For Braiins Dimension Maps it is OK to fill in fields where the main Bro value is used and which are blank after an export e.g. when copying changes across rows, as Import skips these fields. They will revert to blank on the next export.

#### The Spreadsheet Columns

The Columns created by Export and used for Editing and then Importing are described in this table, with comments for inserting/editing guidance.

The Type Characters and background colours mean:

E **E**ditable as described in Comments for standard, non-Braiins Dimension Maps, used by Import

B As for E but also applicable to **B**raiins Dimension Maps

D As for E but only applicable to Braiins **D**imension Maps

T As for E for **T**axonomy based Bros or Main Bros, not applicable to Braiins Dimension Maps

I **I**nformation purposes only, not used by Import. These columns have no background colour.

| **Name** | **Type** | **Comments** |
| --- | --- | --- |
| Id | I E | The Id in this column produced by Bros Export is the Id of the Bro in the DB table BROs.  The Id column is not normally used by Bros Import, so mostly this is an ‘Info’ column.  However, the column can optionally be used as an ‘E’ column to Set or start a new Id sequence or range. This is achieved by entering the desired Id into the column prefaced by ‘=’ e.g.  =3000  This is interpreted as a command to Set the Id for the Bro on this row to the number given, as the start of a new grouping within the Bro Tree. Subsequent Ids will increment from this number.  **To use this feature** t**he ‘=’ must be visible in the SS** i.e. the cell value needs to be text. Bro Export achieves this by outputting a space before the ‘=’. The number for the Id must be 4 digits long in the range 1000 to 9950.  Changing the Id in this manner is purely for human legibility purposes. It serves no DB or summing purpose.  Data is stored within the Braiins DB using Bro Ids. Thus once live data is being stored, Bro Ids can only be changed with a DB update.  Other than if the ‘=’ option is being used, there is no need to edit Ids, or keep them consistent. If a Bro is deleted there is no need to renumber the Ids of following Bros.  The Ids of new Bros created in the SS can be left blank, or any ‘code’ can be used. |
| Type | E | This will always be either ‘Set’, or ‘Ele’ meaning Element for a set member that is not another set. A Set may hold Sets and Elements. An Element must always be a member of a Set. All Level 0 Bros must be Sets. (Export puts ‘Map’ in this column for BD Maps but Import does not use this.)  New Bros can be created as either Sets or Elements.  The type of a Bro may be changed if the Name is adjusted appropriately. |
| Level | I | Level starts at 0 for a top level Bro and increases by 1 for each Set level.  Level corresponds to the number of “.”s in the Bro’s full name or the number of segments in the name less 1.  Level is an Info item, as Import uses the Bro name as the primary source of “level” information. |
| Bro Name | I | The Bro name column shows the full name of a Bro for Info purposes. Bro names consist of dot separated segments or sections corresponding to set or level names. Bro names also appear in the following columns, split into segments. Any edits should be performed there.  A Bro’s name defines a Bro’s place in the Bro tree. It is used in formats and imports, but is not intended to be seen or used via the public Braiins site.  Export prefixes Bro names with 2 spaces per level for visual purposes. These spaces are not part of the actual names.  Bro names must be unique.  Bro names must start with a letter. After that any alphanumeric character plus \_ (underscore) may be used. Segment names after the first may start with a digit or be purely numeric.  In the case of Braiins Dimension Bros, Export follows the name by the dimension reference e.g. PL.Expenses.BadDebts:Function.Admin for information purposes. |
| Name 0-8 | B | Bro Name segments by level from level 0 to level 8.  Bro names may be edited via these columns, provided care is taken to change all set member names appropriately if a set name is changed.  A Bro may be moved in the Bro tree by moving it in the SS and editing its name accordingly. If such a move is performed, the Id need not be changed, but can be.  For Taxonomy based Bros the "magic' word 'Tx' (case insensitive) may be used as the last name segment. This tells Bros Import to generate a Bro name segment from the taxonomy name programmatically, using the function BroNameFromTxName() in Admin/www/utils/UtilsFuncs.inc. This strips invalid characters and shortens it by removing noise words and abbreviating common words or phrases, as well as removing camel case words which appear in prior segments of the name.  ‘Tx’ may also be used for sections of name before the last one, which correspond to a previous Set final name segment that was created via use of ‘Tx’.  An example of the use of Tx for name creation is:  Bro1 name: My0.My1.My2.Tx  Bro2 name: My0.My1.My2.Tx.Tx  Bro3 name: My0.My1.My2.Tx.MyLevel4SetName  Bro4 name: My0.My1.My2.Tx.MyLevel4SetName.Tx  where Bros 1, 2, and 4 are taxonomy based. Bro 3 could be but need not be as far as name generation is concerned.  In this example Bro 1 must be a set for the Bro 2 and Bro 4 usage of two ‘Tx’s. For Bros 2 and 4 the first Tx becomes the Tx generated final segment name from Bro 1, with the second Tx being generated from the Bro 2 and 4 Tx Names. Bro 3 does not involve any new Tx name generation. |
| BD | D | Braiins Dimension member short name used with Braiins Dimension Maps. Allowable values are:   |  |  | | --- | --- | | Admin | For Braiins Dimension Function | | CoS | | Distrib | | All | For Braiins Dimension Ageing | | <1 | | >1 | | 1-5 | | 1-2 | | 2-5 | | >5 |   Maps need only be created for the dimension members required i.e. unwanted ones can be skipped. Those that are used should be in the above order which corresponds to the DiMeId order of the Dimension Map.  Maps for a given Bro must be for just one of the Braiins Dimensions, as a Bro can use only one Braiins Dimension. |
| Ref | B | Ref is an optional free form text field that an Agent is to be able to edit, which is intended to serve as a hint or guide (or reference) as to which NL code or code range, or other item e.g. Memo code or ReportPad name in the case of SAPA, would or could apply to the Bro.  This information will be used in import mapping, and in directing a user to the appropriate part of the Bro Tree during on screen posting.  Initially the field is to be used for SAPA values, but a master option by Agent will be added when support for other originating AP systems is added.  Initially the field will consist of just one section that can contain anything, like the Comment field.  However, the field could be extended to containing multiple sections re dimensions, as well as being specific about NL codes versus Memo codes versus ReportPad names (in the SAPA case), if it becomes clear that this would be useful.  The maximum length of a Ref field is 48 characters. This is arbitrary and can easily be increased if needed. |
| TxId | B | The TxId column can contain either the Id of a concrete element for a taxonomy based Bro, or nothing for a non-taxonomy based Bro.  If a TxId is specified, it must:   * be the Id of a concrete element in the DB table Elements with substitution group of Item * for a totalling Bro, be unique * for a non-totalling Bro be either unique, or the same as the TxId of another Bro, if it for a different hypercube that is not a sub set of the other hypercube.   If TxId is specified, this sets the value of many other columns. |
| Data Type | E | All Standard Bros have a Data Type, one of:   * None which is only applicable to a Set Bro that is just a holder or tree node, which will not ever be output itself. Such Bros cannot hold data, cannot be posted to, and cannot have TxId, HyId or related properties. * String * Integer * Money * Decimal * Date * Boolean * Enum = one of a set of integer values * Share * PerShare * Percent   The Data Type specifies how values are stored in the DB, whether the Bro is a Summing Bro, whether the Money properties apply or not, how the Bro may be used in RG expressions, how values are formatted for inclusion in reports, and how the iXBRL tag (If any) is constructed.  The taxonomy uses more types than are listed above, but other taxonomy types are mapped to one of the above as described for the ‘I Tx Type' column.  The Data Type of a Tx based Bro is normally set by the taxonomy type, but to allow for exceptional cases, or errors, a Bro’s Data Type can be set to be different from the value derived from the taxonomy. Import issues a warning if the Bro’s Data Type is different from that derived from the taxonomy. |
| Sign | E | Sign applies to Money Bros. Allowable values are ‘Debit’, ‘Credit’, and ‘Not set’.  For taxonomy based Bros this sign will usually be the same as the taxonomy value in the ‘I Tx Sign’ column, but it can be different. Import issues a warning if the taxonomy value is set i.e. is not ‘Not set’ and the Bro value is different.  This sign property is used by the report generator in conjunction with the sign of the balance, any Zone sign setting, report generator row/cell sign settings, and brackets in title text, to decide on whether balances are to be bracketed and whether any iXBRL tag is to include a sign attribute. See ‘Table Balance Sign Handling’ in RGlanguage.txt for details. |
| Account Types | E | All Standard Bros must have at least one Account Type, and can have up to 4 Accounts Types in a comma separated list, chosen from:   * BS = Balance Sheet * CF = Cash Flow * PL = P&L * DetailedPL = Detailed P&L * HistoricalPL = Historical P&L * STRGL * Notes * Info * Other   The Account Type or Types define the accounting use or uses of the Bro, though as of 22 Nov 2011 no use is made of this property. It could potentially be used in conjunction with DataType, Report Only, Post Type, Allowable Dims, and Zones to control posting and Bro use. Though does it add anything not covered by Zones and Post Type?? |
| Post Type | E | Post Type applies to Money Bros.  Allowable values are:   * Nothing defaults to DE on import * DE meaning Double Entry or ”Chart of Accounts” type posting required * Sch meaning that Single Entry Schedule type posting is required |
| RO | E | RO or Report Only applies to standard Bros of any data type.  Allowable values are:   * Nothing meaning Posting is allowed * RO meaning Report Only or Non-Posting Bro. Totalling Bros must be RO. |
| HyId | B | HyId is the hypercube Id or, in the case of a totalling Bros a list of one or more comma separated hypercube Ids, for the Bro or Map. It is a required field for a taxonomy based Bro, but can also be used with Non-Tx Bros.  For taxonomy based non-totalling Bros, the HyId must be one of the Ids in the ‘I tx Hys’ column. (A taxonomy element can have multiple hypercubes.) As mentioned in the TxId comment, non-totalling Bros with different hypercubes for one TxId can be used provided that the one HyId is not a sub set of the other.  For taxonomy based totalling Bros, Braiins uses all of the hypercubes for the TxId, with subsets eliminated, to determine the allowable dims for the Bro. If the HyId column of an import does not equal this hypercube list, import will use the Taxonomy derived list instead. A list such as 17,18 for TxId 506 is accepted by import.  The HyId(s) of a Bro define the full list dimensions that can potentially be used with the Bro, as per the Braiins Admin Utils [Hypercubes List](http://admin.braiins.com/utils/HypercubesList.php), though that list can be amended for a particular Bro via the Excl Dims, Incl Dims, and Excl DiMeId Bro options.  The allowable Dims for a Bro derived from its HyId, Excl Dims, and Incl Dims options are shown in the I Allowable Dims column.  HyId for a BD Map can differ from the main Bro value. If the same it may be left blank. |
| Excl Dims | B | For non-totalling Bros or Maps, whether Tx based or not, but with an HyId, Excl Dims is an optional comma separated list of Dimension Ids as per the Braiins Admin Utils [Dimensions List](http://admin.braiins.com/utils/DimensionsList.php) to be excluded from use with the Bro i.e. that are not allowable when posting to the Bro, or, for a Set Bro, when balances from other Bros are being summed to the Bro.  Excl Dims for a BD Map can differ from the main Bro value. If it is the same it may be left blank. |
| Incl Dims | B | For non-Tx based Bros or Maps, Incl Dims is an optional comma separated list of Dimension Ids to be included as allowable for use with the Bro. In such cases the Incl Dims list becomes the Allowable Dims list.  Incl Dims cannot be used with Tx based Bro.  Incl Dims is mutually exclusive with Excl Dims.  Incl Dims for a BD Map can differ from the main Bro value. If it is the same it may be left blank. |
| DiMeId | B | For non-totalling Bros or Maps with an HyId, DiMeId allows a dimension member rather than a whole dimension to be made mandatory (if positive) or to be excluded (if negative) from use. The DiMeId value is the DiMeId of the dimension member as shown in the Braiins Admin Utils [Dimensions Map](http://admin.braiins.com/utils/DimensionsMap.php).  If a dimension member set to be excluded via a –ve DiMeid has a Mux List (see the Dimension map), the Mux List is excluded rather than the dimension member itself.  Examples of DiMeId use are:  423 to exclude the the Officers.CoSec dimension member, DiMeId 423, from Director and PartnerLLP Bros.  1292 to exclude >1 year details from Ageing for a debtor Bro by excluding the mux list of 1294,1295,1296 from 1292.  148 and 145 to make DevelopmentCosts and NegativeGoodwill dimension member use mandatory with Asset development cost and negative goodwill related Bros.  DiMeId for a BD Map can differ from the main Bro value. If it is the same it may be left blank. |
| Except | E | Except applies to Posting Money Bros. Allowable values are ‘Except’ or nothing.  Except means that this Bro is for an Exceptional Item. Except can only be set if one of the allowable dimensions for the Bro is 5 - Exceptional items adjustments. ‘Except’ is used when performing summing for dimension 5 before and after any adjustments for exceptional items:  150 - Dimension - Exceptional Item Adjustments [5]  [A] 132 After any adjustments for exceptional items  [A] 409 Before any adjustments for exceptional items  Nothing means that the Bro is for a normal or non-exceptional item, and that Dimension 5 summing does not apply. |
| Amort | E | Amort applies to Posting Money Bros. Allowable values are ‘Amort’ or nothing.  Amort means that this Bro is for Amortisation and Impairment Adjustments. Amort can only be set if one of the allowable dimensions for the Bro is 6 - Amortisation and Impairment Adjustments. ‘Amort’ is used when performing summing for dimension 6 before and after any amortisation and impairment adjustments:  160 - Dimension - Amortisation and Impairment Adjustments [6]  [A] 131 After any adjustments for amortisation and impairment  [A] 408 Before any adjustments for amortisation and impairment  Nothing means that the Bro is not an amortisation and impairment adjustments Bro, and that Dimension 6 summing does not apply. |
| Sum Up | E | Sum Up applies to Summing Bros and defines what auto summing does with the Bro balances in regard to automatic summing up the Bro tree. All Summing Bros not at level 0 must have a Sum Up property. Allowable values are:   |  |  | | --- | --- | | Nothing | Level 0 Bro for which no summing ‘up’ can be performed. | | + | Specifies that the balances of the Bro sum to the parent Set balances.  This is the default on creation of a new Summing Bro for which no Sum Up value is supplied. | | No | Specifies that the balances of the Bro are not to be summed to the parent Set i.e. that summing up the tree stops at this point.  No is typically used with a Set at the head of a duplicate or analysis branch of the Bro tree, whose sum should not be summed up the tree any further e.g. with PL.Revenue.Analysis so that the restated Revenue figures for analysis purposes are not summed to the PL.Revenue or PL sets which would result in the revenue sums being doubled. | | NA | Setting when auto summing does not apply because either the Bro’s Data Type is different from the parent Set’s Data Type, or the Bro is a Total Bro. | |
| Totalling | E | Summing Bros may be defined as Totalling Bros via the Totalling column. Allowable values are Subtotal or Total, or nothing.  A Totalling Bro:   * cannot be posted to, and so is automatically ‘Report Only’ * cannot have Excl Dims, Incl Dims, or Excl DiMeId values, though the Braiins Dimensions are automatically excluded from all totalling Bros * can be used to provide taxonomy information for report generator table subtotal/total sums, without ever being used for summing itself * can be used to also provide a target or home for ‘Sum To’s of other Bros * allows use of all dimensions in the case of a multiple hypercube taxonomy element   A Total Bro is not summed up the tree i.e. it always has a Sum Up property of NA. (A Subtotal bro is summed up the tree unless Sum Up is set to No.)  A Total Bro cannot be ‘Sum To’ed another Bro, whereas a Subtotal Bro can be.  There are no other differences between the two totalling types currently.  It is not necessary to use Totalling Bros for summing purposes, as the sums may be available via auto Bro summing, or column summing within report tables.  Summing to Totalling Bros via ‘Sum To’s is applicable when neither the Bro Tree structure nor report table summing provide the required sums. |
| Sum To | B | Sum To allows summing of Summing type Bros, included Braiins Dimension Mapped ones, to Totalling type Bros, in addition to any auto dimensional and Set summing for the Summing Bros. The Sum To Bro must be a totalling type Bro. It can appear later in the SS. See also Totalling above.  Allowable values for the Sum To column are a Bro Name or Nothing.  ‘Sum To’ summing is performed after all auto dimensional and set summing, and for Base balances only. As of 5 November 2011 this timing means that Subtotal Bros that obtain their values via ‘Sum To’ are effectively not set summed, even if their ‘Sum Up’ property is ‘+’, as at set summing time their balances are undefined. If such set summing proves to be required, additional code will need to be written to sum such sets after the Sum To summing has been completed.  Currently only one ‘Sum To’ Bro may be specified per Bro. If required, this could be extended to allow for a list of ‘Sum To’ Bros. |
| Related | B | The Related column provides a means of specifying auto summing checks for Summing Bros, included Braiins Dimension Mapped ones, by defining whether a Bro’s sums should be equal to, or equal and opposite to, the sums of a ‘Related’ Bro, which must be a standard Bro i.e. not a Braiins Dimension Bro, with the same Data Type. The Related Bro can appear later in the SS.  The check is applied to Base balances only, after all summing has been completed.  Allowable values for the Related column are:   * Equal To: Bro Name * Equal & Opp To: Bro Name * Nothing |
| StartEnd | E | The StartEnd column applies to Taxonomy based Bros whose Tx element is an Instant period one. Effectively the StartEnd column defines the type of an Instant Bro. There are five options:  **No**, or nothing which defaults to ‘No’ on import Bro based on an Instant Tx element that is not Start End as per the Taxonomy, nor in an accounting sense i.e. a Bro that has just One instant value, such as average number of staff, with properties:   * No StartEnd Sum List (also called SE Sum List) * No Start value * End value is to be posted * TB includes the value if Post Type is DE * Tag: End type * Can use Braiins Dimensions   **SumEnd** Bro based on an Instant Tx element that is StartEnd as per the Taxonomy, in the list of StartEnd Taxonomy element TxIds (82, 145, 146, 222, 511, 542, 1110, 1170, 1172, 1242, 2002, 2004, 2120, 2132, 2155, 2167, 2223, 2467, 2805, 2815, 3019, 3090, 3092, 3198, 3278, 3377, 3379, 3387, 3388, 3389, 3465, 3642, 3696, 3697, 3984, 4062, 4239, 4265, 4267, 4269, 4397, 4403, 4536, 4546, 4551, 4654, 4655, 4810, 5022, 5078, 5092, 5114, 5121, 5230, 5234) derived as described in Doc/BrosAndTx/StartEndPeriodNotes.txt, with properties:   * Has a SE Sum List as defined in ‘SumEnd and PostEnd SE Sum Lists’ below * Start = previous period End and is automatically RO * End = Start + the Sum of the SE Sum List of Bros * End is automatically RO * TB includes: Start balance AND the SE Sum List Bros * Tag: Start or End according to the Bro Reference * Cannot use Braiins Dimensions   **PostEnd** Bro based on an Instant Tx element that is Start End as per the Taxonomy, whose TxId is in the list given above for SumEnd, with properties:   * Has a SE Sum List as defined in ‘SumEnd and PostEnd SE Sum Lists’ below * Start = previous period End and is automatically RO * End is to be posted. Zero if no posting. * The SE Sum List provides a check, or means of calculating missing values. * TB includes: End balance but NOT the SE List Bros * Tag: Start or End according to the Bro Reference * Cannot use Braiins Dimensions   **Stock** Similar to PostEnd with the additional property of being a Stock Bro. The differences from PostEnd are:   * TB includes: P&L: Start and End with sign reversed  BS: End * Movement to be taken into account when checking that a posting journal balances.   **Acc** Bro based on an Instant Tx element that is not Start End as per the Taxonomy i.e. whose TxId is not in the list given above for SumEnd, but which is Start End in an Accounting sense like 541 Cash at bank, 575 Cash in hand, and 3937 Prepayments etc, with properties:   * No SE Sum List * Start = previous period End and is automatically RO * End is to be posted. * TB includes: End * Tag: Start or End according to the Bro Reference. (It is yet to be confirmed whether a start tag is legal re iXBRL verification for such elements.) * Cannot use Braiins Dimensions   **StartEnd Instant Bros**  For Instant Bros other than the ‘No’ type i.e. those with StartEnd values, Import creates two Bros, one for the Start value, and one for the End value, though only one Bro row is needed in the Bros spreadsheet. Also, only one Bro is shown in Bros List and Bros Lookup.  A Bro reference for one of these Bros can include an optional {:<start|end>} value. If neither is used the defaults is end.  **SumEnd and PostEnd SE Sum Lists**  For SumEnd and PostEnd Bros, the StartEnd column takes the following form:  <SumEnd|PostEnd> SeSumList ...  Where SeSumList is a list of TxIds either ‘,’ or ‘+’ separated, space separated from <SumEnd|PostEnd>, and used as described above for SumEnd and PostEnd. There must be at least one SeSumList. There can be multiple lists, space separated.  The list(s) cannot include the TxId of the Bro unless the Bro is a Tuple Bro in which case the self reference means the sum of the other instances in the tuple.  The I{nfo} StartEnd Bros col below shows the list(s) using Bro Ids rather than TxIds.  **Examples**   |  |  |  | | --- | --- | --- | | **Bro TxId** | **Description** | **StartEnd Column** | | 541 | Cash at bank | Acc | | 542 | Cash at bank and in hand | PostEnd 541,575 2646,2647,2648,2649 | | 5114 | Advances and credits, directors | SumEnd 5115+5116 | |
| Context | T | The Context of Standard Taxonomy based Bros and Main Bros is used by the report generator when creating the XBRL context to be used with an iXBRL tag for the Bro or Map. (If a BD Map include a TxId the Main Bro needs a Context even if not Taxonomy based itself, as the Map uses the Main Bro context.)  The allowable values are:   * Period Default that applies to most Bros whether the Tx Period is Instant or Duration * Officer Officer related Bro e.g. Company Secretary, Director etc * AllOfficers Officer in aggregate form. ‘Officer’ can become ‘AllOfficers’ * TPA Third Party Agent – Accountants or Auditors * RegOffice Specific to Registered Office Bros * UkCountry Specific to Country of Incorporation Bro |
| Zones | E | Zones is a comma separated list by Ref of up to 10 zones which apply to the Bro.  See Braiins Adim Zones to list or edit Zones.  If a Bro that is being output in a report has zones defined, the first zone in the list which has a sign defines the zone sign, which is one of the factors taken into account when processing the sign of a balance. See also the Sign column above.  During compilation of a format, if allowable zones have been set via a [zones ....] statement, and a Bro is used which has zones defined, a check is performed to see if one of the Bro’s zones appears in the [zones ....] statement list. If not, a compilation error occurs as use of the Bro at that location in the format is deemed to be invalid. |
| Order | E | Order is an optional integer number intended to define the sort order for elements within a set if an order different from the Bros Id order is required for report List type output purposes. As of 10 October 2011 no RG statement makes use of this property. |
| Descr | B | Descr is the Description or title text of up to 400 characters in length that is output by the report generator when the Bro is used in a title column of a table, or when the Bro is used with a ‘descr’ prefix in an expression.  The default value for ‘Descr’ for a taxonomy based Bro is the taxonomy element’s standard label which is given in the next column, I Tx Std Label.  Only if a description that is different from the taxonomy standard label, or if a description for a non-taxonomy based Bro is required, should the Descr column have a value.  If the Descr property of a non-taxonomy based Bro that has not been given a Descr property is referenced in a format, the name of the Bro is output as a reminder to “give me a Descr or hard code the required description in the format.” |
| Comment | B | Optional free form comment text of up to 200 characters in length. Comments are included in Bro Exports, are shown by Bros Lookup, and are available as an optional column in Bros List. |
| I Tx Std Label | I | The standard label of a taxonomy based Bro. See the previous column Descr for the relevance of this. |
| I Allowable Dims | I | Entries in this column are Info entries generated by the Export.  Allowable Dims is a comma separated list of the allowable dimensions, by Dimension Id, for a Bro as derived from its HyId, Excl Dims, and Incl Dims options. Excl DiMeId dimension member exclusions are not shown here.  Bros without an HyId do not have Allowable Dims. |
| I Man Dim | I | Entries in this column are Info entries generated by the Export.  An entry of M followed by a Dimension Id means that use of an 'M' Type Dimension Member from the given Dim is Mandatory during posting or importing.  An entry of N followed by a Dimension Id means that use of an 'N' Type Dimension Member from the given Dim is mandatory if a Property Dimension Member is used, but differently from 'M' cases, the N and property references may be omitted meaning 'All' e.g. Officers.DirectorRemuneration.  If a DiMeId property has been specified this is appended to the Man Dim value as .nnn for a +ve (fixed DiMeId) or {-nnn} for a –ve (excluded DiMeId). |
| I Prop Dim | I | Entries in this column are Info entries generated by the Export.  An entry only occurs in this column if there is a 'Man Dim' column entry.  A entry of a Dimension Id or a Dimension Ids list, without an 'o' suffix, means that a Property Dimension Member from the given Dim or Dims must be used in conjunction with the M or N Dimension member for posting or importing.  An ‘o’ suffix means that use of a Property Dimension Member is optional.  The allowable Property Dimension Members may be restricted or made optional according to the M or N choice, as defined in the ‘Prop Type’ column of the M or N Dimension Member in the Dimensions Map. |
| I Tuples | I | For taxonomy based Bro a comma separated list of TupleId TupleTxId TuMeId TUC and Tuple Short Name as per the Tuples List appears in this column for the Tuples of which the taxonomy element is a member. |
| I Tag | I | iXBRL tag a taxonomy based Bro’s taxonomy element in the form Name space:Tx Name. |
| I Tx Type | I | Type of a taxonomy based Bro’s taxonomy element. The possible values and their normal mappings to a Bro Data Type are:   |  |  | | --- | --- | | **Taxonomy Type** | **Bro Data Type** | | None | None | | Money | Money | | String | String | | Boolean | Boolean | | Fixed | Boolean | | Date | Date | | Decimal | Decimal | | Integer | Integer | | NonZeroDecimal | Decimal | | Share | Share | | Percent | Percent | | PerShare | PerShare | | Uri, Domain, EntityAccounts, EntityForm, ReportPeriod, Any, QName, Arc, Doc, Extended, Locator, resource, Simple, Title | String | |
| I Tx Period | I | Period of a taxonomy based Bro’s taxonomy element.  The values may be Instant or Duration.  The Bro’s Context will normally be ‘Period’ for both Instant and Duration Tx elements, unless the Bro is one of those that has a special Context such as the Officer ones. |
| I StartEnd Bros | I | This column is a repeat of the StartEnd column with the StartEnd Sum List(s) shown using Bro Ids rather than TxIds. Bros Lookup also gives both forms of the StartEnd Sum Lists. Bros List gives just the TxId form. |
| I Tx Sign | I | Sign of a Money taxonomy based Bro’s taxonomy element.  The sign of a Money taxonomy based Bro will usually be the same as this, but it can be different. |
| I Tx Hys | I | Hypercube or hypercube list of a taxonomy based Bro’s taxonomy element.  See also Columns TxId and HyId. |