IBM® DB2® OLAP Server™

Version 7
OLAP Quick Technical Reference

Contents

Hyperion Essbase Functions 1

Calculation Commands 81

ESSCMD Commands

ESSBASE.CFG File Settings 197

Server File Settings 197

Hyperion Essbase Functions

Hyperion Essbase is designed with powerful calculation features. You can define complex formulas for use in calc scripts or in a database outline. A suite of functions is available to assist you in developing these functions.

This chapter includes the following:

- Tables of Calculation Operators
    - Mathematical Operators
    - Conditional and Logical Operators
    - Cross-Dimensional Operator
- Table of Function Parameters
- An alphabetic listing of functions

Table 1: Mathematical Operators

+	Adds
-	Subtracts
*	Multiplies
/	Divides
%	Evaluates percentage. For example, *Member1 % Member2* evaluates *Member1* as a percentage of *Member2*.
( )	Controls the order of calculations and nests equations and formulas.

Table 2: Conditional and Logical Operators

IF | ELSE | ELSEIF | ENDIF	Tests conditions and calculates a formula based on the success or failure of the test.
>	Data value is greater than.
>=	Data value is greater than or equal to.
<	Data value is less than.
<=	Data value is less than or equal to.
==	Data value is equal to.
<> or !=	Data value is not equal to.
AND	Logical AND linking operator for multiple value tests. Result is TRUE if both conditions are TRUE. Otherwise, the result is FALSE.*
OR	Logical OR linking operator for multiple value tests. Result is TRUE if either condition is TRUE. Otherwise, the result is FALSE.*
NOT	Logical NOT operator. Result is TRUE if condition is FALSE. Result is FALSE is condition is TRUE.*

* The logical constants TRUE and FALSE are interpreted as 1 (TRUE) and 0 (FALSE) where appropriate.

Table 3: Cross-Dimensional Operator

->	The cross-dimensional operator is created with a hyphen (-) and right angle bracket (>). Do not leave spaces between the cross-dimensional operator and member names in quotation marks. For example, type `"New York"->Sales` and *not* `"New York" -> Sales`.

Table 4: Function and Macro Parameters

attDimName	A single attribute dimension name specification. `@WITHATTR(Ounces,"<",16)`

attMbrName	A single attribute member name specification.
	
	`@ATTRIBUTE(Can)`
	`@ATTRIBUTEVAL(Ounces)`
	`@WITHATTR("Pkg Type","==",Can)`

dimName	A single dimension name specification.
	
	`@CURLEV(Accounts)`
	`@CURGEN(Year)`
	`@PARENT(Measures,Sales)`

expList	A comma-delimited list of member names, variable names, functions, and numeric expressions, all of which return numeric values.
	
	`@MAX(Jan,Feb,100,Apr-May)`
	`@MIN(Oct:Dec)`
	`@COUNT(SKIPNONE,`
	`@RANGE(Sales,@CHILDREN(Product)))`

expression	Any mathematical or numeric expression that is valid within Hyperion Essbase and that, when calculated, returns a numeric value. This definition of expression also includes parameters such as *numDigits*, *generation*, and *level*, and other similar parameters for the financial group of functions, such as *rateMbrConst* and *lifeMbrConst*.
	
	`@ABS(Actual-Budget)`
	`@ROUND(Sales/10.0+100)`

genLevName	Generation or level name specification.
	
	`@DESCENDANTS(Market,Regions)`
	`@RELATIVE(Qtr1,Month)`

genLevNum	An integer value that defines the number of a generation or level. A positive integer defines a generation number. A value of 0 or a negative integer defines a level number.
	
	`@ANCESTORS(Sales,-2)`
	`@SANCESTVAL(Product,2,Sales)`

Table 4: Function and Macro Parameters (Continued)

mbrList	A comma-delimited list of members. `@ISMBR("New York",Boston,Chicago)`

mbrName	Any valid single member name or member combination, or a function that returns a single member or member combination. This definition also includes similar parameters, such as *balanceMbrName*, *costMbr*, and *cashflowMbr*, for the financial group of functions.
	
	`@GEN(Actual)`
	`@CHILDREN(Product)`
	`@MAXRANGE(@ANCESTORS(Qtr4),Jan:Dec)`

n	A positive or negative integer value.
	
	`@NEXT(2,Jan:Dec)`
	`@SHIFT(3)`

rangeList	A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is optional and is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time. If no dimension is tagged as Time and this parameter is omitted, Hyperion Essbase reports a syntax error. This definition of *rangeList* also includes *mbrList*.
	
	`@ACCUM(Q189:Q491)`
	`@MAXRANGE(Sales,@CHILDREN(Qtr1))`

tag	Any valid account tag defined in the current database including First, Last, Average, Expense, and two-pass. `@ISACCOUNT(EXPENSE)`

@**ABS**(*expression*)

Returns the absolute value of *expression*. The absolute value of a number is that number less its sign. A negative number becomes positive, while a positive number remains positive.

expression

Member name or mathematical expression that generates a numeric value.

@**ACCUM**(*mbrName* [, *rangeList*])

Accumulates the values of *mbrName* within *rangeList*, up to the current member in the dimension of which *rangeList* is a part.

mbrName

Single member specification whose value is to be accumulated.

rangeList

Optional comma-delimited list of members, member set functions, or range functions from the same dimension, across which the accumulation occurs. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**ALLANCESTORS**(*mbrName*)

Returns all ancestors of the specified member, including ancestors of any occurrences of the specified member, as a shared member. This function excludes the specified member.

You can use @**ALLANCESTORS** as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ALLOCATE**(*amount, allocationRange, basisMbr,* [*roundMbr*]*,*
method [*, methodParams*] [*, round* [*, numDigits*] [*, roundErr*]])

Allocates values from a member, from a cross-dimensional member, or from a value across a member list within the same dimension. The allocation is based on a variety of criteria.

The @ALLOCATE function allocates values that are input at an upper level to lower-level members. The allocation is based upon a specified share or spread of another variable. For example, you can allocate values loaded to a parent member to all of that member's children. You can specify a rounding parameter for allocated values and account for rounding errors.

amount

A value, member, or cross-dimensional member that contains the value to be allocated into *allocationRange*. The value also may be a constant.

● If *amount* is a member, the member must be from the dimension to which *allocationRange* belongs.

● If *amount* is a cross-dimensional member, at least one of its members must be from the dimension to which *allocationRange* belongs.

● If no member or cross-dimensional member is from the dimension to which *allocationRange* belongs, Hyperion Essbase displays a warning message.

If the *amount* parameter is a loaded value, it cannot be a Dynamic Calc member.

allocationRange

> A comma-delimited list of members, member set functions, or range functions from the same dimension, into which values from *amount* are allocated. *allocationRange* should be from only one level (for example, @CHILDREN(Total Expenses) rather than from multiple levels (for example, @DESCENDANTS(Product)).

basisMbr

> A value, member, or cross-dimensional member that contains the values that provide the basis for the allocation. The *method* you specify determines how the basis data is used.

roundMbr

> Optional. The member or cross-dimensional member to which rounding errors are added. The member (or at least one member of a cross-dimensional member) must be included in *allocationRange*.

method

> The expression that determines how values are allocated. One of the following:

- *share*—Uses *basisMbr* to calculate a percentage share. The percentage share is calculated by dividing the value in *basisMbr* for the current member in *allocationRange* by the sum across the *allocationRange* for that basis member:

  $$amount * (@CURRMBR()\text{->}basisMbr/@SUM(allocationRange\text{->}basisMbr))$$

- *spread*—Spreads *amount* across *allocationRange*:

  amount * (1/@COUNT(SKIP,*allocationRange*))

  SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH:

  Values to be ignored during calculation of the spread. You must specify a SKIP parameter only for *spread*.

  - SKIPNONE—Includes all cells.

  - SKIPMISSING—Excludes all #MISSING values in *basisMbr*, and stores #MISSING for values in *allocationRange* for which the *basisMbr* is missing.

  - SKIPZERO—Excludes all zero (0) values in *basisMbr*, and stores #MISSING for values in *allocationRange* for which the *basisMbr* is zero.

  - SKIPBOTH—Excludes all zero (0) values and all #MISSING values, and stores #MISSING for values in *allocationRange* for which the *basisMbr* is zero (0) or #MISSING.

- *percent*—Takes a percentage value from *basisMbr* for each member in *allocationRange* and applies the percentage value to *amount*:

  amount * (@CURRMBR()->*basisMbr* * .01)

- *add*—Takes the value from *basisMbr* for each member of *allocationRange* and adds the value to *amount*:

  amount + @CURRMBR()->*basisMbr*

- *subtract*—Takes the value from *basisMbr* for each member of *allocationRange* and subtracts the value from *amount*:

  amount − @CURRMBR()->*basisMbr*

- *multiply*—Takes the value from *basisMbr* for each member of *allocationRange* and multiplies the value by *amount*:

  amount * @CURRMBR( )->basisMbr

- *divide*—Takes the value from *basisMbr* for each member of *allocationRange* and divides the value by *amount*:

  amount/@CURRMBR( )->basisMbr

round

Optional. One of the following:

- *noRound*—No rounding. *noRound* is the default.

- *roundAmt*—Indicates that you want to round the allocated values. If you specify *roundAmt*, you also must specify *numDigits* to indicate the number of decimal places to round to.

numDigits

An integer that represents the number of decimal places to round to. You must specify *numDigits* if you specify *roundAmt*.

- If *numDigits* is 0, the allocated values are rounded to the nearest integer. The default value for *numDigits* is 0.

- If *numDigits* is greater than 0, the allocated values are rounded to the specified number of decimal places.

- If *numDigits* is a negative value, the allocated values are rounded to a power of 10.

If you specify *roundAmt*, you also can specify a *roundErr* parameter.

roundErr

> Optional. An expression that specifies where rounding errors should be placed. You must specify *roundAmt* in order to specify *roundErr*. If you do not specify *roundErr*, Hyperion Essbase discards rounding errors.
>
> To specify *roundErr*, choose from one of the following:
>
> - *errorsToHigh*—Adds rounding errors to the member with the highest allocated value. If allocated values are identical, adds rounding errors to the first value in *allocationRange*.
>
> - *errorsToLow*—Adds rounding errors to the member with the lowest allocated value. If allocated values are identical, adds rounding errors to the first value in *allocationRange*. #MISSING is treated as the lowest value in a list; if multiple values are #MISSING, rounding errors are added to the first #MISSING value in the list.
>
> - *errorsToMbr*—Adds rounding errors to the specified *roundMbr*, which must be included in *allocationRange*.

@**ANCEST**(*dimName, genLevNum* [, *mbrName*])

Returns the ancestor at the specified generation or level of the current member being calculated in the specified dimension. If you specify the optional *mbrName*, that ancestor is combined with the specified member.

This member set function can be used as a parameter of another function, where that parameter is a member or list of members.

dimName

Single dimension name specification.

genLevNum

An integer value that defines the generation or level number from which the ancestor value is returned. A positive integer defines a generation number. A value of 0 or a negative integer defines a level number.

mbrName

Optional. Any valid single member name or member combination, or a function that returns a single member or member combination, that is crossed with the ancestor returned.

@**ANCESTORS**(*mbrName* [, *genLevNum* | *genLevName*])

Returns all ancestors of the specified member (*mbrName*) or those up to a specified generation or level. You can use this member set function as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination (or a function that returns a single member or member combination).

genLevNum

Optional. An integer value that defines the absolute generation or level number up to which to select the members. A positive integer defines a generation number. A value of 0 or a negative integer defines a level number.

genLevName

Optional. Level name or generation name up to which to select the members.

@**ANCESTVAL**(*dimName, genLevNum* [, *mbrName*])

Returns the ancestor values of a specified member combination.

dimName

A single dimension name that defines the focus dimension of ancestor values.

genLevNum

Integer value that defines the generation or level number from which the ancestor values are to be returned. A positive integer defines a generation reference. A negative number or value of 0 defines a level reference.

mbrName

Optional. Any valid single member name or member combination (or a function that returns a single member or member combination).

@**ATTRIBUTE**(*attMbrName*)

Generates a list of all base members that are associated with the specified attribute member (*mbrName*). This member set function can be used as a parameter of another function, where that parameter is a member or list of members.

attMbrName

Single attribute member name or member combination.

@**ATTRIBUTEVAL**(*attDimName*)

Returns the numeric value that is associated with a level 0 attribute member from the specified numeric, Boolean, or date attribute dimension, for the current member being calculated.

attDimName

Single dimension specification for a numeric, Boolean, or date attribute dimension.

@**AVG**(SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH, *expList*)

Returns the average of all the values of *expList*.

SKIPNONE

Includes all cells specified in the average operation regardless of their content.

SKIPMISSING

Excludes all values that are #MISSING in the average operation.

SKIPZERO

Excludes values of zero from the average calculation.

SKIPBOTH

Excludes all values of zero or #MISSING from the average calculation.

expList

Comma-delimited list of members, variable names, functions, or numeric expressions. *expList* provides a list of numeric values across which the average is calculated.

@**AVGRANGE**(SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH, *mbrName* [, *rangeList*])

Returns the average value of the specified member (*mbrName*) across the specified range (*rangeList*).

SKIPNONE

Includes all cells specified in the average operation regardless of their content.

SKIPMISSING

Excludes all values that are #MISSING in the average operation.

SKIPZERO

Excludes values of zero from the average calculation.

SKIPBOTH

Excludes all values of zero or #MISSING from the average calculation.

mbrName

Any valid single member or member combination.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**CHILDREN**(*mbrName*)

Returns all children of the specified member, excluding the specified member. This member set function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**COMPOUND**(*balanceMbr, rateMbrConst* [, *rangeList*])

Compiles the proceeds of a compounded interest calculation. The calculation is based on the balances of a specified member at the specified rate across the specified range.

balanceMbr

Single member specification representing the beginning balance across a range of periods. The input can be either one deposit or a series of deposits. If *balanceMbr* is a constant, then Hyperion Essbase assumes *balanceMbr* to be a single deposit in the first member of *rangeList*. This is equivalent to entering the constant value in the first member in the *rangeList* followed by zeros. The function keeps track of each deposit separately, but returns a composite value. If *balanceMbr* is a member or a range, then it is assumed to be a series of deposits.

rateMbrConst

Single member specification, variable name, or numeric expression in decimal form. This represents the interest rate per time period specified in the *rangeList*. If your interest is compounded monthly, this value would be the annual interest rate divided by 12.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the dimension tagged as Time. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time. *rangeList* represents the range over which the interest is compounded. The last value in the range is the total compounded interest for that range.

@**COMPOUNDGROWTH**(*principalMbr, rateMbrConst* [, *rangeList*])

Calculates a series of values that represent a compound growth of the first nonzero value in the specified member across the specified range of members. The growth factor is calculated by multiplying the growth rate in the current time period by the previous period's result, yielding a compounded value. You can change the growth rate from period to period by placing a nonzero value in the current period's *rateMbrConst* cell.

principalMbr

Member specification representing the initial value to be compounded. The input line must be a single deposit.

rateMbrConst

Single member specification, variable name, or expression which provides a constant value. This value can change across *rangeList*, making the new value be the new compound rate. If the value in the current period is zero, the compound rate is equal to zero, and the principal does not change.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the dimension tagged as Time. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**CORRELATION**(SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH, *expList1*, *expList2*)

Returns the correlation coefficient between two parallel data sets (*expList1* and *expList2*). The correlation coefficient determines the relationship between two data sets.

SKIPNONE

Includes all cells specified in *expList1* and *expList2*, regardless of their content, during calculation of the correlation coefficient.

SKIPMISSING

Excludes all #MISSING values from *expList1* and *expList2* during calculation of the correlation coefficient.

SKIPZERO

Excludes all zero (0) values from *expList1* and *expList2* during calculation of the correlation coefficient.

SKIPBOTH

Excludes all zero (0) values and #MISSING values from *expList1* and *expList2* during calculation of the correlation coefficient.

expList1

The first list of member specifications, variable names, functions, or other numeric expressions.

expList2

The second list of member specifications, variable names, functions, or other numeric expressions.

@**COUNT**(SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH, *expList*)

Returns the number of data values in the specified data set (*expList*).

SKIPNONE

Includes all cells specified in *expList*, regardless of their content, during calculation of the count.

SKIPMISSING

Excludes all #MISSING values from *expList* during calculation of the count.

SKIPZERO

Excludes all zero (0) values from *expList* during calculation of the count.

SKIPBOTH

Excludes all zero (0) values and #MISSING values from *expList* during calculation of the count.

expList

Comma-delimited list of member specifications, variable names, functions, or numeric expressions.

@**CURGEN**(*dimName*)

Returns the generation number of the current member combination for the specified dimension. This member represents the number of members that separates the current member from the top-most member in the dimension.

dimName

Single dimension-name specification. *dimName* must be the name of the top-most member of the dimension. It cannot be another member name from within the dimension.

@**CURLEV**(*dimName*)

Returns the level number of the current member combination for the specified dimension. This number represents the number of members that separates the current member from its bottom-most descendant.

dimName

Single dimension name specification. *dimName* must be the name of the top-most member of a dimension. It cannot be another member from within the dimension.

@**CURRMBR**(*dimName*)

Returns the member that is currently being calculated in the specified dimension (*dimName*). This function can be used as a parameter of another function, where that parameter is a single member or a list of members.

dimName

A single dimension name specification.

@**CURRMBRRANGE**(*dimName*, {GEN|LEV}, *genLevNum*, [*startOffset*], [*endOffset*])

Generates a member list that is based on the relative position of the current member being calculated.

dimName

Name of the dimension for which you want to return the range list.

GEN|LEV

Defines whether the range list to be returned is based on a generation or level within the dimension.

genLevNum

Integer value defining the generation or level number of the range list to be returned.

startOffset

Defines the first member in the range to be returned.

- A null value returns the first member of the specified *genLevNum*.

- An integer value returns the member name relative to the current member being calculated.

- A negative value specifies a member prior to the current member being calculated in the dimension.

- A value of 0 returns the name of the member currently being calculated.

- A positive value specifies a member after the current member being calculated in the dimension.

endOffset

Defines the last member in the range to be returned.

- A null value returns the last member of the specified *genLevNum*.

- An integer value returns the member name relative to the current member being calculated.

- A negative value specifies a member prior to the current member being calculated in the dimension.

- A value of 0 returns the name of the member currently being calculated.

- A positive value specifies a member after the current member being calculated in the dimension.

@**DECLINE**(*costMbr, salvageMbrConst, lifeMbrConst, factorMbrConst* [, *rangeList*])

Calculates the depreciation of an asset for a specific period using the declining balance method. The factor by which the declining balance depreciates the assets is specified using *factorMbrConst*. For example, to calculate a double declining balance, set *factorMbrConst* to 2.

costMbr

Single member specification representing the starting values of the assets. More than one asset can be input and depreciated across the specified range. The function calculates each asset separately.

salvageMbrConst

Single member specification, variable name, or numeric expression that provides a constant value representing the value of the asset at the end of the depreciation.

lifeMbrConst

Single member specification, variable name, or numeric expression that provides a constant value. The value represents the number of periods over which the asset is depreciated.

factorMbrConst

Single member specification, variable name, or numeric expression that provides a constant value. The value represents the factor by which the asset is depreciated.

rangeList

Optional. A valid member name, a comma-delimited
list of member names, member set functions, and
range functions from the dimension tagged as Time. If
rangeList is not specified, Hyperion Essbase uses the
level 0 members from the dimension tagged as Time.
The range represents the periods over which
the function is calculated. More than one asset can
be depreciated.

@**DESCENDANTS**(*mbrName* [, *genLevNum* | *genLevName*])

Returns all descendants of the specified member, or those
down to a specified generation or level. This function
excludes the specified member. You can use this member
set function as a parameter of another function, where that
parameter is a list of members.

mbrName

Any valid single member name or member
combination, or a function that returns a single
member or member combination.

genLevNum

Optional. An integer value that defines the absolute
generation or level number down to which to select
the members. A positive integer defines a generation
number. A value of 0 or a negative integer defines a
level number.

genLevName

Optional. Level name or generation name down to
which to select the members.

@**DISCOUNT**(*cashMbr, rateMbrConst* [*, rangeList*])

Calculates a value discounted by the specified rate, from the first period of the range to the period in which the amount to discount is found. The answer is returned in the same period. More than one value can be discounted simultaneously in this manner.

cashMbr

Member specification representing the value you want to discount from the last period in *rangeList* to the current period.

rateMbrConst

Member specification, variable name, or numeric expression which provides a constant value. The value represents the rate per period which *cashMbr* is discounted. It is a decimal value, not a percent.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**FACTORIAL**(*expression*)

Returns the factorial of *expression*. The factorial of a number is equal to 1*2*3* ... * number.

expression

Single member specification or numeric expression.

@**GEN**(*mbrName*)

Returns the generation number of the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**GENMBRS**(*dimName, genName|genNum*)

Returns all the members with the specified generation number or generation name in the specified dimension.

dimName

A single dimension name specification.

genName|genNum

Generation name or generation number from *dimName*. A positive integer defines a generation number.

@**GROWTH**(*principalMbr, rateMbrConst* [, *rangeList*])

Calculates a series of values that represent a linear growth of the first nonzero value encountered in *principalMbr* across the range specified by *rangeList*. Growth is calculated by multiplying the growth rate in *rateMbrConst* by the original *principalMbr*. This value is then added to the previous time period's result, yielding the new value.

principalMbr

Single member specification representing the initial value of the value to grow. The first nonzero value encountered is the initial value. Other *principalMbr* values after the first are ignored.

rateMbrConst

Single member specification, variable name, or numeric expression providing a constant value that represent the decimal growth rate to be applied (for example, 10% = .1).

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**IALLANCESTORS**(*mbrName*)

Returns the specified member and all the ancestors of that member, including ancestors of any occurrences of the specified member as a shared member. You can use this member set function as a parameter of another function, where that parameter is a list of members.

mbrName

A valid single member name or member combination, or a function that returns a single member or member combination.

@**IANCESTORS**(*mbrName* [, *genLevNum* | *genLevName*])

Returns the specified member and either (1) all ancestors of the specified member or (2) all ancestors up to the specified generation or level. You can use this member set function as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

genLevNum

Optional. An integer value that defines the absolute generation or level number up to which to select the members. A positive integer defines a generation number. A value of 0 or a negative integer defines a level number.

genLevName

Optional. Level name or generation name up to which to select the members.

@**ICHILDREN**(*mbrName*)

Returns the specified member and all of its children. This member set function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**IDESCENDANTS**(*mbrName* [, *genLevNum* | *genLevName*])

Returns the specified member, and either (1) all descendants of the specified member or (2) all descendants down to a specified generation or level. You can use this member set function as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

genLevNum

Optional. An integer value that defines the absolute generation or level number down to which to select the members. A positive integer defines a generation number. A value of 0 or a negative integer defines a level number.

genLevName

Optional. Level name or generation name down to which to select the members.

@**ILSIBLINGS**(*mbrName*)

Returns the specified member and all of the left siblings of the member. Left siblings are children that share the same parent as the member and that precede the member in the database outline. This member set function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**INT**(*expression*)

Returns the next lowest integer value of *expression*.

expression

Member specification or mathematical expression that generates a numeric value.

@**INTEREST**(*balanceMbr, creditrateMbrConst, borrowrateMbrConst* [, *rangeList*])

Calculates the simple interest in *balanceMbr* at the rate specified by *creditrateMbrConst* if the value specified by *balanceMbr* is positive, or at the rate specified by *borrowrateMbrConst* if *balanceMbr* is negative. The interest is calculated for each time period specified by *rangeList*.

balanceMbr

Single member specification representing the balance at the time the interest is calculated.

creditrateMbrConst

Single member specification, variable name, or numeric expression providing a constant value. The value must be a decimal number that corresponds to a percentage. The value represents the per-period interest rate.

borrowrateMbrConst

Single member specification, variable name, or numeric expression providing a constant value. The value must be a decimal number corresponding to a percentage value. The value represents the per-period interest rate.

rangeList

> Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the dimension tagged as Time. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**IRR**(*cashflowMbr*, *discountFlag*[, *rangeList*])

> Calculates the Internal Rate of Return on a cash flow that must contain at least one investment (negative) and one income (positive) value.

cashflowMbr

> Single member specification.

discountFlag

> Member specification, variable name, or numeric expression providing a constant value of either 1 or 0. Indicates whether the function should discount from the first period. 1 means do not discount from the first period. 0 means discount from the first period.

rangeList

> Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the dimension tagged as Time. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**IRSIBLINGS**(*mbrName*)

Returns the specified member and all the right siblings of the specified member. Right siblings are children that share the same parent as the member and that follow the member in the database outline. This member set function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISACCTYPE**(*tag*)

Returns TRUE if the current member has the associated accounts *tag*.

tag

Valid account tag defined in the current database. Any of the following tags may be used: First, Last, Average, Expense, and two-pass.

@**ISANCEST**(*mbrName*)

Returns TRUE if the current member is an ancestor of the specified member. This function excludes the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISCHILD**(*mbrName*)

Returns TRUE if a current member is a child of the specified member. This function excludes the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISDESC**(*mbrName*)

Returns TRUE if the current member is a descendant of the specified member. This function excludes the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISGEN**(*dimName, genName|genNum*)

Returns TRUE if the current member of the specified dimension is the specified generation.

dimName

The name of a dimension.

genName|genNum

Generation name specification, or a non-negative number that defines the number of a generation.

@**ISIANCEST**(*mbrName*)

Returns TRUE if a current member is the specified member or an ancestor of the specified member. This function includes the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISIBLINGS**(*mbrName*)

Returns the specified member and all siblings of that member. This member set function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISICHILD**(*mbrName*)

Returns TRUE if the current member is the specified member or a child of the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISIDESC**(*mbrName*)

>Returns TRUE if the current member is the specified member or a descendant of the specified member.

>*mbrName*

>>Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISIPARENT** (*mbrName*)

>Returns TRUE if the current member is the specified member or the parent of the specified member.

>*mbrName*

>>Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISISIBLING**(*mbrName*)

>Returns TRUE if the current member is the specified member or a sibling of the specified member.

>*mbrName*

>>Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISLEV**(*dimName, levName | levNum*)

Returns TRUE if the current member of the specified dimension is in the specified level.

dimName

Name of a dimension.

levName | levNum

A level name or an integer value that defines the number of a level. A value of 0 or a negative integer defines a level number.

@**ISMBR**(*mbrName|rangeList|mbrList*)

Returns TRUE if the current member matches any one of the specified members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

rangeList

A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension.

mbrList

A comma-delimited list of members.

@**ISPARENT**(*mbrName*)

Returns TRUE if the current member is the parent of the specified member. This function excludes the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISSAMEGEN**(*mbrName*)

>Returns TRUE if the current member is the same generation as the specified member.

>*mbrName*

>>Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISSAMELEV**(*mbrName*)

>Returns TRUE if the current member is the same level as the specified member.

>*mbrName*

>>Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISSIBLING**(*mbrName*)

>Returns TRUE if the current member is a sibling of the specified member. This function exludes the specified member.

>*mbrName*

>>Any valid single member name or member combination, or a function that returns a single member or member combination.

@**ISUDA**(*dimName, UDAStr*)

Returns TRUE if the specified user-defined attribute (UDA) exists for the current member of the specified dimension at the time of the calculation.

dimName

Dimension name specification that contains the member you are checking.

UDAStr

UDA name string.

@**LEV**(*mbrName*)

Returns the level number of the specified member.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**LEVMBRS**(*dimName, levName|levNum*)

Returns all members with the specified level number or level name in the specified dimension.

dimName

Dimension name specification.

levName|levNum

A level name or an integer value that defines the number of a level. A value of 0 or a negative integer defines a level number.

@**LIST**(*argument1, argument2, ..., argumentN*)

Creates and distinguishes lists that are processed by functions that require list arguments. @LIST can be used to create *expLists*, member lists, or *rangeLists*. @LIST treats a collection of parameters as one entity.

argument1, argument2, ..., argumentN

The list of arguments that are collected and treated as one argument so they can be processed by the parent function. Arguments can be member names, member combinations, member set functions, range functions, and numeric expressions.

@**LSIBLINGS**(*mbrName*)

Returns the left siblings of the specified member. Left siblings are children which share the same parent as the member and that precede the member in the database outline. This function excludes the specified member. This member set function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**MATCH**(*mbrName* | *genName* | *levName*, "*pattern*")

Perfoms wildcard (* or ?) member selections.

mbrName

> The default or user-defined name of the member on which to base the search. Hyperion Essbase searches the member names and alias names of the specified member and its descendants.

genName

> The default or user-defined name of the generation to search. Hyperion Essbase searches all member names and member alias names in the generation.

levName

> The default or user-defined name of the level to search. Hyperion Essbase searches all member names and member alias names in the level.

"pattern"

> The character pattern to search for, including a wildcard character (* or ?).

> - ?   substitutes one occurrence of any character. You can use ? anywhere in the pattern.

> - *   substitutes any number of characters. You can use * only at the end of the pattern.

> - To include spaces in the character pattern, enclose the pattern in quotation marks (" ").

@**MAX**(*expList*)

Returns the maximum value among the results of the expressions in the member list.

expList

Comma-delimited list of members, variable names, functions, and numeric expressions, all of which return numeric values.

@**MAXRANGE**(*mbrName* [, *rangeList*])

Returns the maximum value of the specified member across the specified range of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

rangeList

A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**MDALLOCATE**(*amount*, *Ndim*, *allocationRange1* ... *allocationRangeN*, *basisMbr*, [*roundMbr*] , *method* [, *methodParams*] [, *round* [, *numDigits*][, *roundErr*]])

Allocates values from a member, from a cross-dimensional member, or from a value across multiple dimensions. The allocation is based on a variety of criteria.

The @MDALLOCATE function allocates values that are input at an upper level to lower-level members in multiple dimensions. The allocation is based upon a specified share or spread of another variable. You can specify a rounding parameter for allocated values and account for rounding errors.

amount

A value, member, or cross-dimensional member that contains the value to be allocated into each *allocationRange*. The value may also be a constant.

● If *amount* is a member, the member must be from a dimension to which an *allocationRange* belongs.

● If amount is a cross-dimensional member, the member must include a member from every dimension of every *allocationRange*.

● If a member or cross-dimensional member is not from an *allocationRange* dimension, Hyperion Essbase displays a warning message.

If the amount parameter is a loaded value, it cannot be a Dynamic Calc member.

Ndim

The number of dimensions across which values are allocated.

allocationRange1 ... allocationRangeN

Comma-delimited lists of members, member set functions, or range functions from the multiple dimensions into which values from *amount* are allocated.

basisMbr

A value, member, or cross-dimensional member that contains the values that are used as the basis for the allocation. The *method* you specify determines how the basis data is used.

roundMbr

Optional. The member or cross-dimensional member to which rounding errors are added. This member (or at least one member of a cross-dimensional member) must be included in an *allocationRange*.

method

The expression that determines how values are allocated. One of the following:

- *share*—Uses *basisMbr* to calculate a percentage share. The percentage share is calculated by dividing the value in *basisMbr* for the current member in *allocationRange* by the sum across the *allocationRange* for that basis member:

  $amount * (@CURRMBR()->basisMbr/@SUM(allocationRange->basisMbr))$

- *spread*—Spreads *amount* across *allocationRange:*

  $amount * (1/@COUNT(SKIP, allocationRange))$

  SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH:

  Values to be ignored during calculation of the spread. You must specify a SKIP parameter only for *spread*.

  - SKIPNONE—Includes all cells.
  - SKIPMISSING—Excludes all #MISSING values in *basisMbr*, and stores #MISSING for values in *allocationRange* for which the *basisMbr* is missing.
  - SKIPZERO—Excludes all zero (0) values in *basisMbr*, and stores #MISSING for values in *allocationRange* for which the *basisMbr* is zero.
  - SKIPBOTH—Excludes all zero (0) values and all #MISSING values, and stores #MISSING for values in *allocationRange* for which the *basisMbr* is zero (0) or #MISSING.

- *percent*—Takes a percentage value from *basisMbr* for each member in *allocationRange* and applies the percentage value to *amount*:

  amount * (@CURRMBR( )->*basisMbr* * .01)

- *add*—Takes the value from *basisMbr* for each member of *allocationRange* and adds the value to *amount*:

  amount + @CURRMBR( )->*basisMbr*

- *subtract*—Takes the value from *basisMbr* for each member of *allocationRange* and subtracts the value from *amount*:

  amount − @CURRMBR( )->*basisMbr*

- *multiply*—Takes the value from *basisMbr* for each member of *allocationRange* and multiplies the value by *amount*:

  amount * @CURRMBR( )->*basisMbr*

- *divide*—Takes the value from *basisMbr* for each member of *allocationRange* and divides the value by *amount*:

  amount / @CURRMBR( )->*basisMbr*

round

Optional. One of the following:

- *noRound*—No rounding. *noRound* is the default.

- *roundAmt*—Indicates that you want to round the allocated values. If you specify *roundAmt*, you also must specify *numDigits* to indicate the number of decimal places to round to.

numDigits

> An integer that represents the number of decimal places to round to. You must specify *numDigits* if you specify *roundAmt*.
>
> - If *numDigits* is 0, the allocated values are rounded to the nearest integer. The default value for *numDigits* is 0.
>
> - If *numDigits* is greater than 0, the allocated values are rounded to the specified number of decimal places.
>
> - If *numDigits* is a negative value, the allocated values are rounded to a power of 10.

If you specify *roundAmt*, you also can specify a *roundErr* parameter.

roundErr

> Optional. An expression that specifies where rounding errors should be placed. You must specify *roundAmt* in order to specify *roundErr*. If you do not specify *roundErr*, Hyperion Essbase discards rounding errors. To specify *roundErr*, choose from one of the following:
>
> - *errorsToHigh*—Adds rounding errors to the member with the highest allocated value. If allocated values are identical, adds rounding errors to the first value in *allocationRange*.
>
> - *errorsToLow*—Adds rounding errors to the member with the lowest allocated value. If allocated values are identical, adds rounding errors to the first value in *allocationRange*. #MISSING is treated as the lowest value in a list; if multiple values are #MISSING, rounding errors are added to the first #MISSING value in the list.
>
> - *errorsToMbr*—Adds rounding errors to the specified *roundMbr*, which must be included in *allocationRange*.

@**MDANCESTVAL**(*dimCount*, *dimName1*, *GenLevNum1* ... *dimNameX*, *genLevNumX* [, *mbrName*])

Returns ancestor-level data from multiple dimensions based on the current member being calculated.

dimCount

Integer value that defines the number of dimensions from which ancestor values are being returned.

dimName1, ... dimNameX

Defines the dimension names from which the ancestor values are to be returned. You must specify a *genLevNum* for every *dimName*.

genLevNum, ... genLevNumX

Integer value that defines the absolute generation or level number from which the ancestor values are to be returned. A positive integer defines a generation reference. A negative number or value of 0 defines a level reference. You must specify a *dimName* for every *genLevNum*.

mbrName

Optional. Any valid single member name or member combination, or a function that returns a single member or member combination, from which the ancestor values are to be returned.

@**MDPARENTVAL**(*numDim, dimName1, ... dimNameX* [*,
mbrName*])

> Returns parent-level data from multiple dimensions based
> on the current member being calculated.

> *numDim*

>> Integer value that defines the number of dimensions
>> from which parent values are to be returned.

> *dimName1, ... dimNameX*

>> Defines the dimension names from which the parent
>> values are to be returned.

> *mbrName*

>> Any valid single member name or member
>> combination, or a function that returns a single
>> member or member combination, from which the
>> parent values are to be returned.

@**MDSHIFT**(*mbrName, shiftCnt1, dimName1,* [*range1* | (*range1*)], ...
shiftCntX, dimNameX, [*rangeX* | (*rangeX*)]])

> Shifts a series of data values across multiple dimension
> ranges.

> *mbrName*

>> Any valid single member name or member
>> combination, or a function that returns a single
>> member or member combination, from which the
>> values are to be shifted.

> *shiftCnt1 ... shiftCntX*

>> Integer that defines the number of member positions
>> to shift.

> *dimName1, ... dimNameX*

>> Defines the dimension names in which the shift is to
>> occur.

range1 | (range1) ... rangeX | (rangeX)

> Optional. A valid member name, a comma-delimited
> list of member names, member set functions, and
> range functions from the same dimension. If *rangeList*
> is not specified, Hyperion Essbase uses the level 0
> members from the dimension specified with the
> *dimName* parameter. If the range list is comma
> delimited, then the list must be enclosed in
> parentheses.

@**MEDIAN**(SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH, *expList*)

> Returns the median (the middle number) of the specified
> data set (*expList*). Half the numbers in the data set are
> larger than the median, and half are smaller.

SKIPNONE

> Includes all cells specified in *expList*, regardless of
> their content, during calculation of the median.

SKIPMISSING

> Excludes all #MISSING values from *expList* during
> calculation of the median.

SKIPZERO

> Excludes all zero (0) values from *expList* during
> calculation of the median.

SKIPBOTH

> Excludes all zero (0) values and #MISSING values
> from *expList* during calculation of the median.

expList

> Comma-delimited list of member specifications,
> variable names, functions, or numeric expressions.
> *expList* provides a list of numeric values across
> which the median is calculated.

@**MERGE**(*list1*, *list2*)

Merges two member lists that are processed by another function. Duplicate values from both lists are included only once in the merged list.

list1

The first list of member specifications to be merged.

list2

The second list of member specifications to be merged.

@**MIN**(*expList*)

Returns the minimum value among the results of the expressions in *expList*.

expList

Comma-delimited list of members, variable names, functions, and numeric expressions, all of which return numeric values.

@**MINRANGE**(*mbrName* [, *rangeList*])

Returns the minimum value of *mbrName* across the *rangeList*.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**MOD**(*mbrName1, mbrName2*)

Calculates the modulus of a division operation.

mbrName1 and *mbrName2*

Members from the same dimension, whose modulus is to be calculated.

@**MODE**(SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH, *expList*)

Returns the mode (the most frequently occurring value) in the specified data set (*expList*).

SKIPNONE

Includes all cells specified in *expList*, regardless of their content, during calculation of the mode.

SKIPMISSING

Excludes all #MISSING values from *expList* during calculation of the mode.

SKIPZERO

Excludes all zero (0) values from *expList* during calculation of the mode.

SKIPBOTH

Excludes all zero (0) values and #MISSING values from expList during calculation of the mode.

expList

Comma-delimited list of member specifications, variable names, functions, or numeric expressions. *expList* provides a list of numeric values across which the mode is calculated.

@**MOVAVG**(*mbrName* [, *n* [, *rangeList*]])

Applies a moving *n*-term average (mean) to an input data set. Each term in the set is replaced by a trailing mean of *n* terms, and the first terms (the *n*-1 terms) are copies of the input data. @MOVAVG modifies a data set for smoothing purposes.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

n

Optional. A positive integer value that represents the number of values to average. The default is 3.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**MOVMAX**(*mbrName* [, *n* [, *rangeList*]])

Applies a moving *n*-term maximum (highest number) to an input data set. Each term in the set is replaced by a trailing maximum of *n* terms, and the first terms (the *n*-1 terms) are copies of the input data. @MOVMAX modifies a data set for smoothing purposes.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

n

Optional. A positive integer value that represents the number of values that are used to calculate the moving maximum. The default is 3.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**MOVMED**(*mbrName* [, *n* [, *rangeList*]])

Applies a moving *n*-term median (middle number) to an
input data set. Each term in the list is replaced by a trailing
median of *n* terms, and the first terms (the *n*-1 terms) are
copies of the input data. @MOVMED modifies a data set
for smoothing purposes.

mbrName

Any valid single member name or member
combination, or a function that returns a single
member or member combination.

n

Optional. A positive integer value that represents the
number of values that are used to calculate the moving
median. The default is 3.

rangeList

Optional. A valid member name, a comma-delimited
list of member names, member set functions, and
range functions from the same dimension. If *rangeList*
is not specified, Hyperion Essbase uses the level 0
members from the dimension tagged as Time.

@**MOVMIN**(*mbrName* [, *n* [, *rangeList*]])

Applies a moving *n*-term minimum (lowest number) to an input data set. Each term in the list is replaced by a trailing minimum of *n* terms, and the first terms (the *n*-1 terms) are copies of the input data. @MOVMIN modifies a data set for smoothing purposes.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

n

Optional. A positive integer value that represents the number of values that are used to calculate the moving minimum. The default is 3.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**NEXT**(*mbrName* [*, n, rangeList*])

Returns the *n*th cell value in the sequence *rangeList* from *mbrName*, retaining all other members identical to the current member. @NEXT cannot operate outside the given range.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

n

Optional signed integer. If you do not specify *n*, then the default is set to 1, which provides the next member in the range. Using a negative value for *n* has the same effect as using the matching positive value in an @PRIOR function.

rangeList

Optional. A valid single member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**NPV**(*cashflowMbr*, *rateMbrConst*, *discountFlag* [, *rangeList*])

Calculates the Net Present Value of an investment based on the series of payments (negative values) and income (positive values).

cashflowMbr

Member specification providing a series of numeric values.

rateMbrConst

Single member specification, variable name, or numeric expression, providing a constant value.

discountFlag

Single member specification, variable name, or numeric expression set to 0 or 1 to indicate whether the function should discount from the first period. 1 means do not discount from the first period.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the dimension tagged as Time. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**PARENT**(*dimName* [, *mbrName*])

Returns the parent of the current member being calculated in the specified dimension. If you specify the optional *mbrName*, that parent is combined with the specified member.

This member set function can be used as a parameter of another function, where that parameter is a member or list of members.

dimName

Single dimension name specification.

mbrName

Optional. Any valid single member name or member combination, or a function that returns a single member or member combination, that is combined with the parent returned.

@**PARENTVAL**(*dimName*, [, *mbrName*])

Returns the parent values of a the member being calculated in the specified dimension.

dimName

Single dimension name specification that defines the focus dimension of parent values.

mbrName

Optional. Any valid single member name or member combination, or a function that returns a single member or member combination.

@**POWER**(*expression, power*)

Returns the value of the specified member or expression raised to *power*.

expression

Single member specification, variable name, function, or other numeric expression.

power

Single member specification, variable name, function, or other numeric expression.

@**PRIOR**(*mbrName* [, *n, rangeList*])

Returns the *n*th previous cell member from *mbrName* in *rangeList*. All other dimensions assume the same members as the current member. @PRIOR works only within the designated range.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

n

Optional signed integer. Using a negative value for *n* has the same effect as using the matching positive value in an @NEXT function. If you do not specify *n*, then a default value of 1 is assumed, which returns the next prior member from the lowest level of the dimension tagged as Time in the database outline.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**PTD**(*timePeriodList*)

Calculates the period-to-date values of members in the dimension tagged as Time. By default, data is summed unless Accounts are tagged as "First" or "Last."

timePeriodList

Range of members from the dimension tagged as Time.

@**RANGE**(*mbrName* [, *rangeList*])

Returns a member list that crosses the specified member from one dimension (*mbrName*) with the specified member range from another dimension (*rangeList*). @RANGE can be combined with non-range functions, such as @AVG, which replaces an existing range function, such as @AVGRANGE.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**RANK**(SKIPNONE|SKIPMISSING |SKIPZERO |SKIPBOTH, *value*, *expList*)

Returns the rank of the specified members or the specified value among the values in the specified data set. The rank of a value is equivalent to its position (its rank) in the sorted data set.

SKIPNONE

Includes all cells specified in *expList*, regardless of their content, during calculation of the rank.

SKIPMISSING

Excludes all #MISSING values from *expList* during calculation of the rank.

SKIPZERO

Excludes all zero (0) values from *expList* during calculation of the rank.

SKIPBOTH

Excludes all zero (0) values and #MISSING values from *expList* during calculation of the rank.

value

1   The member or member combination for which the rank is calculated,

     or

2   a constant value for which the rank is calculated.

expList

Comma-delimited list of member specifications, variable names, functions, or numeric expressions. *expList* provides a list of numeric values across which the rank is calculated.

@**RELATIVE**(*mbrName, genLevNum* | *genLevName*)

Returns all members at a specified generation or level that are above or below the specified member in the database outline.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

genLevNum

An integer value that defines the number of a generation or level number. A positive integer defines a generation number. A value of 0 or a negative integer defines a level number.

genLevName

Generation or level name specification.

@**REMAINDER**(*expression*)

Returns the remainder value of *expression*.

expression

Single member specification, variable name, or other numeric expression.

@**REMOVE**(*list1, list2*)

Removes values or members in one list from another list.

list1

A list of member specifications, from which the members specified in *list2* are removed.

list2

A list of member specifications to be removed from *list1*.

@**ROUND**(*expression, numDigits*)

This function rounds *expression* to *numDigits*.

expression

Single member specification, variable name, or other numeric expression.

numDigits

Single member specification, variable name, or other numeric expression that provides an integer value. If *numDigits* is 0, the number is rounded to the nearest integer. If *numDigits* is greater than 0, *expression* is rounded to the specified number of decimal places. If *numDigits* is a negative value, *expression* is rounded to a power of 10. The default value for *numDigits* is 0.

@**RSIBLINGS**(*mbrName*)

Returns all of the right siblings of the specified member. Right siblings are children that share the same parent as the member and that follow the member in the database outline. This function excludes the specified member. This member set function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**SANCESTVAL**(*rootMbr, genLevNum* [, *mbrName*])

Returns ancestor-level data based on the shared ancestor value of the current member being calculated.

rootMbr

Defines a member that is used to search for the nearest occurrence of an ancestor of a shared member.

genLevNum

Integer value that defines the absolute generation or level number from which the ancestor values are to be returned. A positive integer defines a generation reference. A negative number or value of 0 defines a level reference.

mbrName

Optional. Any valid single member name or member combination, or a function that returns a single member or member combination, for which the ancestor values are to be returned.

@**SHIFT**(*mbrName* [, *n, rangeList*])

Returns the *n*th cell value in the sequence *rangeList* from *mbrName*, retaining all other members identical to the current member. This function gets either the prior or next (*n*th past or future value in *rangeList*) value of *mbrName*, based on *n*. The direction of shift is wholly based on *n*, with positive *n* values producing an effect equivalent to @NEXT and negative values of *n* producing an equivalent effect to @PRIOR.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

n

Optional signed integer. Using a negative value for *n* has the same effect as using a positive value in the @PRIOR function. *n* must be a numeric value, not a reference, such as a member name.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**SIBLINGS**(*mbrName*)

Returns all siblings of the specified member. This function excludes the specified member. This function can be used as a parameter of another function, where that parameter is a list of members.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

@**SLN**(*costMbr, salvageMbrConst, lifeMbrConst* [*, rangeList*])

Calculates the amount per period that an asset in the current period may be depreciated, calculated across a range of periods. The depreciation method used is straight-line depreciation.

More than one asset may be depreciated over the range. The value is depreciated from its entry period to the last period in the range. The resulting value represents the sum of all the per-period depreciation values of each asset being depreciated.

costMbr

Single member specification representing an input asset for the current period.

salvageMbrConst

Single member specification, variable name, or numeric expression, providing a constant numeric value. This value represents the value of the asset in the current period at the end of the useful life of the asset.

lifeMbrConst

Single member specification, variable name, or numeric expression representing the useful life of the asset.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the dimension tagged as Time. *rangeList* represents the range over which the function accepts input and returns depreciation values. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**SPARENTVAL**(*rootMbr* [, *mbrName*])

Returns parent-level data based on the shared parent value of the current member being calculated.

RootMbr

Defines a member that is used to search for the nearest occurrence of a parent of a shared member.

mbrName

Optional. Any valid single member name or member combination, or a function that returns a single member or member combination from which the parent values are returned.

@**SPLINE**(*YmbrName* [, *s* [, *XmbrName* [, *rangeList*]]])

Applies a smoothing spline to a set of data points. A spline is a mathematical curve that smoothes or interpolates data.

YmbrName

A valid single member name that contains the dependent variable values used (when crossed with *rangeList*) to construct the spline.

s

Optional. A zero (0) or positive value that determines the smoothness parameter. The default value is 1.0.

XmbrName

Optional. A valid single member name that contains the independent variable values used (when crossed with *rangeList*) to construct the spline. The default independent variable values are 0, 1, 2, 3, and so on.

rangeList

Optional. A comma-delimited list of members, member set functions, or range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**STDEV**(SKIPNONE | SKIPMISSING | SKIPZERO | SKIPBOTH, *expList*)

Calculates the standard deviation of the specified data set (*expList*). The calculation is based upon a sample of a population. Standard deviation is a measure of how widely values are dispersed from their mean (average).

SKIPNONE

Includes all cells specified in *expList*, regardless of their content, during calculation of the standard deviation.

SKIPMISSING

Excludes all #MISSING values from *expList* during calculation of the standard deviation.

SKIPZERO

Excludes all zero (0) values from *expList* during calculation of the standard deviation.

SKIPBOTH

Excludes all zero (0) values and #MISSING values from *expList* during calculation of the standard deviation.

expList

Comma-delimited list of member specifications, variable names, functions, or numeric expressions. *expList* provides a list of numeric values across which the standard deviation is calculated.

@**STDEVP**(SKIPNONE |SKIPMISSING |SKIPZERO |SKIPBOTH, *expList*)

Calculates the standard deviation of the specified data set (*expList*). The calculation is based upon the entire population. Standard deviation is a measure of how widely values are dispersed from their mean (average).

SKIPNONE

Includes all cells specified in *expList*, regardless of their content, during calculation of the standard deviation.

SKIPMISSING

Excludes all #MISSING values from *expList* during calculation of the standard deviation.

SKIPZERO

Excludes all zero (0) values from *expList* during calculation of the standard deviation.

SKIPBOTH

Excludes all zero (0) values and #MISSING values from *expList* during calculation of the standard deviation.

expList

Comma-delimited list of member specifications, variable names, functions, or numeric expressions. *expList* provides a list of numeric values across which the standard deviation is calculated.

@**STDEVRANGE**(SKIPNONE |SKIPMISSING |SKIPZERO | SKIPBOTH, *mbrName* [, *rangeList*])

Calculates the standard deviation of all values of the specified member (*mbrName*) across the specified data set (*rangeList*). The calculation is based upon a sample of a population. Standard deviation is a measure of how widely values are dispersed from their mean (average).

SKIPNONE

Includes all cells specified in *expList*, regardless of their content, during calculation of the standard deviation.

SKIPMISSING

Excludes all #MISSING values from *expList* during calculation of the standard deviation.

SKIPZERO

Excludes all zero (0) values from *expList* during calculation of the standard deviation.

SKIPBOTH

Excludes all zero (0) values and #MISSING values from *expList* during calculation of the standard deviation.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**SUM**(*expList*)

Returns the summation of all the values in *expList*.

expList

Comma-delimited list of member specifications, variable names, or other numeric expressions, all of which provide numeric values.

@**SUMRANGE**(*mbrName* [, *rangeList*])

Returns the summation of all the values of the specified member (*mbrName*) across the specified range (*rangeList*).

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the same dimension. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**SYD**(*costMbr, salvageMbrConst, lifeMbrConst* [*, rangeList*])

Calculates the amount per period that an asset in the current period may be depreciated, across a range of periods. The depreciation method used is sum of the year's digits. More than one asset may be depreciated over the range. The value is depreciated from its entry period to the last period in the range. The resulting value represents the sum of all per-period depreciation values of each asset.

costMbr

Single member specification representing an input asset for the current period.

salvageMbrConst

Single member specification, variable name, or numeric expression, providing a constant numeric value. This value is the value of the asset in the current period after the useful life of the asset.

lifeMbrConst

Single member specification, variable name, or numeric expression representing the useful life of the asset.

rangeList

Optional. A valid member name, a comma-delimited list of member names, member set functions, and range functions from the dimension tagged as Time. *rangeList* represents the range over which the function accepts input and returns depreciation values. If *rangeList* is not specified, Hyperion Essbase uses the level 0 members from the dimension tagged as Time.

@**TODATE**(*formatString*, *dateString*)

Converts date strings to numbers that can be used in calculation formulas. @TODATE converts date strings into the number of seconds elapsed since midnight, January 1, 1970.

formatString

The format of the date string, either "mm-dd-yyyy" or "dd-mm-yyyy."

dateString

The date string.

@**TREND**(*Ylist*, [*Xlist*], [*weightList*], [*errorList*], [*XforecastList*], *YforecastList*, *method* [, method parameters] [, *Xfilter1* [, parameters]] [, *XfilterN* [, parameters]] [, *Yfilter1* [, parameters]] [, *YfilterN* [, parameters]])

Calculates future values based on curve-fitting to historical values. The @TREND procedure considers a number of observations, constructs a mathematical model of the process based on these observations (that is, fits a curve), and predicts values for a future observation. You can use weights to assign credibility coefficients to particular observations, report errors of the curve fitting, choose the forecasting method to be used (for example, linear regression), and specify certain data filters.

Ylist

An expression list that contains known observations.

Xlist

Optional. An expression list that contains underlying variable values. If you do not specify *Xlist*, the default variable values are 1, 2, 3, and so on, up to the number of values in *Ylist*.

weightList

> Optional. An expression list that contains weights for the data points in *Ylist*, for the linear regression method only. If values in *weightList* are #MISSING, the default is 1. Weights for methods other than linear regression are ignored. Negative weights are replaced with their absolute values.

errorList

> Optional. Member list that represents the differences between the data points in *Ylist* and the data points on the line or curve (as specified for *method*).

XforecastList

> Optional. Expression list that contains the underlying variable values for which the forecasting is sought. If you do not specify *XforecastList*, the values are assumed to be as follows:

> {(last value in *Xlist* + 1), (last value in *Xlist* + 2), ...} up to (last value in *Xlist* + the number of values in *YforecastList*)

> If you forecast consecutively from where Ylist stops, you do not need to specify XforecastList. If you want to move the forecasting period forward, specify the new period with XforecastList.

YforecastList

> A member list into which the forecast values are placed.

method

> A choice among LR (linear regression), SES (single exponential smoothing), DES (double exponential smoothing), and TES (triple exponential smoothing).

Hyperion Essbase Quick Technical Reference

Method parameters must be numeric values, not member names. Method parameters may be any of the following:

- *LR*[,*t*]

  A standard linear regression with possible weights assigned to each data point and an optional seasonal adjustment period [*t*], where [*t*] is the length of the period. In general, the weights are equal to 1 by default. You might want to increase the weight if the corresponding observation is important, or decrease the weight if the corresponding observation is an outlier or is unreliable.

- *SES*[,*c*]

  A single exponential smoothing with parameter *c* (default *c*=0.2). This method uses its own weight system, using the single parameter *c*. Increasing this parameter gives more weight to early observations than to later ones.

- *DES*[[,*c1*],*c2*]

  A double exponential smoothing (Holt's method) with optional parameters *c1*, *c2* (default *c1*=0.2, *c2*=0.3). This is a two-parameter weight system and a linear subsequent approximation scheme. The first parameter controls weight distribution for the intercept; the second parameter controls weight distribution for the slope of the line fit.

- *TES*[[[[,*T*],*c1*],*c2*],*c3*]

  A triple exponential smoothing (Holt-Winters method) with optional parameters *c1*, *c2*, *c3*, *T* (default *c1*=0.2, *c2*=0.05, *c3*=0.1, *T*=1). This is a three-parameter weight system and a linear model with a multiplicative seasonal component.

Xfilter1 ... XfilterN

Optional. Use one or more of the following filter methods to scale *Xlist:*

- *XLOG*[,*c*]

    logarithmic change with shift c (x' = log(x+c)) (default $c=1$)

- *XEXP*[,c]

    exponential change with shift c (x' = exp(x+c)) (default $c=0$)

- *XPOW*[,*c*]

    power change with power c (x' = x^c) (default $c=2$)

Yfilter1 ... YfilterN

Optional. Use one or more of the following filter methods to scale *Ylist:*

- *YLOG*[,*c*]

    logarithmic change with shift c (y' = log(y+c)) (default $c=1$).

- *YEXP*[,*c*]

    exponential change with shift c (y' = exp(y+c)) (default $c=0$).

- *YPOW*[,*c*]

    power change with power c (y' = y^c) (default $c = 2$)

@**TRUNCATE**(*expression*)

Removes the fractional part of *expression*, returning the integer.

expression

Single member specification, function, variable name, or other numeric expression, which returns a numeric value.

@**UDA**(*dimName, uda*)

Returns members based on a common attribute, which you have defined as a user-defined attribute (UDA) on the Hyperion Essbase server.

dimName

Name of the dimension with which the *uda* is associated.

uda

Name of the UDA as it appears in the database outline.

@**VAR**(*mbrName1, mbrName2*)

Calculates the variance (difference) between two members. The variance calculation recognizes the difference between accounts that are tagged in the database outline as "Expense" or "No Expense" and calculates the variance accordingly.

mbrName1 and *mbrName2*

Members from the same dimension whose variance results are to be calculated. The variance is derived by subtracting *mbrName2* values from *mbrName1*, unless an account is tagged as "Expense", in which case *mbrName1* values are subtracted from *mbrName2*.

@**VARPER**(*mbrName1, mbrName2*)

>Calculates the percent variance (difference) between two members. The variance calculation recognizes the difference between accounts that are tagged in the database outline as "Expense" or "No Expense" and calculates the variance accordingly.
>
>*mbrName1* and *mbrName2*
>
>>Members from the same dimension whose variance results are to be calculated. The percent variance is derived by taking the percent variance of *mbrName2* values from *mbrName1*, unless an account is tagged as "Expense," in which case *mbrName1* values are taken as a percent variance of *mbrName2*.

@**VARIANCE**(SKIPNONE|SKIPMISSING|SKIPZERO|SKIPBOTH, *expList*)

>Calculates the statistical variance of the specified data set (*expList*). The calculation is based upon a sample of a population. Variance is a measure of the dispersion of a set of data points around their mean (average) value.
>
>SKIPNONE
>
>>Includes all cells specified in *expList*, regardless of their content, during calculation of the variance.
>
>SKIPMISSING
>
>>Excludes all #MISSING values from *expList* during calculation of the variance.
>
>SKIPZERO
>
>>Excludes all zero (0) values from expList during calculation of the variance.
>
>SKIPBOTH
>
>>Excludes all zero (0) values and #MISSING values from *expList* during calculation of the variance.

expList

> Comma-delimited list of member specifications, variable names, functions, or numeric expressions. *expList* provides a list of numeric values across which the variance is calculated.

@**VARIANCEP**(SKIPNONE |SKIPMISSING |SKIPZERO | SKIPBOTH, *expList*)

> Calculates the statistical variance of the specified data set (*expList*). The calculation is based upon the entire population. Variance is a measure of the dispersion of a set of data points around their mean (average) value.

SKIPNONE

> Includes all cells specified in expList, regardless of their content, during calculation of the variance.

SKIPMISSING

> Excludes all #MISSING values from *expList* during calculation of the variance.

SKIPZERO

> Excludes all zero (0) values from *expList* during calculation of the variance.

SKIPBOTH

> Excludes all zero (0) values and #MISSING values from *expList* during calculation of the variance.

expList

> Comma-delimited list of member specifications, variable names, functions, or numeric expressions. *expList* provides a list of numeric values across which the variance is calculated.

@**WITHATTR**(*dimName*, "*operator*", *value*)

Returns all base members that are associated with an attribute that satisfies the conditions you specify. You can use operators such as >, <, =, and IN to specify conditions that must be met. @WITHATTR can be used as a parameter of another function, where that parameter is a list of members.

dimName

Single attribute dimension name.

operator

Operator specification, which must be enclosed in quotation marks (""). The following operators are supported:

>	Greater than
>=	Greater than or equal to
<	Less than
<=	Less than or equal to
==	Equal to
<> or !=	Not equal to
IN	In

These operators may behave differently with different attribute types.

value

A value that, in combination with the operator, defines the condition that must be met. The *value* can be an attribute member specification, a constant, or a date-format function (that is, @TODATE).

@**XREF**(*locationAlias* [, *mbrList*])

A cross-database function that allows a calculation taking place in one Hyperion Essbase database to incorporate values from a different, possibly remote database.

locationAlias

A location alias for the data source. A location alias is a descriptor that identifies the data source. The location alias specifies a server, application, database, username, and password. Location aliases are set by the database administrator at the database level using Application Manager, ESSCMD, or the API. For more information about setting location aliases, see the appropriate documentation. For example, if you want to set location aliases through Application Manager, see the *Hyperion Essbase Database Administrator's Guide* or the Application Manager Online Help.

mbrList

Optional. A comma-delimited list of members that qualifies the @XREF query. The members you specify for *mbrList* are sent to the data source in addition to the members in the current point of view in the data target. The data source then constructs a member combination, using in order of precedence:

- The members specified in *mbrList*

- The members in the current point of view

- The top member in any unspecified dimensions inthe data source

The *mbrList* parameter (1) modifies the point of view on the data target or (2) defines a specific point of view on the data source. For example, the following formula modifies the point of view on the data target:

```
1999->Jan->Inventory =
@XREF(sourceDB,Dec);
```

If the cube on the data source (sourceDB) contains data only from 1998, this formula sets Inventory for Jan in 1999 to the Inventory value for Dec from 1998.

The following formula defines a specific point of view on the data target:

```
Sales->Jan = @XREF(sourceDB,January);
```

Assume that the data target contains the member Jan, while the data source ("sourceDB") contains the member January. This formula simply maps the member in the data target (Jan) with its corresponding member in the data source (January), and pulls Sales->January from sourceDB.

Calculation Commands

Calculation commands are defined within a calculation script to instruct Hyperion Essbase in the exact calculation rules to be used. The Calculation Script Editor is used to create a script. Within the Editor, a dialog box is available, allowing you to paste functions while you develop formulas.

Note: Every formula and calc script command ends with a semicolon (;). For example, `CALC DIM(Product, Measures);`

This chapter includes an alphabetical listing of commands.

&*variableName;*

Prefaces a substitution variable in your calc script.

variableName

The name of the substitution variable set on the database.

AGG(*dimList*);

Consolidates database values. An AGG command ignores all member formulas; it simply consolidates parent/child relationships.

dimList

Name of a single dimension or a comma-delimited list of dimensions.

ARRAY *arrayVariableName* [*dimName*] = {*constList*};

Declares one-dimensional array variables.

arrayVariableName

Comma-delimited list of one or more array variable names.

dimName

Dimension whose size determines the size of the array variable. You must surround *dimName* with brackets [] when using the ARRAY command.

constList

Optional list of data values used to initialize the array variables. If no initialization is performed, then the array variables are set to #MISSING. The order of the values corresponds to the order of the members in the dimension used to define the array.

CALC ALL [EXCEPT DIM (*dimList*) |MBR (*mbrList*)];

Calculates and aggregates the entire database based on the database outline.

EXCEPT

Defines an exception list of dimensions or members that are to be excluded from the calculation.

DIM

Single-dimension specification.

dimList

Optional comma-delimited list of dimensions.

MBR

Single-member specification.

mbrList

Optional comma-delimited list of members, member set functions, or range functions.

CALC AVERAGE;

Calculates all members tagged in the database outline as time balance Average or Average Non-Missing.

Note: This command calculates the members based only on the dimension tagged as Accounts; it does not do a Time Series calculation on the dimension tagged as Time.

CALC DIM(*dimList*);

Calculates the formulas and aggregations associated with each member of all the specified dimensions.

dimList

Dimension or comma-delimited list of dimensions to be calculated.

CALC FIRST;

Calculates all members tagged in the database outline as time balance First.

CALC LAST;

Calculates all members tagged in the database outline as time balance Last.

CALC TWOPASS;

Calculates all members tagged in the database outline as Two-Pass. These members must be on a dimension tagged as Accounts.

CCONV *currExchMbr* | TOLOCALRATE *curType*;

Calculates currency conversions. This command is available only if your company has purchased the optional Hyperion Essbase Currency Conversion product.

currExchMbr

Currency name containing the required exchange rate. This is a member from the currency database.

TOLOCALRATE

Converts a converted currency back to the original, local rate.

curType

Currency type. This is a member from the CurType dimension in the currency database.

CLEARBLOCK ALL | UPPER | NONINPUT | DYNAMIC;

Clears blocks of data and sets them to #MISSING.

ALL

Clears all data blocks.

UPPER

Clears all consolidated level blocks.

NONINPUT

Clears blocks containing values derived from calculations.

DYNAMIC

Clears blocks containing values derived from Dynamic Calc And Store member combinations.

CLEARDATA *mbrName*;

Clears data values from the database and sets them to #MISSING.

mbrName

Any valid single member name or member combination, or a function that returns a single member or member combination.

DATACOPY *mbrName1* TO *mbrName2*;

Copies a range of data cells to another range within the database.

mbrName1 and *mbrName2*

Any valid single member name or member combination, or a function that returns a single member or member combination.

ELSE *statement*; [... *statement*;] ENDIF

Designates a conditional action to be performed in an IF statement. All actions placed after the ELSE in an IF statement are performed only if the test in the IF statement generates a value of FALSE.

statement

Those operations that are to be performed in the event that the IF test including the ELSE command produces a FALSE, or 0, result.

ELSEIF(*condition*) *statement*; [*... statement*;] ELSEIF | ELSE | ENDIF

Designates a conditional test and conditions that are performed if the preceding IF test generates a value of TRUE. For this reason, multiple ELSEIF commands are allowed following a single IF.

condition

Formula or function which returns a Boolean value of TRUE (a nonzero value) or FALSE (a zero value)

statement

Those operations that are to be performed in the event that the IF test (including the ELSE command) produces a TRUE, or 1, result.

ENDIF

Marks the end of an IF command sequence. The ENDIF command can only be used in conjunction with IF or IF ... ELSEIF statements.

FIX (*fixMbrs*)
COMMANDS ;
ENDFIX

Restricts database calculations to a subset of the database. All commands nested between the FIX and ENDFIX statements are restricted to the specified database subset.

fixMbrs

A member name or list of members from any number of database dimensions. *fixMbrs* can also contain:

● AND/OR operators. Use the AND operator when all conditions must be met. Use the OR operator when one condition of several must be met.

● Member set functions, which are used to build member lists based on other members.

COMMANDS

The commands you want to be executed for the duration of the FIX.

IF(*condition*) *statement*; [*...statement*;] [**ELSEIF** *...statement* | ELSE*...statement*] **ENDIF**

Performs conditional tests within a formula. Using the IF statement, you can define a Boolean test, as well as formulas to be calculated if the test returns either a TRUE or FALSE value.

condition

Formula or function which returns a Boolean value of TRUE (a nonzero value) or FALSE (a zero value).

statement

Operations to be performed depending on the results of the test.

LOOP (*integer*, [*break*])
COMMANDS;
ENDLOOP

>Specifies the number of times to iterate calculations. All commands between the LOOP and ENDLOOP statements are performed the number of times that you specify.

>*integer*

>>The integer constant that indicates the number of times to execute the commands contained in the loop block.

>*break*

>>Optional parameter used to break the iterative process of a loop. *break* must be the name of a temporary variable (VAR). Setting the value of the variable to 1 during the execution of the loop causes the loop to break at the beginning of its next iteration.

>*COMMANDS*

>>Those commands that you want to be executed for the duration of the LOOP.

SET Commands

>SET commands in a calc script are procedural. The first occurrence of a SET command in a calc script stays in effect until the next occurrence of the same SET command.

SET AGGMISSG ON|OFF;

>Specifies whether Hyperion Essbase aggregates #MISSING values in the database.

SET CACHE HIGH |DEFAULT |LOW |OFF |ALL;

Specifies the size of the calculator cache.

HIGH, DEFAULT, and LOW

Levels defining the size of the calculator cache. You set the values of HIGH, DEFAULT, and LOW in the ESSBASE.CFG file. If you do not set the value of DEFAULT in the ESSBASE.CFG file, Hyperion Essbase uses a default value of 200,000 bytes. The maximum calculator cache size that you can specify is 200,000,000 bytes.

OFF

Hyperion Essbase does not use a calculator cache.

ALL

Hyperion Essbase uses a calculator cache, even when you do not calculate at least one full sparse dimension.

SET CALCHASHTBL ON |OFF;

Optimizes the calculation of large, flat database outlines.

ON

Turns on optimization of large, flat database outlines.

OFF

Turns off the optimization of large, flat database outlines. The default setting is OFF. You can change this setting using CALCOPTCALCHASHTBL=TRUE in the ESSBASE.CFG file.

SET CLEARUPDATESTATUS AFTER |ONLY |OFF ;

Specifies when Hyperion Essbase marks data blocks as clean. This clean status is used during intelligent calculation. For detailed information on Intelligent Calculation, see the *Hyperion Essbase Database Administrator's Guide*.

The data blocks in your database have a calculation status of either clean or dirty. When Hyperion Essbase does a full calculation of your database, it marks the calculated data blocks as clean. When a data block is clean, Hyperion Essbase will not recalculate the data block on subsequent calculations, provided that Intelligent Calculation is turned on.

To ensure the accuracy of your calculation results, consider carefully the effect of the SET CLEARUPDATESTATUS AFTER command on your calculation. For more information, see the *Hyperion Essbase Database Administrator's Guide*.

If you do *not* use SET CLEARUPDATESTATUS, Hyperion Essbase does *not* mark calculated data blocks as clean when you calculate a subset of your database. Hyperion Essbase marks data blocks as clean only on a full calculation (CALC ALL;) or when Hyperion Essbase calculates all members in a single calculation pass through your database. For more information, see the *Hyperion Essbase Database Administrator's Guide*.

AFTER

> Hyperion Essbase marks calculated data blocks as clean, even if you are calculating a subset of your database.

ONLY

> Hyperion Essbase marks the specified data blocks as clean, but does not actually calculate the data blocks. This does the same as AFTER, but disables calculation.

OFF

> Hyperion Essbase does not mark the calculated data blocks as clean. Data blocks are not marked as clean, even on a default calculation (CALC ALL;) of your database. The existing clean or dirty status of the calculated data blocks remains unchanged.

SET FRMLBOTTOMUP ON |OFF;

> Optimizes the calculation of complex formulas on sparse dimensions in large database outlines. This command tells Hyperion Essbase to perform a bottom-up calculation on formulas that would otherwise require a top-down calculation.

ON

> Turns on the bottom-up sparse formula calculation method.

OFF

> Turns off the bottom-up sparse formula calculation method. The default setting is OFF. You can change this setting by using CALCOPTFRMLBOTTOMUP TRUE in the ESSBASE.CFG file.

SET LOCKBLOCK HIGH |DEFAULT |LOW;

> Specifies the maximum number of blocks that Hyperion Essbase can get addressability to concurrently when calculating a sparse member formula.

HIGH, DEFAULT, and LOW

> Levels defining the number of blocks that Hyperion Essbase can get addressability to concurrently.

SET MSG SUMMARY| DETAIL| ERROR | WARNS | INFO | NONE ;

Traces your calculations.

SUMMARY

Displays calculation setting, and provides statistics on the number of:

- Data blocks created, read, and written

- Data cells calculated

DETAIL

Provides the same information as SUMMARY. In addition, it displays a detailed information message every time Hyperion Essbase calculates a data block.

ERROR

Displays error messages only.

WARNS

Displays warning and error messages only.

INFO

Displays information, warning, and error messages.

NONE

Displays no messages during the life of the calc script. However, because error messages may contain vital information, they still are displayed.

SET NOTICE HIGH | DEFAULT | LOW;

Monitors the progress of your calculation by providing completion notices at intervals during the calculation.

HIGH, DEFAULT, and LOW

Levels defining the frequency and number of completion notices.

You can set the values of HIGH, DEFAULT, and LOW using the CALCNOTICE setting in the ESSBASE.CFG file. If you do not set the value of DEFAULT in the ESSBASE.CFG file, Hyperion Essbase uses a default value of 10 which provides 10 completion messages at 10% intervals during the calculation.

SET UPDATECALC ON | OFF;

Turns Intelligent Calculation on and off.

ON

Hyperion Essbase calculates only blocks marked as dirty. Dirty blocks include updated blocks and their dependent parents. The default setting is ON. You can change this default using the UPDATECALC TRUE | FALSE setting in the ESSBASE.CFG file.

OFF

Hyperion Essbase calculates all data blocks, regardless of whether they have been updated.

SET UPTOLOCAL ON | OFF;

Restricts aggregations to those parents with the same defined currency. The default is OFF.

VAR *varName* [= *value*];

Declares a temporary variable that contains a single value.

varName

Name of the temporary variable.

value

Optional parameter that declares the data value.

Report Writer Commands

The Hyperion Essbase Report Writer is a text-based editor that you use to report on data in a Hyperion Essbase database. You can combine Report Writer's selection, layout, and formatting commands to build a variety of reports.

This chapter includes the following:

● Table of Report Delimiters

  The < or { } delimiters are required for Report Writer commands. If you do not use a delimiter, Report Writer assumes that the command name is a member name.

● An alphabetic listing of commands

Table 5: Report Delimiters

Delimiter	Use in Report Writer	Example
{ }	Encloses report formatting commands	{SUPFORMATS}
<	Precedes layout and member sorting, selection, calculation, and some formatting commands	<PAGE

&_variableName_

Prefaces a substitution variable in the report script.

variableName

The name of the substitution variable set on the database. The variable name can be any combination of letters, numbers, and underscores up to 80 characters in length. Spaces, punctuation, and other special characters are not supported in the variable name.

!

Tells Hyperion Essbase to output the instructions in the report script to the current line.

{**AFTER** _char_ [_columnList_]}

Displays the first character of a designated character string following the data columns in the report.

char

Single character enclosed in quotation marks.

columnList

Optional list of one or more column numbers, separated by spaces. If included, AFTER affects only these columns. If you do not specify *columnList*, all data columns are affected.

<**ALLINSAMEDIM** _mbrName_

Selects all the members from the same dimension as the specified dimension member for the report.

mbrName

Single member representing a dimension. All members from this dimension are selected.

<**ALLSIBLINGS** *mbrName*

Adds all the siblings of the specified member to the report.

mbrName

Name of member whose siblings you want to add.

<**ANCESTORS** *mbrName*

Adds all the ancestors of the specified member to the report.

mbrName

Name of member whose ancestors you want to add.

<**ASYM**

Causes a report to be printed in an asymmetric format.

<**ATTRIBUTE**(*attrMbrName*)

Returns all base dimension members associated with a specified attribute. You must create the attribute dimension in the database outline and associate it with a base dimension before you use it in a report script.

attrMbrName

Name of the attribute dimension member. For example: <ATTRIBUTE (Red) returns all base members that are red in color.

{BEFORE "*char*" [*columnList*]}

Displays a character string before the data columns in the report.

char

A single character enclosed in quotation marks.

columnList

Optional. List of the column numbers, separated by spaces, that you want *char* to precede. Without *columnList*, *char* is displayed before all columns in the report.

{BLOCKHEADERS}

Displays all members that apply to a column as the column heading, in the style used by asymmetric reports.

<BOTTOM ([<*rowgroupDimension*>,] <*rows*>, <*column*>)

Returns rows with the lowest values of a specified data column.

<*rowgroupDimension*>

Optional. Row grouping dimension that determines the rows to sort as a set.

<*rows*>

Positive integer number of rows to be returned; must be greater than 0.

<*column*>

@DATACOL (<*colnumber*>) |
@DATACOLUMN (<*colnumber*>)

where <*colnumber*> is the target column number; must be between 1 and the maximum number of columns in the report.

{**BRACKETS**}

Displays parentheses around negative numbers instead of negative signs. The BRACKETS command need only be used to cancel the effect of a previously issued SUPBRACKETS command, as brackets are the default for negative numbers.

{**CALCULATE COLUMN** "*newColumn*" = *expression*}

Creates a new report column, performs on-the-fly calculations, and displays the calculation results in the newly-created column.

"*newColumn*"

New column name enclosed in quotation marks.

expression

Any valid column calculation expression. The following mathematical operators are supported in column calculations:

+	Addition operator
–	Subtraction operator
*	Multiplication operator
%X%Y	Evaluates X as a percentage of Y
/	Division operator
:X:Y	Performs a summation of data values from X to Y (inclusive). Must be the first operator if used with multiple operators.

{**CALCULATE ROW** "*newRow*" [*columnNo*] = *expression*}
or
{**CALCULATE ROW** "*newRow*" [*operator*]}

Creates a named report row and perform on-the-fly
calculations.

"*newRow*"

Name of a new row, enclosed by quotation marks,
that was declared with CALCROW, SAVEROW,
or SAVEANDOUTPUT.

columnNo

Optional. Designation of column numbers to which
Hyperion Essbase selects and applies the expression.

expression

Any valid row calculation expression.

operator

Any valid mathematical operator. The following
mathematical operators are supported in row
calculations:

+	Addition operator
−	Subtraction operator
*	Multiplication operator
%X%Y	Evaluates X as a percentage of Y
/	Division operator
OFF	Turn off the row operator

<**CHILDREN** *mbrName*

Selects all members in the level immediately below the specified member as defined in the database outline.

mbrName

Dimension or member name of the parent.

{**CLEARALLROWCALC**}

Resets the value of all calculated rows to #MISSING.

{**CLEARROWCALC** *name*}

Resets the value of the row calculation *name* to #MISSING.

name

Name of a calculated row from a CALCULATE ROW command.

{**COLHEADING**}

Turns on automatic display of the column header, and sets it to be output prior to display of the next non-suppressed output data row.

<**COLUMN** (*dimList*)

Specifies the column or columns to display across the page.

dimList

Dimension name or a comma-delimited list of dimensions.

{**COMMAS**}

Displays commas for numbers greater than 999 after commas have been suppressed with either a SUPCOMMAS or SUPALL command.

{**CURHEADING**}

Enables the display of the currency conversion heading.

<**CURRENCY** *targetCurrency*

Performs on-the-fly currency conversions in a report.

targetCurrency

Currency and currency type to display in the report.
Currency type is optional. Up to four members (at
most, one from each currency database dimension) in
a cross-dimensional member (->).

For example: US$, or FFrancs->Actual->Jun99

{**DECIMAL** *decPlaces* |VARIABLE [*columnN* [*columnN*]]}

Determines the number of decimal places to display in the
report.

decPlaces

Number of decimal places to display. Positive integer
from 0 (the default) to 40. Specify either VARIABLE
or *decPlaces*.

VARIABLE

Allows the decimal to float; may switch to scientific
notation (E+00 format) if necessary to display the
significant digits of a number in the given column
width. Specify either VARIABLE or *decPlaces*.

columnN

Optional. List of columns, separated by spaces, to be
affected by this command. If omitted, the command
affects all data columns.

<**DESCENDANTS** *mbrName*

Adds the descendants of the specified member to the report, excluding *mbrName* itself.

mbrName

Name of parent of descendants to include.

<**DIMBOTTOM** *mbrName*

Includes the members at the bottom of the dimension, those members with no children (level 0), to the report.

mbrName

Single member from the dimension for which you want to use the bottom-level members.

<**DIMEND** *dimList*

Allows you to specify a dimension format that is processed after cycling through all the members in the dimension.

dimList

List of members, separated by commas, that represents the dimensions for which the format is intended.

<**DIMTOP** *mbrName*

Adds the top of the dimension for the member to the report.

mbrName

Single member from the dimension to designate.

<**DUPLICATE** *mbrRange*

Allows a member name to occur more than once in a
dimension group selection.

mbrRange

Specifies single member name or selection command.

- Single member: A member already selected for
  the dimension can be selected again.

- Selection command: <DUPLICATE applies to
  all members selected by *mbrRange*. For example,
  <CHILDREN Accounts.

{**ENDHEADING**}

Ends the definition of the custom page heading that
is displayed at the top of each page in the report.

{**EUROPEAN**}

Enables non-US formatting of numbers by switching
commas and decimal points in the final report data values.

{**FEEDON**}

Enables page breaks in a report when the number of output
lines on a page is greater than the current PAGELENGTH
setting. The defaults are FEEDON and PAGELENGTH of
66 lines.

{**FIXCOLUMNS** *number*}

Fixes the number of total columns in the final report
regardless of how many actual columns are originally
selected.

number

Number of columns that you want to be displayed in
your final report.

{**FORMATCOLUMNS** *number* }

Expands the number of data columns when processed.

number

Expected number of columns that are encountered for
formatting purposes.

{**HEADING**}

Displays the page heading: either the default heading or
the heading as defined with the STARTHEADING and
ENDHEADING commands.

<**IANCESTORS** *mbrName*

Adds a member and its ancestors to the report.

mbrName

Single member whose ancestors you want to include.

<**ICHILDREN** *mbrName*

Selects the specified member and all members in the level
immediately below it.

mbrName

Dimension or member name of the parent.

<**IDESCENDANTS** *mbrName*

Adds the specified member and its descendants to the
report.

mbrName

Name of single member and descendants to add to the
report.

{IMMHEADING}

Forces the immediate display of the heading without waiting for the next non-suppressed data row.

{INCEMPTYROWS}

Displays empty rows of data, or rows that contain only zeros or #MISSING data values, in the final report.

{INCFORMATS}

Controls the formats affected by the following commands:

- SUPMASK
- SUPMISSING
- SUPZERO

{INCMASK}

Re-includes (turns back on) the mask that has been suppressed by the command SUPMASK.

{INCMISSINGROWS}

Displays missing rows of data, or rows that contain all #MISSING data values, in the final report.

{INCZEROROWS}

Includes rows that contain only data values of zero in the final report.

{**INDENT** [*offset*]}

Shifts the first row names column in column-output order by the specified number of characters.

offset

Optional. Number of spaces to indent column 0 from the left boundary of the name column. Values:

- Positive number (up to 100)—Shifts column 0 to the right.

- Negative number—Shifts column left, but cannot indent to the left of the start of the name column.

- 0—Returns column to original position.

- Default (no value)—Indents columns by 2.

{**INDENTGEN** [*offset*]}

Indents subsequent row members in the row names column based on the generation in the database outline.

offset

Optional. Number that determines the amount to indent each succeeding generation from the previous generation. The default is INDENTGEN -2.

<**IPARENT** *mbrName*

Adds the specified member and its parent to the report.

mbrName

A single member, which must not be the top member of the dimension.

<**LATEST** *mbrName*
or
reservedName (*mbrName*)

Specifies a Dynamic Time Series member in a report script. You must create a Dynamic Time Series member in the database outline before you use it in a report script.

reservedName

One of the following pre-defined generation names:

History-To-Date (H-T-D)
Year-To-Date   (Y-T-D)
Season-To-Date   (S-T-D)
Period-To-Date   (P-T-D)
Quarter-To-Date (Q-T-D)
Month-To-Date   (M-T-D)
Week-To-Date   (W-T-D)
Day-To-Date   (D-T-D)

mbrName

The name of the level 0 member in the Time dimension.

<**LINK** (*extractionCommand* [*operator extractionCommand*])

Uses the AND, OR, and NOT Boolean operators, combined with extraction commands, to refine member selections.

extractionCommand

Any of the following extraction commands or another AND/OR expression:

<ALLINSAMEDIM (*member*)
<ALLSIBLINGS (*member*)
<ANCESTORS (*member*)
<CHILDREN (*member*)
<DESCENDANTS (*member*)
<DIMBOTTOM (*member*)
<DIMTOP (*member*)
<IANCESTORS (*member*)
<ICHILDREN (*member*)
<IDESCENDANT (*member*)
<IPARENT (*member*)
<MATCH (*Dimension*, *match_string*)
<MEMBER (*member*)
<OFSAMEGEN (*member*)
<ONSAMELEVELAS (*member*)
<PARENT (*member*)
<UDA (*Dimension*, *UDA_name*)

operator

Any of the following Boolean operators:

● Use the AND operator when all conditions must be met.

● Use the OR operator when either one condition or another must be met.

● Use the NOT operator to choose the inverse of the selected condition.

{**LMARGIN** [*marginSize*]}

Sets the left margin for the report to *marginSize* characters.

marginSize

Optional. Numeric value: number of character spaces for left margin.

{**MASK** *charPosition* "*replacement*" [*charPosition* "*replacement*"]}

Overwrites the text in each output row with the specified characters at the specified position.

charPosition

Character position at which to start replacing text.

"*replacement*"

New text, enclosed in quotation marks, with which to overwrite the original output.

<**MATCH** ("*Member*"|"*Gen*"|"*Level*", "*Pattern*")

Performs wildcard member selections.

"*Member*"

Member name at the top of the member hierarchy you want to search. Hyperion Essbase searches the member name and its descendents.

"*Gen*"

Default or user-defined name of the generation you want to search.

"*Level*"

Default or user-defined name of the level you want to search.

"*Pattern*"

The character pattern you want to search for, including a wildcard character (* or ?).

- ?   Substitutes one occurrence of any character; can be placed anywhere in the string.

- *   Substitutes any number of characters; must be used at the end of the string.

- You can include spaces in the character pattern. Ensure that you enclose the pattern in quotation marks (" ").

{**MISSINGTEXT** ["*text*"]}

Substitutes a text label for missing values.

text

Optional. Text to use for missing values.

{**NAMESCOL** [*columnList* | CENTERED]}

Determines the location of the row names columns in the report.

columnList

Optional. List, separated by spaces, of the locations for each row name. List position corresponds to the number of the affected column.

CENTERED (or C)

Key word that centers the column of row member names in the report. Before using this parameter:

- Define all columns in the report.

- Use the FORMATCOLUMNS command to set the number of columns.

{**NAMESON**}

Turns on the display of columns of row member names.

{**NAMEWIDTH** [*width*]}

Determines the width of all row name columns in the report.

width

Optional. Specifies the total number of characters displayed for each column.

{**NEWPAGE**}

Inserts a new page in the report regardless of how many lines have been generated for the current page.

{**NOINDENTGEN**}

Displays all row member names left-aligned in the row names column without indenting members based on generation in the database outline.

{**NOPAGEONDIMENSION** *mbrName*}

Turns off insertion of a new page when the member in the report from the same dimension as *member* changes in a row of the report.

mbrName

Single member whose dimension is part of the PAGEONDIMENSION declaration.

{**NOROWREPEAT**}

Prevents row member names from being repeated on each line of the report if the row member name does not change on the next line. This is the default.

{**NOSKIPONDIMENSION** mbrName}

Prevents insertion of a new line when a member from the same dimension as *mbrName* changes in a row of the report.

mbrName

Single member that defines a dimension for which to halt line-skipping.

{**NOUNAMEONDIM** mbrName}

Turns off underlining for the new member name when the member in the report from the same dimension as the specified member changes in a row of the report.

mbrName

Member whose dimension is part of the UNAMEONDIM declaration.

{**OFFCOLCALCS**}

Disables all column calculations within the report.

{**OFFROWCALCS**}

Temporarily disables all row calculations.

<**OFSAMEGEN** mbrName

Adds to the report the members from the same dimension and generation as the specified member.

mbrName

Single member that designates the dimension and generation to retrieve.

{**ONCOLCALCS**}

Reenables column calculations in the report after they have been disabled by OFFCOLCALCS.

{**ONROWCALCS**}

Reenables all row calculations after they have been disabled by OFFROWCALCS. Each subsequent row of data after using the command is calculated.

<**ONSAMELEVELAS** *mbrName*

Adds to the report all members on the same level as the specified member.

mbrName

Single member that designates the dimension and generation to retrieve.

{**ORDER** *columnList*}

Specifies the order of columns in a report.

columnList

Numeric designations of the columns to rearrange, separated by a space between each column number.

Each column number represents the *initial* positions of each column (from 0 to *n* where *n* is the last column—counting names, data, and calculated columns, respectively).

The position of each number in the *columnList* represents the new order in which you want the columns to be displayed.

<**ORDERBY** ([<*rowgroupDimension*>,] <*column*> [<*direction*>]
{, <*column*> [<*direction*>]})

> Orders the rows in a report according to data values in the
> specified columns.
>
> <*rowgroupDimension*>
>
>> Optional. Row grouping dimension that determines
>> the rows to sort as a set.
>
> <*column*>
>
>> @DATACOL (<*colnumber*>) |
>> @DATACOLUMN (<*colnumber*>)
>>
>> where <*colnumber*> is the target column number;
>> must be between 1 and the maximum number of
>> columns in the report.
>
> <*direction*>
>
>> You can specify multiple columns with different
>> sorting directions where:
>>
>> ASC   is the ascending sort
>> DESC   is the descending sort

<**OUTALT**

> Sets the output alias to the database outline alias name, as
> defined in the current alias table.

<**OUTALTMBR**

> Sets the output alias to the database outline alias name (as
> defined in the current alias table) followed by the database
> outline member name.

{**OUTALTNAMES**}

> Displays alias names for members in a report.

<**OUTALTSELECT** *AliasTableName*

Selects an alias table in a report script.

AliasTableName

The name of the selected alias table associated with the database outline.

<**OUTMBRALT**

Sets the output name to the Database Outline member name followed by the Outline alias, as defined in the current alias table.

{**OUTMBRNAMES**}

Reverts to the default member name display after the OUTALTNAMES command has been used to display alternate names.

{**OUTPUT**}

Causes Hyperion Essbase to resume output, reversing the action of SUPOUTPUT.

<**PAGE**(*dimList*)

Defines which dimensions are displayed as page members in the final report.

dimList

Dimension name or a comma-delimited list of dimensions.

{**PAGEHEADING**}

Displays the page heading before the next data-output row.

{**PAGELENGTH** [*lines*]}

Sets the maximum number of lines for one page in the report.

lines

Optional. Total number of output lines for the size of paper you are using. Because the Report Writer does not recognize any font characteristics of the output report, it operates based on lines rather than inches.

{**PAGEONDIMENSION** *mbrName*}

Performs a page break whenever a member from the same dimension as the specified member changes from one line in the report to the next.

mbrName

Single member. If any member of the same dimension increments, a new page is started.

<**PARENT** *mbrName*

Adds the parent of the member to the report.

mbrName

Single member, which must not be the dimension (top) member.

{**PRINTROW** "*rowName*"}

Immediately displays the calculated *rowName* with its current values.

"*rowName*"

Character string, enclosed by quotation marks, which designates a previously declared calculated row. When the command is issued, the designated row is printed immediately in the report.

{**PYRAMIDHEADERS**}

Displays column members in centered, pyramid-shaped levels above columns (the default style used by symmetric reports).

<**QUOTEMBRNAMES**

Displays all the member names within quotation marks in the report script output.

{**REMOVECOLCALCS**}

Removes all column calculation definitions from the report.

{**RENAME** "*newMbrName*"} mbrName

Renames a member within the report.

"*newMbrName*"

Valid member name, enclosed in quotation marks, to be used as the replacement name.

mbrName

Name of the member that you want to rename temporarily.

<**RESTRICT** (<*column | value*> <*operator*> <*column | value*>
{<*logicalOperator*> <*column | value*><*operator*><*column | value*>})

Specifies the conditions that the row must satisfy before it becomes part of a result set.

<*column*>

@DATACOL (<*colnumber*>) |
@DATACOLUMN (<*colnumber*>)

where <*colnumber*> is the target column number; must be between 1 and the maximum number of columns in the report.

<*value*>

Cell data type (real number) | #MISSING

<*operator*>

>, >=	greater than, greater or equal
<, <=	less than, less than or equal
=	equal
!=, <>	not equal

<*logicalOperator*>

Report Writer processes logical operations from left to right without exception. Parentheses are not supported. The logical operators supported are AND and OR.

<**ROW** (*dimList*)

Determines the row dimensions for a report whose member names appear in the data rows of the report.

dimList

Dimension name or a comma-delimited list of dimensions.

{**ROWREPEAT**}

Displays all applicable row members on each row of the report even if a member describing a row is the same as in the previous row.

{**SAVEANDOUTPUT** ["*rowCalcName*"]} *rowMbr* !

Adds *rowMbr* to the report and creates a new calculated row whose default name is *rowMbr*, but which may be renamed with an optional name in quotation marks.

"*rowCalcName*"

Optional. Name, enclosed in quotation marks, for the calculated data row created by the SAVEROW command.

rowCalcName can be multi-part, separated by a tilde (~), as in the CALCULATE ROW and CALCULATE COLUMN syntax.

rowMbr

Row member that determines the row name for the calculated data row.

{**SAVEROW** ["*newRowCalcName*"] } *rowMbr* !

Creates a new calculated row whose default name is *rowMbr*, but which may be renamed with an optional name enclosed in quotation marks.

"*newRowCalcName*"

Optional. Name, enclosed in quotation marks, for the data row created by the SAVEROW command. The name can be multi-part, separated by a tilde (~), as in the CALCULATE ROW and CALCULATE COLUMN syntax.

rowMbr

Default row member used to determine the row name for the calculated data row.

rowMbr is the next member encountered after the {SAVEROW} command, so other intervening format commands ({ }) or non-member-selecting commands (<) are allowed and do not affect which member is saved.

{**SCALE** *factor* [*columnList*]}

Scales the data in the report by multiplying it by a numeric value.

factor

Numeric value by which all output values are multiplied. The result is a scaled value.

columnList

Optional. List of column numbers that this command affects.

{**SETCENTER** *charPosition*}

Sets a new centerline position on the page.

charPosition

Integer representing a character position on your page. Character position is counted from the left edge of the page and is not affected by the left margin setting.

{**SETROWOP** "*rowCalcName*" [*operation*]}

Defines on-the-fly calculations for a named row created with CALCULATE ROW.

"*rowCalcName*"

Named row, in quotation marks, to which SETROWOP applies.

operation

You can use any valid row calculation expression.

SETROWOP accepts the same mathematical operators as CALCULATE ROW. In addition, SETROWOP accepts the OFF operator, which turns off row operations for rows that follow.

<**SINGLECOLUMN**

Displays a column heading when there is only one column member extracted in the report.

{**SKIP** *n*}

Skips one or more lines in the output report.

n

Positive integer representing the number of lines to skip.

{**SKIPONDIMENSION** *mbrName*}

Inserts a blank line when a member from the same dimension as the specified member changes on the next line in the report.

mbrName

Name of a single member. When a member from this dimension changes during report processing, a blank line is inserted before the member change.

<**SORTALTNAMES**

Alphabetically sorts members by their alternate names within a member selection command (for example, <CHILDREN).

<**SORTASC**

Specifies an ascending sort order.

<**SORTDESC**

Specifies a descending, hierarchical sort order.

<**SORTGEN**

Sorts members by outline generation number.

<**SORTLEVEL**

Sorts members by outline level number.

<**SORTMBRNAMES**

Sorts members alphabetically by name.

<**SORTNONE**

Disables all previous sorting commands.

<**SPARSE**

Tells Hyperion Essbase to use the sparse data extraction method, which optimizes performance when a high proportion of the reported data blocks are #MISSING. This data extraction method is different from the regular method. Hyperion Essbase cannot use the sparse data retrieval optimization method on Dynamic Calc or Dynamic Calc And Store members.

{**STARTHEADING**}

Starts the definition of the page heading in place of the default heading, which is displayed at the top of each page in the report or immediately following a HEADING command.

{**SUPALL**}

Suppresses the display of the page and column headings, all member names, page breaks, commas, and brackets in the final report.

{**SUPBRACKETS**}

Suppresses the display of parentheses around negative numbers.

{**SUPCOLHEADING**}

Suppresses the display of the default column headings in the report.

{**SUPCOMMAS**}

Suppresses the display of commas in numbers greater than 999.

{SUPCURHEADING}

Suppresses the display of currency information when you use the CURRENCY command to convert the data values in your report to a specified currency.

{SUPEMPTYROWS}

Suppresses the display of rows that have only 0 or `#MISSING` values in the row.

{SUPEUROPEAN}

Disables the European method for displaying numbers.

{SUPFEED}

Suppresses the automatic insertion of a page break whenever the number of lines on a page exceeds the current PAGELENGTH setting.

{SUPFORMATS}

Used to suppress formats that produce output such as underlines and skips.

{SUPHEADING}

Suppresses the display of the default heading (page header and column headers) or custom header, if defined, at the top of each page.

{SUPMASK}

Suppresses the display of a text mask.

{SUPMISSINGROWS}

Suppresses the display of all rows that contain only `#MISSING` values.

{SUPNAMES}

Suppresses the display of row member names in the final report.

{SUPOUTPUT}

Suppresses all output while continuing to process all operations, such as calculations, format settings, and so forth. Use the OUTPUT command to resume output.

{SUPPAGEHEADING}

Suppresses the display of the page member heading whenever a heading is generated.

<SUPSHARE

Suppresses the display of duplicate shared members when you use generation or level names to extract data for your report.

<SUPSHAREOFF

Reinstates the display of duplicate shared members after they have been suppressed using the SUPSHARE command.

{SUPZEROROWS}

Suppresses the display of rows that have only 0 values in the row in the report.

<**SYM**

Forces a symmetric report, regardless of the data selection. Use SYM to change the symmetry of a report that Hyperion Essbase would create as an asymmetric report.

{**TABDELIMIT**}

Places tabs rather than spaces between columns.

{**TEXT** *charPosition* "*text*" [*charPosition* "*text*"...]}

Adds descriptive text to a report.

charPosition

Character position on the line to start *text*. Successive *charPositions* need not be in ascending order.

The only effect the order has is that if the position of two text strings cause an overlap, the last overwrites the first. "Last" is determined by left-right order in the TEXT statement, not by *charPosition*.

text

Text to add to the report.

<**TODATE** (*formatString, dateString*)

Converts date strings to numbers that can be used to extract data output for a specific time period. <TODATE converts date strings into the number of seconds elapsed since midnight, January 1, 1970.

formatString

The format of the date string, either "mm-dd-yyyy" or "dd-mm-yyyy".

dateString

The date string.

\<**TOP** ([<*rowgroupDimension*>,] <*rows*>, <*column*>)

Returns rows with the highest values of a specified data column.

<*rowgroupDimension*>

Optional. Row grouping dimension that determines the rows to sort as a set. The default is the inner row.

<*rows*>

Positive integer that specifies the number of rows to be returned; must be greater than 0.

<*column*>

@DATACOL (<*colnumber*>) |
@DATACOLUMN (<*colnumber*>)

where <*colnumber*> is the target column number; must be between 1 and the maximum number of columns in the report.

{**UCHARACTERS** ["*char*"]}

Underlines all non-blank characters in the preceding row in the report.

"*char*"

Optional. Single character, enclosed in quotation marks, used as the underline character.

{**UCOLUMNS** ["*char*"]}

Underlines all the columns, including both names and data, in the preceding row in the report.

"*char*"

Optional. Single character, enclosed in quotation marks, that creates an underline character.

<**UDA** (*dimName, udaStr*)

Selects members based on a common attribute, defined as a user-defined attribute (UDA) on the server.

dimName

Name of the dimension associated with the *udaStr*.

udaStr

Name of the user-defined attribute as it appears in the database outline.

{**UDATA** ["*char*"] }

Underlines all the data columns for a row in a report, while not underlining the row name columns.

"*char*"

Optional. Single character, enclosed in quotation marks, used as the underline character.

{**UNAME** ["*char*"]}

Underlines all the row name columns in the preceding row while not underlining the data columns.

"*char*"

Optional. Single character, enclosed in quotation marks, used as the underline character.

{**UNAMEONDIMENSION** *mbrName*}

Underlines the row member names in a row whenever a member from the same dimension as the specified member changes.

mbrName

Single member representing a dimension. When a new member from this dimension is output, an underline appears under all row names in the previous line.

{**UNDERLINECHAR** ["*character*"]}

Sets the default underline character displayed when underlining any information in a report.

"*character*"

Single character, enclosed in quotation marks, for the new underline character.

{**UNDERSCORECHAR** "*char*"}

Replaces the _ (underscore) character in a member name with another character.

"*char*"

Single character, enclosed in quotation marks, to display in place of underscore.

{**WIDTH** *number* [*column1* [*column2* [*columnN*]]]}

Specifies the width of columns in a report.

number

New column width in characters.

column1, *column2*, *columnN*

Optional. Numbers that designate the columns to resize, separated by spaces. Values: between 2 and 161.

<**WITHATTR**(*dimName*, "*operator*", *value*)

Specifies the characteristics of a base dimension member that match the specified values in a report script. You must create attribute dimensions in the database outline and associate them with a base dimension before you use it in a report script.

dimName

Single attribute dimension name.

"*operator*"

Operator specification, which must be enclosed in quotation marks (""). The supported operators are:

>	Greater than
>=	Greater than or equal to
<	Less than
<=	Less than or equal to
==	Equal to
<> or !=	Not equal to
IN	Within a specified range

These operators may behave differently, depending on the attribute type with which you use them.

value

Value that, in combination with the operator, defines the condition that must be met. The value can be an attribute member specification, a constant, or a date-format function (for example, <TODATE).

{**ZEROTEXT** ["*text*"]}

Replaces zero data values with a text string if a zero data value is output.

"*text*"

Optional. Text string, in quotation marks, to use in place of the 0 value.

ESSCMD Commands

The Hyperion Essbase OLAP Server includes ESSCMD, a command-line interface that performs operations interactively or through a batch or script file.

This chapter includes an alphabetic listing of commands.

ADDUSER *groupName userName*

Adds a user to a group.

groupName

Name of an existing group.

userName

Name of an existing user.

APPLYOTLCHANGEFILE *numFiles fileName*

Applies the outline changes specified in the .CHG log file to the outline of the target database you selected with the SELECT command. Use this command after calling the GETPARTITIONOTLCHANGES command, which creates the log file for the APPLYOTLCHANGEFILE command.

numFiles

A numeric value indicating the number of .CHG log files to read.

fileName

> The name of the `.CHG` log file to read. The filename must be the full pathname of the desired change file on the target database. The filename must be in quotation marks. More than one file can be specified.

ARCHIVE

This command is retained for backward compatibility. When you run the ARCHIVE command, Hyperion Essbase returns an informational message. Use the BEGINARCHIVE and ENDARCHIVE commands.

BEGINARCHIVE *App Db file*

Places a database in Read-only mode for archiving.

App

> Name of the application to archive.

DB

> Name of the database to archive.

file

> Name of the file to contain the archive.

BEGININCBUILDDIM

Prepares Hyperion Essbase for upcoming incremental, dimension-building commands. Used in conjunction with the ENDINCBUILDDIM command together with one or more INCBUILDDIM statements.

BUILDDIM *location rulobjName dataLoc sourceName fileType errorLog*

Use this command to dynamically build one or more dimensions from a data file or SQL source.

location

Location of the rules object. Values:

1 Local/client-based rules object

2 Remote/server rules object

3 File. Use option 3 if the file is not a Hyperion Essbase object, or if you want to specify the full path name. Otherwise, Hyperion Essbase looks in the *<APPNAME>/<DBNAME>* directory.

rulobjName

Name of the rules object.

dataLoc

Location of the data file. Values:

1 Local/client data file

2 Remote/server data file

3 File. Use option 3 if the file is not a Hyperion Essbase object, or if you want to specify the full path name. Otherwise, Hyperion Essbase looks in the *<APPNAME>/<DBNAME>* directory.

4 SQL source

sourceName

Source of the data file. Value:

● If dataLoc is 1, 2, or 3, specify the data file name.

● If dataLoc is 4, specify the SQL user name and password.

fileType

> Data file type. Values:

> 1   Excel file
> 2   Lotus `.WK1` file
> 3   Lotus `.WK3` file
> 4   Text file
> 5   Lotus `.WK4` file (this parameter is not required if you are using an SQL source.)

errorLog

> Name of the text file to receive error messages and rejected records.

CALC "*calcString*; [*calcString*;]"

> Executes one or more calculation strings.

> "*calcString*"

> > A calculation string in quotation marks (any valid string that is accepted by a calc script).

CALCDEFAULT

> Calculates the default database calculation.

CALCLINE "*calcString*"

> Executes a single calculation string.

> "*calcString*"

> > A calculation string in quotation marks (any valid string accepted by a calc script).

COMMITDB

Retained for backward compatibility, and no longer used. When the Transaction Isolation Level is Committed access, Hyperion Essbase handles commits automatically. When the Transaction Isolation Level is Uncommitted access, you can specify a commit threshold. See SETDBSTATEITEM for more information.

COPYAPP *sourceApp destApp*

Copies an application.

sourceApp

Name of the application to copy.

destApp

Name of the application copy.

COPYDB *sourceApp sourceDb destApp destDb*

Copies a database.

sourceApp

Name of the application that includes the database to copy.

sourceDb

Name of the database to copy.

destApp

Name of the application for the new database.

destDb

Name of the database copy.

COPYFILTER *sourceApp sourceDb sourceFilter destApp destDb destFilter*

Copies a filter.

sourceApp

Name of the application that includes the filter to copy.

sourceDb

Name of the database that includes the filter to copy.

sourceFilter

Name of the filter to copy.

destApp

Name of the application for the new filter.

destDb

Name of the database for the new filter.

destFilter

Name of the filter copy.

COPYOBJECT *objType sourceApp sourceDb sourceObj destApp destDb destObj*

Copies a database object.

objType

Type of object to list. Values:

0   Abort

1   Outline object (not available)

2   Calc script

3   Report script

4   Rules object

5   Alias table

6   Structure file

7   Backup file (not available)

8   Worksheet of any type (not available)

9   Text object

10   Partition

11   Linked Reporting Object

12   Selection

13   Wizard

sourceApp

Name of the application that includes the object to copy.

sourceDb

Name of the database that includes the object to copy.

sourceObj

Name of the object to copy.

destApp

Name of the application for the new object.

destDb

Name of the database for the new object.

destObj

Name of the object copy.

CREATEAPP *appName*

Creates a new application.

appName

Name of the application to create.

CREATEDB *appName dbName*

>Creates a database.
>
>*appName*
>
>>Name of the application in which to create a database.
>
>*dbName*
>
>>Name of the database to create.

CREATEGROUP *groupName*

>Creates a group.
>
>*groupName*
>
>>Name of the group to create.

CREATELOCATION *alias host application database user_name password*

>Creates a new location alias at the database level.
>
>*alias*
>
>>Desired location alias name.
>
>*host*
>
>>Destination host name.
>
>*application*
>
>>Destination application name.
>
>*database*
>
>>Destination database name.
>
>*user_name*
>
>>Login name.
>
>*password*
>
>>Valid password for *user_name*.

CREATEUSER *userName password*

Creates a new user ID.

userName

Name of the user ID to create.

password

Password for the new user.

CREATEVARIABLE *variableName serverName* [*appName* [*dbName*]] *value*

Defines a new substitution variable and its corresponding string value on the server. A variable can be defined at the database application, or server level.

variableName

The name to give to the new substitution variable. The name must be alphanumeric and can contain a maximum of 80 characters. You can use underscores, but not spaces.

serverName

Name of the server for which the variable is defined.

appName

Optional. Name of the application for which the variable is defined.

dbName

Optional. Name of the database for which the variable is defined.

value

The string value that corresponds to the substitution variable set on the server. The name must be alphanumeric and can contain a maximum of 255 characters. It can include a null value. Do not use the & character as the leading character in the value string.

DEFRAG

This command is no longer used. Starting with Release 5.0, defragmentation of data freespace is performed dynamically by the Hyperion Essbase kernel.

DELETEAPP *appName*

Deletes an application.

appName

Name of the application to delete.

DELETEDB *appName dbName*

Deletes a database.

appName

Name of the application containing the database to delete.

dbName

Name of the database to delete.

DELETEGROUP *groupName*

Deletes a group.

groupName

Name of the group to delete.

DELETELOCATION *alias*

Removes a location alias from the current database.

alias

Name of location alias to delete.

DELETELOG *appName*

Deletes an application log file or the Agent log file.

appName

Name of application. If you do not specify *appName*, Hyperion Essbase deletes the Agent log file.

DELETEUSER *userName*

Deletes a user ID.

userName

Name of the user to delete.

DELETEVARIABLE *variableName serverName* [*appName* [*dbName*]]

Removes an existing substitution variable.

variableName

Name of the substitution variable to delete.

serverName

Name of the server from which the variable is deleted.

appName

Optional. Name of the application from which the variable is deleted.

dbName

Optional. Name of the database from which the variable is deleted.

DISABLELOGIN [*appName*]

Prevents users from logging in to an application. Supervisors, and application designers for the application, are not affected by this setting.

appName

Optional. Application name required only if no application is selected.

DISPLAYALIAS *aliasTableName*

Lists the alias names defined in an alias table.

aliasTableName

Name of the alias table to display.

ENABLELOGIN [*appName*]

Enables connections to an application.

appName

Optional. Application name required only if no application is selected.

ENDARCHIVE *appName dbName*

Restores the database to read/write mode after archiving is complete.

appName

Name of the application containing the archived database.

dbName

Name of the archived database.

ENDINCBUILDDIM *preserve*

Ends the programming block started by BEGININCBUILDDIM and restructures the database after one or more incremental, dimension-building (INCBUILDDIM) commands.

preserve

Specifies whether to preserve existing data in the database. This parameter is required. Values:

1. Preserves all existing data blocks.
2. Preserves existing level 0 data.
3. Preserves existing input-level data.
4. Discards all existing data.

EXIT

Exits the ESSCMD utility.

EXPORT *exportName amount*

Dumps the data values of a database into an ASCII text file. If no path is specified, the file is created in the `ARBORPATH\app` directory.

exportName

Name of the file to create to receive the exported data.

amount

Number representing the data to export. Values:

1. Export all data.
2. Export only level 0 blocks.
3. Export only data from blocks with input data.

GETALLREPLCELLS *sourceServerName sourceAppName*
sourceDbName
or
GETALLREPLCELLS ALL

> Replicates all data cells in the replicated partition from a
> data source database to the selected data target database.
> Use this command when you are in the data target database.
>
> *sourceServer*
>
>> Name of the data source server from which cells are
>> replicated.
>
> *sourceApp*
>
>> Name of the data source application from which cells
>> are replicated.
>
> *sourceDb*
>
>> Name of the data source database from which cells are
>> replicated.
>
> ALL
>
>> Updates cells for all partitions where the selected
>> database is a data replication target.

GETAPPACTIVE

> Returns the name of the currently selected application.

GETAPPINFO [*appName*]

> Returns server, user, and database information for the
> current application.
>
> *appName*
>
>> Optional. Required only if no application is selected.

GETAPPSTATE [*appName*]

Returns information on the state of the currently selected application.

appName

Optional. Required only if no application is selected.

GETATTRIBUTESPECS

Returns the current attribute specifications for the selected application and database.

GETATTRINFO*mbrName*

Returns attribute member, dimension, and name information for given attribute members.

mbrName

Full attribute member name, as defined in Outline Editor > Settings > Attribute Member Names > Member Name Format tab. Example: Intro Date_07-26-1996

GETCRDB

Returns the name of the currency database that is linked to the currently selected database.

GETCRDBINFO

Returns information about the currency database that is linked to the currently selected database.

GETCRRATE

Returns the currency rate for every currency partition.

GETCRTYPE

Returns information about the default currency type and conversion method.

GETDBACTIVE

Returns the name of the currently selected database.

GETDBINFO [*appName dbName*]

Returns information on the state of the currently selected database.

appName dbName

Optional. Both parameters required if no application and database are selected.

GETDBSTATE [*appName dbName*]

Returns the most recently entered database settings information for the currently selected database.

appName dbName

Optional. Both parameters required if no application and database are selected.

GETDBSTATS

Returns detailed statistics for the currently selected database.

GETDEFAULTCALC

Returns the default calc script of the currently selected database.

GETMBRCALC *mbrName*

Returns the calc string associated with the selected member.

mbrName

Member name

GETMBRINFO *mbrName*

Returns information on a specific member.

mbrName

Member name

GETMEMBERS *mbrString*

Returns a list of members from the currently selected database.

mbrString

Optional. Dimension or member name. If specified, returns the children of the named dimension or member. The default is NULL. Returns a list of top-level members from the database.

GETPARTITIONOTLCHANGES *sourceServerName*
sourceAppName sourceDbName sourcePartitionType
getAllOtlChanges [*getAllDimChanges* [*getNewDim getDeletedDim*
getUpdatedDim getMovedDim getRenamedDim] *getAllMbrChanges*
[*getNewMbrs getDeletedMbrs getRenamedMbrs getMovedMbrs*]
getAllMbrAttribChanges [*getChngedMbrStatus getChngedMbrAlias*
getChngedMbrCalcSym getChngedMbrAcctType
getChngedMbrCurrCnvInfo getChngedMbrUda
getChngedMbrCalcFormulas] *getChangedLevNbr*
getChangedGenNbr]

> **Note:** All arguments must be provided on one line.

> Retrieves a list of outline changes made to the partitioned
> area in the source database, and writes these changes to
> the .CHG file on the target database you select with the
> SELECT command.

> *sourceServerName*

>> Name of the data source server where the outline
>> changes were made.

> *sourceAppName*

>> Name of the data source application where the outline
>> changes were made.

> *sourceDbName*

>> Name of the data source database where the outline
>> changes were made.

> *sourcePartitionType*

>> Name of the partition type where the outline changes
>> were made. Can be any of the following:

>> 1   Replicated
>> 2   Linked
>> 3   Transparent

> *getAllOtlChanges*

>> Lists all changes to the database outline. Values Y/N.

getAllDimChanges

> Lists all changes to the dimensions, including member names. Values Y/N.

getNewDim

> Lists newly created dimensions. Values Y/N.

getDeletedDim

> Lists deleted dimensions. Values Y/N.

getUpdatedDim

> Lists updated dimensions. Values Y/N.

getMovedDim

> Lists moved dimensions. Values Y/N.

getRenamedDim

> Lists renamed dimensions. Values Y/N.

getAllMbrChanges

> Lists all member changes. Values Y/N.

getNewMbrs

> Lists newly created members. Values Y/N.

getDeletedMbrs

> Lists deleted members. Values Y/N.

getRenamedMbrs

> Lists renamed members. Values Y/N.

getMovedMbrs

> Lists moved members. Values Y/N.

getAllMbrAttribChanges

> Lists all changes to member attributes. Values Y/N.

getChngedMbrStatus

> Lists members that have a changed status such as data storage or Dynamic Time Series information. Values Y/N.

getChngedMbrAlias

> Lists changed member aliases. Values Y/N.

getChngedMbrCalcSym

> Lists changed member unary operators. Values Y/N.

getChngedMbrAcctType

> Lists changed account type information for members in an Accounts dimension. Values Y/N.

getChngedMbrCurrCnvInfo

> Lists changed member currency conversion information. Values Y/N.

getChngedMbrUda

> Lists changed member user-defined attributes. Values Y/N.

getChngedMbrCalcFormulas

> Lists changed member calc formulas. Values Y/N.

getChangedLevNbr

> Lists changed level numbers. Values Y/N.

getChangedGenNbr

> Lists changed generation numbers. Values Y/N.

GETPERFSTATS

> Returns performance statistics tables. You must first enable statistics gathering using RESETPERFSTATS. Collecting and analyzing performance statistics can help you understand whether databases could use modifications to improve performance.

GETUPDATEDREPLCELLS *sourceServerName sourceAppName sourceDbName*
or
GETUPDATEDREPLCELLS ALL

Replicates all changed data cells in the replicated partition from a data source database to the selected data target database. Use this command when you are in the data target database.

sourceServerName

Name of the data source server from which cells are replicated.

sourceAppName

Name of the data source application from which cells are replicated.

sourceDbName

Name of the data source database from which cells are replicated.

ALL

Updates cells for all partitions where the selected database is a data replication target.

GETUSERINFO *userName*

Returns information about a specified user or group.

userName

Name of user or group.

GETVERSION

Returns the version number information on the current Hyperion Essbase server software installation.

GOTO "*Label*"; <SKIPPED COMMANDS> :*Label*; <COMMANDS OR EOF>

Skips all commands until it encounters the associated label.

"*Label*"

A string of ASCII characters; not case-sensitive.

:*Label*

Target location, preceded by a colon (:) and associated with "*Label*". Processing skips to this label.

HELP *?*

Lists all available commands.

?

The question mark represents the list of all available commands.

IFERROR "*Label*"; <SKIPPED COMMANDS> :*Label*; <COMMANDS OR EOF>

Checks the status returned by a command and either continues processing or branches to the associated label in response to the status.

"*Label*"

String of ASCII characters terminated by a white space; not case-sensitive.

:*Label*

Target location, preceded by a colon (:) and associated with "*Label*". Processing skips to this label.

IMPORT *numeric dataFile fileType* Y/N *ruleLoc rulobjName y/n* [*ErrorFile*]

For an SQL data source, the syntax is as follows:

IMPORT *4 SQLUserName SQLUserPassword ruleLoc rulobjName* Y/N [*ErrorFile*]

Loads data values from an external source into the currently selected database.

numeric

Location of the *dataFile* file. Values:

1   Local/client data file.
2   Remote/server data file.
3   File.
4   SQL source.

dataFile

Name of data source file.

fileType

File type of *dataFile*. Values:

1   Excel file.
2   Lotus 2 file.
3   Lotus 3 file.
4   Text file.
5   Lotus 4 file.

y/n

Whether to use rules when importing *dataFile*.

ruleLoc

> Location of the *rulobjName* file. Values:

> 1   Local/client rule object file.
> 2   Remote/server rule object file.
> 3   File is not a Hyperion Essbase object; enter a fully qualified path to the file.

rulobjName

> Name of the rules file.

y/n

> Whether to abort on error.

SQLUserName

> User name that connects to the SQL database.

SQLUserPassword

> User password for the SQL database.

ErrorFile

> The name of the error file. This is required only if you choose not to abort on error.

INCBUILDDIM *location rulobjName dataLoc sourceName fileType errorLog appendLog*

Incrementally builds one or more dimensions from a data file, without restructuring the database. This command provides better performance than BUILDDIM whenever you need to do multiple dimension builds from multiple rules files and your database contains data.

location

Location of the rules file. Values:

1   Local/client-based rules object.

2   Remote/server rules object.

3   File. Use option 3 if the file is not a Hyperion Essbase object, or if you want to specify the full path name. Otherwise, Hyperion Essbase looks in the *<APPNAME>/<DBNAME>* directory.

rulobjName

Name of the rules file.

dataLoc

Location of the data file. Values:

1   Local/client data file.

2   Remote/server data file.

3   File. Use option 3 if the file is not a Hyperion Essbase object, or if you want to specify the full path name. Otherwise, Hyperion Essbase looks in the *<APPNAME>/<DBNAME>* directory.

4   SQL source.

sourceName

Source of the data file. Values:

● If *dataLoc* is 1 or 2, specify the data file name.

● If *dataLoc* is 3, specify the data file name and path.

● If *dataLoc* is 4, specify the SQL user name and password.

fileType

Data file type. Values:

1   Excel file.
2   Lotus `.WK1` file.
3   Lotus `.WK3` file.
4   Text file.
5   Lotus `.WK4` file. This parameter is not required if you are using an SQL source.

errorLog

Name of text file to receive error messages and rejected records. Each INCBUILDDIM command in a BEGININCBUILDDIM...ENDINCBUILDDIM block can specify a different error log.

appendLog

Specifies whether to append to the error log file or overwrite it. Values:

1   Append.
2   Overwrite.

LISTALIASES

Returns a list of alias tables that are defined for the currently selected database.

LISTAPP

Returns a list of applications that are defined on the server.

LISTDB

Returns a list of databases that are contained within the currently selected application.

LISTFILES *fileType appName dbName*

Helps track the amount of disk space used by Hyperion Essbase databases, by supplying accurate index and data file information.

fileType

Type of Hyperion Essbase storage file for which to display names, counts, sizes, totals, and usage information. Values:

1   Index files.
2   Data files.
3   Index and data files. This is the default.

appname

Name of the application for which information is requested. Required only if no application is selected.

dbname

Name of the database for which information is requested. Required only if no database is selected.

LISTFILTERS *appName dbName*

Lists the filters in a database.

appName

Name of the application containing the filters.

dbName

Name of the database containing the filters.

LISTGROUPS

Returns a list of groups that are defined on the server.

LISTGROUPUSERS *groupName*

Returns a list of users that belong to a specified group.

groupName

Name of the group for which to return a list of users.

LISTLINKEDOBJECTS *userName modDate*

Lists information about the objects linked to the active database for a given user name or modification date.

userName

The name of a user. If specified, Hyperion Essbase returns a list of all objects last modified by the given user.

modDate

A modification date. If specified, Hyperion Essbase returns a list of all objects modified on or before the given date.

LISTLOCATIONS

Displays all location aliases defined on the current database.

LISTLOCKS [*appName dbName*]

Returns a list of all users who have locks on blocks for the currently selected database.

appName dbName

Optional. Both parameters required if no application and database are selected.

LISTLOGINS

Returns the list of login instances in your session.

LISTMEMBERS *filename*

Reads an .STR file (an exported Hyperion Essbase outline file). Use this command only when working with Release 2.*x* or earlier outlines.

filename

Name of .STR file to read.

LISTOBJECTS *number appName dbName*

Returns a list of objects.

number

Type of object to list. Values:

0   Abort.
1   Outline object.
2   Calc script.
3   Report script.
4   Rules object.
5   Alias table.
6   Structure file.
7   Backup file.
8   Worksheet of any type.
9   Text object.
10 Partition.
11 Linked Reporting Object (stored).
12 Selection.
13 Wizard.

appName

Name of the application containing the objects.

dbName

Name of the database containing the objects.

LISTUSERS

Returns a list of the users that are defined on the server.

LISTVARIABLES *serverName* [*appName* [*dbName*]]

Lists all substitution variables defined for a specified server.

serverName

Name of the server for which the variable is defined.

appName

Optional. Name of the application for which the variable is defined.

dbName

Optional. Name of the database for which the variable is defined.

LOADALIAS *aliasName fileName*

Loads an alias table to the currently selected database.

aliasName

Name of the alias table to load.

fileName

Name of the feeder file that loads into the table. Must be in the format required to import an alias table.

LOADAPP *appName*

Loads an application and its respective databases into memory.

appName

Name of the application to load.

LOADDATA *numeric fileName*

Loads data without a rules file.

numeric

Location of the data file. Values:

1   Local/client-based rules object (file).
2   Remote/server data file.
3   File. Use option 3 if the file is not a Hyperion Essbase object, or if you want to specify the full path name. Otherwise, Hyperion Essbase looks in the *<APPNAME>/<DBNAME>* directory.

fileName

Name of the file to load.

LOADDB *appName dbName*

Loads a database into memory.

appName

Name of the application in which the database resides.

dbName

Name of the database to load.

LOGIN *hostNode userName password* [*appName*] [*dbName*]

> Used to log in to the server.

> *hostNode*

>> Server name.

> *userName*

>> User ID defined on the Hyperion Essbase server.

> *password*

>> User's password.

> *appName*

>> Optional. Name of the application to load.

> *dbName*

>> Optional. Name of the database to load.

LOGOUT

> Logs the current user out of the Hyperion Essbase server.

LOGOUTALLUSERS *y/n*

> Logs out all users from the Hyperion Essbase server.

> *y/n*

>> Sets whether users are logged out.

LOGOUTUSER *userNumber*

> Logs a specific user off the server.

> *userNumber*

>> Login ID number associated with a user. Issue
>> LOGOUTUSER with no parameter to display a
>> list of users and user numbers.

OUTPUT *outputType* [*outputName* | *errorName*]

Directs process information output from the ESSCMD session to a text file.

outputType

Number representing output operation. Values:

1   Outputs all process information.

2   Outputs only errors.

3   Stops output of process information.

4   Stops output of errors.

outputName

Required for *outputType* 1 only. Name of file to receive output. Not used with other values for *outputType*.

errorName

Required for *outputType 2* only. Name of file to receive errors. Not used with other values for *outputType*.

PRINTPARTITIONDEFFILE *location* [*ddbFileName*] *textFileName*

Produces an ASCII text file of the distributed database's partition mapping tables.

location

Possible values:

1   Local/client file with a .DDB file extension that is stored in the directory pointed to by ARBORPATH. The *ddbFileName* is automatically retrieved.

2   Remote/server .DDB file. The *ddbFileName* is automatically retrieved.

3   Local/client file not stored in the ARBORPATH, or without a .DDB file extension. The *ddbFileName* is required when using this option.

ddbFileName

> The partition mapping definition `.DDB` file name from which to read information. This is usually the name of the database; for example, `BASIC.DDB`.
>
> If location is 1 or 2, `.DDB` file name is not required. If location is 3, the full path, file name, and file extension of the file is required.

textFileName

> The full path, file name, and file extension of the ASCII text output file to create.

PURGELINKEDOBJECTS *userName modDate*

Deletes objects linked to the active database for a given user name or modification date.

userName

> The name of a user. If *userName* is specified, Hyperion Essbase deletes all objects last modified by the given user.

modDate

> A modification date. If *modDate* is specified, Hyperion Essbase deletes all objects modified on or before the given date.

PURGEOTLCHANGEFILE *serverName appName dbName partitionType direction*

Deletes outline changes that already have been applied from the .CHG log file.

serverName

Name of the server from which to delete .CHG information.

appName

Name of the application from which to delete .CHG information.

dbName

Name of the database from which to delete .CHG information.

partitionType

Name of the partition type to which the deletions are applied. Values:

1   Replicated.
2   Linked.
3   Transparent.

direction

Values:

Source   The selected database is used as a data source for the replicated, transparent, or linked partition.

Target   The selected database is used as a data target for the replicated, transparent, or linked partition.

PUTALLREPLCELLS *targetServerName targetAppName*
targetDbName
or
PUTALLREPLCELLS ALL

Replicates all data cells in a replicated partition from the data source database you selected with the SELECT command, to a specified data target database. Use this command when you are in the data source database.

targetServerName

Name of the data target server to which cells are replicated.

targetAppName

Name of the data target application to which cells are replicated.

targetDbName

Name of the data target database to which cells are replicated.

ALL

Updates all cells in partitions where the selected database is a data replication source.

PUTUPDATEDREPLCELLS *targetServerName targetAppName*
targetDbName
or
PUTUPDATEDREPLCELLS ALL

Replicates all changed data cells in the replicated partition from the data source database you selected with the SELECT command, to the specified data target database. Use this command when you are in the data source database.

targetServerName

Name of the data target server to which changed cells are replicated.

targetAppName

Name of the data target application to which changed cells are replicated.

targetDbName

Name of the data target database to which changed cells are replicated.

ALL

Updates all changed cells in all partitions where the selected database is a data replication source.

REMOVEUSER *groupName userName*

Removes a user from a group.

groupName

Name of group from which to remove user.

userName

Name of the user to remove.

REMOVELOCKS *userNumber*

Removes any locks that a specified user has acquired
through a spreadsheet operation.

userNumber

Logon ID of user for whom you are removing locks.

RENAMEAPP *sourceApp newAppName*

Renames an existing application.

sourceApp

Name of existing application.

newAppName

New name for application.

RENAMEDB *sourceApp sourceDb newDbName*

Renames an existing database.

sourceApp

Name of the application that contains the database to be renamed.

sourceDb

Name of the database to be renamed.

newDbName

New name for the database.

RENAMEFILTER *sourceApp sourceDb sourceFltr newFltrName*

Renames an existing filter.

sourceApp

Name of the application that includes the filter.

sourceDb

Name of the database that includes the filter.

sourceFltr

Name of the existing filter.

newFltrName

New name for the filter.

RENAMEOBJECT *objType sourceApp sourceDb sourceObj newObjName*

Renames an existing object.

objType

Type of object to rename. Values:

0   Abort.

1   Outline object (not available).

2   Calc script.

3   Report script.

4   Rules object.

5   Alias table.

6   Structure file (retained only for backward compatability with Release 2.x).

7   Backup file (retained only for backward compatability with Release 2.x).

8   Worksheet of any type (not available).

9   Text object.

10 Partition.

11 Selection.

12 Wizard.

sourceApp

Name of the application that includes the object.

sourceDb

Name of the database that includes the object.

sourceObj

Name of the existing object.

newObjName

New name for the object.

RENAMEUSER *userName newUserName*

Renames an existing user.

userName

Name of the existing user.

newUserName

New name for the user.

REPORT *reportString*

Executes one or more report strings.

reportString

One or more report strings.

REPORTLINE *reportString*

Executes a single report string.

reportString

Report string.

RESETDB

Clears all the data from the currently selected database.

RESETOTLCHANGETIME *fromPartition toPartition*

Changes the time on the server you selected with the SELECT command, to match the time on another server.

fromPartition includes the following parameters:

serverName

Name of the server from which the time change is applied.

appName

Name of the application from which the time change is applied.

dbName

Name of the database from which the time change is applied.

partitionType

The name of the type of partition from which the time change is applied. Values:

1   Replicated.
2   Linked.
3   Transparent.

direction

Source   The selected database is used as a data source for the replicated, transparent, or linked partition.

Target   The selected database is used as a data target for the replicated, transparent, or linked partition.

toPartition includes the following parameters:

serverName

    Name of the server to get the time change.

appName

    Name of the application to get the time change.

dbName

    Name of the database to get the time change.

partitionType

    The name of the type of partition to which the time change is applied. Values:

    1   Replicated

    2   Transparent

    3   Linked

direction

    Source   The selected database is used as a data source for the replicated, transparent, or linked partition.

    Target   The selected database is used as a data target for the replicated, transparent, or linked partition.

RESETPERFSTATS *persistence scope*

Resets statistics gathering for a specified persistence
and scope. Each of the statistics tables available using
GETPERFSTATS command has a pre-defined persistence
and scope. When you issue RESETPERFSTATS without
parameters, statistics-gathering is reset for all tables.

Collecting and analyzing performance statistics can help
you understand whether databases could use modifications
to improve performance.

persistence [default=long]

   disable

      Turn off performance-statistics gathering.

   enable

      Turn on performance-statistics gathering. You
      might do this when you want to tune the system,
      change hardware configuration, or monitor I/O.
      The measurement begins for current processes as
      soon as you enable it. Any subsequent queries for
      statistics return measurements spanning from the
      time of enablement to the time of the query.

   short

      Reset tables that measure transient events. Short
      measurements need frequent resetting. You might
      use this to measure how many x events happened
      during an operation; for example, how many
      reads or writes occurred during a calculation? Did
      the calculation speed up or slow down by a factor
      of n? Examples: Semaphore, Event, Spinlock, and
      Mutex tables.

> Reset tables that measure medium-length events. Examples:
>
> - Essbase kernel I/O Statistics table.
>
> - Cache Endtrans Statistics table.
>
> - Database Synchronous I/O table.
>
> - Database Asynchronous I/O table.

long (default)

> Reset tables that measure events over the course of the entire session. Long measurements rarely need to be reset. Example: Essbase kernel Cache Statistics table.

scope [default=all]

thread

> Reset per-thread statistics tables. There are currently no per-thread tables available in ESSCMD. A thread is the scope of one Hyperion Essbase transaction; for example, a load operation. Many threads are at work within Hyperion Essbase processes.

db

> Reset per-database statistics tables.

server

> Reset per-application statistics tables.

all (default)

> Reset all statistics tables: for threads, databases, and applications.

RESETSTATUS

Resets all saved status values to 0 (zero).

RESTORE

No longer used. Retained for backward compatibility. When you run the RESTORE command, Hyperion Essbase returns an informational message.

RUNCALC *numeric calcScript*

Runs a calc script.

numeric

Location of the calc script data file. Values:

1   Local/client-based calc script.
2   Remote/server calc script.
3   File. Use option 3 if the file is not a Hyperion Essbase object, or if you want to specify the full path name. Otherwise, Hyperion Essbase looks in the *<APPNAME>* / *<DBNAME>* directory.

calcScript

Name of the calc script to run.

RUNREPT *numeric reptScript outputFile*

Runs a report script.

numeric

Location of the report script file. Values:

1   Local/client-based report script.
2   Remote/server report script.
3   File. Use option 3 if the file is not a Hyperion Essbase object, or if you want to specify the full path name. Otherwise, Hyperion Essbase looks in the *<APPNAME>* / *<DBNAME>* directory.

reptScript

Name of the report script to run.

outputFile

Target file name for report output.

SELECT *appName dbName*

Selects an application and database.

appName

Name of the application containing the desired database.

dbName

Name of database within the selected application.

SETALIAS *aliasName*

Sets an alias table as the primary table.

aliasName

Name to set for the alias table.

SETAPPSTATE ["*appName*"] "*desc*" *Y/N Y/N accessLevel Y/N Y/N Y/N Y/N lockTimeout MaxLROFileSize* ;

Defines application settings.

appName

Name of the application. Do not include *appName* if the active application is selected.

desc

Text string describing the application.

Y/N

Sets whether the application is loadable.

Y/N

Sets whether autoload occurs.

accessLevel

Default access level. Values:

0   None.

1   Read.

2   Write.

3   Calculate.

4   Application designer or database designer.

Y/N

Sets whether connections can be made.

Y/N

Sets whether commands can be issued.

Y/N

Sets whether updates can occur.

Y/N

Sets whether security is enabled.

lockTimeout

Maximum number of seconds that locks can be placed on blocks by Spreadsheet Add-in users.

MaxLROFileSize

Maximum size, in kilobytes, for a Linked Reporting Objects (LRO) file.

SETDBSTATE ["*appName*"] ["*dbName*"] "*desc*" *Y/N Y/N accessLevel dataCacheSize Y/N Y/N Y/N currDb ccType 0/1 indexCacheSize IndexPageSize Y/N*;

Defines database settings.

Note: It is most efficient to load the required database before you run the SETDBSTATE command, then stop and restart the database for the command to take effect.

appName

Name of the application. Not required if the active application is selected.

dbName

Name of the database; required if *appName* is used.

desc

Text string describing the database.

Y/N

Sets whether the database is loadable.

Y/N

Sets autoload on or off.

accessLevel

Default access level. Values:

0   None.
1   Read.
2   Write.
3   Calculate.
4   Database designer.

dataCacheSize

Maximum amount of server memory allocated for data cache. Default: 3145728 bytes.

Y/N

Sets whether to aggregate missing values.

Y/N

Sets whether to perform a Two-Pass calc.

Y/N

Sets whether to create blocks on equations.

currDb

Links a currency database.

ccType

Specifies the default currency type member.

0/1

Sets the conversion method. Values:

0   Division.

1   Multiplication.

indexCacheSize

Maximum amount of server memory allocated for index cache. Default: 1048576 bytes.

indexPageSize

Maximum amount allocated for index page. Value: integer between 1024 and 8192 bytes.

Y/N

Enable (Y) or disable (N) data compression on disk.

SETDBSTATEITEM [*optionNumber*] ["*appName*"] ["*dbName*"]
["*value(s)*"]

> Defines database settings by number, and provides more
> options than SETDBSTATE.

> **Note:** It is most efficient to load the required
> database before you run the SETDBSTATE
> command, then stop and restart the database
> for the command to take effect.

optionNumber

> An integer between 0 and 27, inclusive. This number
> corresponds to the options listed below. Enter 99 to be
> prompted for all options (in interactive mode).

appName

> Name of the application. Not required if the active
> application is selected.

dbName

> Name of the database; required if *appName* is used.

value(s)

> Acceptable value or values; these vary from option to
> option.

> If you specify the *optionNumber* or follow the
> prompts, the following values are:

> 0 Abort—Returns you to the ESSCMD command
> line. Use only in interactive mode.

> 1 Description—Text string describing the database.

> 2 Allow Database to Start?—Sets whether the
> database is loadable. Values: Y/N.

3   Start database with Application?—Sets autoload
    on or off. Values: Y/N.

4   Access Level—Values:

    0   None.

    1   Read.

    2   Write.

    3   Calculate.

    4   Database designer

5   Data Cache Size—The maximum size of a buffer
    in memory that holds data blocks for the current
    operation. Default and minimum: 3145728B
    (3 megabytes).

6   Aggregate Missing Values?—Sets whether to
    aggregate missing values. Values: Y/N.

7   Two Pass Calc When [CALC ALL]?—Sets
    whether or not to perform a second calculation
    on formulas tagged as "Two-Pass" as part of the
    default calculation. Values: Y/N.

8   Create Blocks on Equation?—Sets whether to
    create blocks on equations. Values: Y/N.

9   Currency Database Name—Links a currency
    database that you specify.

10 Currency Conversion Type Member—Specifies
    the default currency conversion type member.

11 Currency Conversion Type—Sets the conversion
    method. Values:

    0   Division

    1   Multiplication

12 Index Cache Size—Maximum size of a memory buffer that holds index pages for the current operation. Default: 1048576 bytes (1 megabyte).

13 Index Page Size—The size of an index page (all pages in a database are the same size). Acceptable values: 1024B, 2048B, 4096B, or 8192B.

14 Data Compression on Disk?—Enables (Y) or disables (N) data compression on disk.

15 Data Compression Type—Values:

    1 Run-Length Encoding.

    2 Bitmap (the default).

16 Retrieval Buffer Size—Specifies the size of the internal server sorting buffer that holds extracted row data cells before they are evaluated by the RESTRICT or TOP/BOTTOM Report Writer command. This buffer is used by the Report Writer and the Retrieval Wizard. The default is 10K.

17 Retrieval Sort Buffer Size—Specifies the size of the internal server sorting buffer that holds data until it is sorted. This buffer is used by the Report Writer and the Retrieval Wizard. The default is 10K.

18 Isolation level—Choose committed or uncommitted access to your database. Committed access provides better data integrity. Uncommitted access provides consistency with Hyperion Essbase Release 4. See the *Hyperion Essbase Database Administrator's Guide* for information about isolation levels. Values:

1   Committed access

2   Uncommitted access (the default)

Depending on which type of access you specify, ESSCMD prompts you for other parameters (or you can supply the values on the command line).

If you choose 1 (committed access), ESSCMD prompts for:

● Pre-image access (see item 19).

● Time Out (see item 20).

If you choose 2 (uncommitted access), ESSCMD prompts for:

● Number of blocks modified before internal commit. The default is 3000.

● A value of 0 means no implicit commit; Hyperion Essbase commits blocks at the end of the transaction.

● Number of rows to data load before internal commit. The default is 0, no implicit commit; Hyperion Essbase commits blocks at the end of the transaction.

19 Pre image access?—Valid for Committed access only. Provides users Read-only access to data blocks that are locked for the duration of another transaction. Users see the last committed data values for those data blocks. If you choose N (No), your transaction waits for the blocks to become available, or Hyperion Essbase issues a time-out error. Values: Y/N. The default is N (No).

20 Time Out—The length of time, in seconds, to wait to acquire a lock on data blocks that are locked by another transaction. Acceptable values are:

-1   Indefinite wait

0   Immediate access, or no wait

n   A number of seconds that you specify.

21 Number of Blocks Modified Before Internal Commit—The default is 3000. See item 18.

22 Number of Rows to Data Load Before Internal Commit—The default is 0. See item 18.

23 Add Disk Volume Definitions—Use this parameter if you want to allocate storage across multiple volumes or restrict space used on a volume. For information on disk volumes, see the *Hyperion Essbase Database Administrator's Guide*.

ESSCMD prompts you for the following values, unless you supply them on the command line:

●   The number of new disk volumes you want to add.

Then, for each volume:

- Volume name or drive letter (required).

- Volume size (maximum space to use on that volume). The default is unlimited (0). The minimum is 8 megabytes. You can specify this value in bytes (B), kilobytes (K), megabytes (M, the default), or gigabytes (G).

- File types to be stored on this volume:

    1   Index files only
    2   Data files only
    3   Index and data files (the default)

- File size. The maximum size that each index or data file can attain before Hyperion Essbase creates a new file. The default is 2G. The minimum is 8 megabytes. You can specify this value in bytes (B), kilobytes (K), megabytes (M, the default), or gigabytes (G).

24 Modify Disk Volume Information—Change the disk volume settings on an allocated volume. This command prompts you for the number assigned to the disk volume you want to change and then prompts you for each value. Use GETDBSTATE to see a list of the currently defined disk volumes, and the number assigned to each volume.

25 Delete Disk Volume Definition—Stop Hyperion Essbase from storing additional files on an allocated volume. This command prompts you for:

Volume Definition-*n*

where *n* is the number corresponding to the disk volume definition you want to remove. For example, suppose you defined three volumes: first, C; then, E; then, D. Hyperion Essbase considers D the third volume-definition number 3.

26　Cache Memory Locking—Enable or disable Cache Memory Locking. When enabled, this setting locks the memory used for the index cache, data file cache, and data cache into physical memory, improving database performance. Values: Y/N. The default is No.

27　Data File Cache Size—Specify the size, in bytes, for the Data File Cache. Minimum: 8388608 bytes. Default: 33554432 bytes. Recommended: Combined size of all ESS*.PAG files if possible; as large as possible otherwise.

99　All Items—Prompts for each option in turn. Use only in interactive mode.

SETDEFAULTCALC *calcString*

Sets a calculation string as the default database calculation.

calcString

Calculation string to set.

SETDEFAULTCALCFILE *calcobjName*

Sets a calculation object as the default database calculation.

calcobjName

Calculation object to set. Give full path name if this object is not in the CLIENT directory.

SETHELP *numberLines*

Changes the number of lines of command-listing output the ESSCMD HELP command displays on the screen at a time.

numberLines

Desired number of lines of HELP-command output to display on the screen at a time.

SETLOGIN *sesNo*

Sets the active login to a particular instance.

sesNo

Login instance session number. Values:

prev	Previous number.
next	Next session number.
sessionNo	Integer representing session.

SETMSGLEVEL *level*

Defines the level of messages that are generated by the server.

level

Level setting for messages. Values:

1	Make no changes.
2	Display all information messages.
3	Display only warning messages.
4	Display only error messages.
5	Display no messages.

SETPASSWORD *userName newPassword*

Assigns a new password to an existing user.

userName

Name of the existing user.

newPassword

New password for the user.

SHUTDOWNSERVER *servername username password*

Lets you shut down the Agent from any terminal connected to it. You must have Supervisor privilege to use this command.

servername

Name of the server you want to shut down.

username

Your user name.

password

Your password.

SLEEP "*seconds*"

Pauses an ESSCMD script.

seconds

Number of seconds for the batch file execution to sleep.

UNLOADALIAS *aliasName*

Unloads the existing alias table.

aliasName

Name of the alias table to unload.

UNLOADAPP *appName*

Unloads an application from memory on the server.

appName

Name of the application to unload.

UNLOADDB *appName dbName*

Unloads a database from memory on the server.

appName

Name of the application in which the database resides.

dbName

Name of the database to unload.

UNLOCKOBJECT *objType sourceApp sourceDb sourceObj*

Unlocks an existing object.

objType

Type of object to list. Values:

1 Outline object.
2 Calc script.
3 Report script.
4 Rules object.
5 Alias table (not available).
6 Structure file (not available).
7 Backup file (not available).
8 Worksheet of any type (not available).
9 Text object.
10 Partition.
11 Linked Reporting Object (stored).
12 Selection.
13 Wizard.

sourceApp

Name of the application that includes the object.

sourceDb

Name of the database that includes the object.

sourceObj

Name of the existing object to unlock.

UPDATE *dataString*

Loads a single data record.

dataString

A single data record.

UPDATEFILE *location fileName update*

Loads data, unlocks blocks, and verifies a data file.

location

Location of the data file. Values:

1   Local/client-based rules object
2   Remote/server data object
3   File. Use option 3 if the file is not a Hyperion
    Essbase object, or if you want to specify the full
    path name. Otherwise, Hyperion Essbase looks in
    the *<APPNAME>*/*<DBNAME>* directory.

fileName

Name of the file to load

update

Update action. Values:

1   Load data
2   Unlock data blocks
3   Verify data

UPDATEVARIABLE *variableName* [*serverName* [*appName* [*dbName*]]] *value*

Updates the variable value that corresponds to the specified substitution variable.

variableName

The name of the existing substitution variable.

serverName

Optional. Name of the connection server to which the variable is applied.

appName

Optional. Name of the application to which the variable is applied.

dbName

Optional. Name of the database to which the variable is applied.

value

The new string value that corresponds to the substitution variable. The name must be alphanumeric, and can be a maximum of 255 characters. You can have a null value, but do not use a leading & character in the value.

VALIDATE [*errorlogFile*]

Checks the database for data integrity.

errorlogFile

Optional. Name of destination file for error messages. If no path is specified, the default location for the list file is in the `application\database` directory.

For example:

`ESSBASE\APP\Sample\Basic\VALIDATE.LST`

VALIDATEPARTITIONDEFFILE

Validates shared partition definitions identified in the partition mapping definition (`.DDB`) file. You must issue the command for both the data source and the data target `.DDB` files. You need to log in to each server and issue the command separately for each portion of the partition definition.

ESSBASE.CFG File Settings

The ESSBASE.CFG (essbase.cfg on UNIX platforms) file enables you to customize your Hyperion Essbase configuration. You can create separate ESSBASE.CFG files at the server and client levels, each accepting different settings. This chapter includes an alphabetical listing of settings available in the server file and client file.

Server File Settings

AGENTDELAY *n*

Specifies the number of seconds a Server Agent thread waits to perform a specific action.

n

> The number of seconds an Agent waits before performing a specific action. *n* must be an integer and must be 5 or higher. The default value is 20.

AGENTTHREADS *n*

Specifies how many threads the Server Agent may spawn.

n

> The number of threads the Server Agent may produce. *n* is an integer between 2 and 500, inclusive. The default value is 5. It is strongly recommended that you use this default value.

CALCCACHE TRUE | FALSE

Specifies whether Hyperion Essbase uses a calculator cache when calculating your database.

TRUE

Tells Hyperion Essbase to use a calculator cache when calculating the database. The default is TRUE.

FALSE

Tells Hyperion Essbase not to use a calculator cache when calculating the database.

CALCCACHEHIGH | CALCCACHEDEFAULT | CALCCACHELOW *n*

Sets the HIGH, DEFAULT, and LOW values for the calc script SET CACHE command.

HIGH

Maximum calculator cache size that a user can choose to use during calculation.

DEFAULT

Default calculator cache size.

LOW

Minimum calculator cache size that a user can choose to use during calculation.

n

An integer value for each level. It represents the size of the calculator cache in bytes.

If you do not set the value of DEFAULT, Hyperion Essbase uses a default value of 200,000 bytes.

The maximum calculator cache size that you can specify is 200,000,000 bytes.

CALCHASHTBLMEMORY *MemSize*

Sets the calculator hash table memory limit.

MemSize

Maximum amount of memory (in bytes) that you want the calculator hash table to use. The default is 20 megabytes.

CALCLOCKBLOCKHIGH | CALCLOCKBLOCKDEFAULT | CALCLOCKBLOCKLOW *n*

Sets the HIGH, DEFAULT, and LOW values for the calc script SET LOCKBLOCK command.

This setting specifies the maximum number of blocks that Hyperion Essbase can fix (get addressability to) when calculating one block. HIGH, DEFAULT, and LOW are levels.

HIGH

The maximum number of blocks that a user can choose to fix concurrently when one data block is calculated.

DEFAULT

The default number of blocks that can be fixed concurrently.

LOW

The minimum number of blocks that a user can choose to fix concurrently.

n

Integer value for each level, representing the total number of blocks that can be fixed concurrently.

CALCNOTICE HIGH | CALCNOTICEDEFAULT | CALCNOTICELOW *n*

Sets the HIGH, DEFAULT, and LOW values for the SET NOTICE calculation command.

The SET NOTICE command monitors the progress of your calculation, displaying completion notices during the calculation. HIGH, DEFAULT, and LOW are levels.

HIGH

Maximum number of completion notices that a user can choose to display.

DEFAULT

Default number of completion notices.

LOW

Minimum number of completion notices that a user can choose to display.

n

Integer value for each level. It represents the number of notices to be displayed at set intervals during the calculation.

CALCOPTCALCHASHTBL TRUE | FALSE

Specifies whether Hyperion Essbase optimizes the calculation of large, flat database outlines.

TRUE

Optimizes the calculation of large, flat database outlines; for example, where one member has more than 5,000 children.

FALSE

Does not optimize the calculation of large, flat dimensions. The default is FALSE.

CALCOPTFRMLBOTTOMUP TRUE | FALSE

Specifies whether Hyperion Essbase optimizes the calculation of complex formulas on sparse dimensions in large database outlines. If enabled, this setting tells Hyperion Essbase to perform a bottom-up calculation on formulas that would otherwise require a top-down calculation.

TRUE

Optimizes the calculation of formulas on sparse dimensions in large database outlines by forcing a bottom-up calculation.

FALSE

Does not use the bottom-up calculation for formulas on sparse dimensions in large database outlines. The default is FALSE.

CASESENSITIVE TRUE | FALSE

Determines whether member names are case-sensitive.

TRUE

Member names are case-sensitive.

FALSE

You need not pay attention to case when entering a member name. The default is FALSE.

CCTRACK TRUE | FALSE

Controls whether exchange rates are tracked as Hyperion Essbase calculates currency conversions.

TRUE

Causes Hyperion Essbase to track exchange rates while conversions are calculated. The default value is TRUE.

FALSE

Turns off the tracking system.

CLEARLOGFILE TRUE | FALSE

Determines whether Hyperion Essbase overwrites log files.

TRUE

Hyperion Essbase overwrites the application and server log files.

FALSE

Hyperion Essbase appends to the existing log files. The default setting is FALSE.

COMMITBLOCKS

COMMITBLOCKS is no longer used, and is retained only for migration from Release 4.x. Hyperion Essbase offers committed or uncommitted isolation levels. When the isolation level is uncommitted, two related settings are optional: Commit Blocks and Commit Rows. For information about these settings, see the online help for the Application Manager Database Settings dialog box, or see the online *Technical Reference* for the SetDbStateItem command in ESSCMD.

DATACOMPRESS

No longer used. To enable data compression, use the Application Manager Database Settings dialog box, or SetDbStateItem in ESSCMD. For more information, see the online help or HTML documentation for those items.

DATACOMPRESSIONTYPE

No longer used. To set data compression type, use the Application Manager Database Settings dialog box, or SetDbStateItem in ESSCMD. For more information, see the online help or HTML documentation for those items.

DATAERRORLIMIT *n*

Determines the number of records that can be written to an error log file during a data load operation.

n

The number of records, per data load, that can be written to the error log file. The default setting is 1000.

DISKVOLUMES

No longer used. To set or change Disk Volumes, choose Database > Settings in the Application Manager and select the Storage tab, or issue SetDbStateItem in ESSCMD. For more information, see the online help or HTML documentation for those items.

EXCEPTIONLOGOVERWRITE TRUE | FALSE

Determines where Hyperion Essbase writes application and server exception error log data.

TRUE

Hyperion Essbase overwrites the existing error log. The default value is TRUE.

FALSE

Hyperion Essbase keeps the existing error log and creates new logs for every exception.

EXCLUSIVECALC TRUE | FALSE

Determines whether Hyperion Essbase allows concurrent calculations.

TRUE

If a calculation operation (command or script) is running, Hyperion Essbase fails any other calculation operations.

FALSE

Hyperion Essbase allows concurrent calculation operations. The default value is FALSE.

INCRESTRUC *appname dbname* TRUE | FALSE

Specifies whether incremental restructuring is enabled for a database. You can enable incremental restructuring for individual databases or for all databases.

appname

Application name. Optional parameter for enabling Incremental Restructuring for one or all databases in an application. This parameter can be used in combination with *dbname*. If you omit *appname*, you cannot specify *dbname*, and INCRESTRUC will be enabled for all applications and databases.

dbname

> Database name. Optional parameter for enabling Incremental Restructuring for an individual database. This parameter must be used in combination with *appname*. If you specify *dbname*, you must also specify *appname*.

TRUE

> When you make certain outline or dimension changes that normally result in immediate database restructuring, Hyperion Essbase defers restructuring until the next time it accesses the affected blocks.

FALSE

> Hyperion Essbase immediately restructures the database whenever an outline or dimension change calls for it. The default is FALSE (for all databases).

You can use a wildcard, *xxxxx*, to indicate "all" for any application or database argument. For example:

```
INCRESTRUC xxxxx Basic TRUE
```

enables incremental restructuring for any application with a Basic database.

Settings for nonexistent applications or databases are ignored.

You can issue up to ten (total) INCRESTRUC statements per application.

INDEXCACHESIZE

No longer used, except during migration from Release 4.x. To set or change the index cache size, choose Database > Settings in Application Manager and select the Storage tab, or issue SetDbStateItem in ESSCMD. For more information, see the online help or HTML documentation for those items.

INDEXPAGESIZE

No longer used in ESSBASE.CFG, except during migration from Release 4.x. To set or change the index page size, choose Database > Settings in Application Manager and select the Storage tab, or issue SetDbStateItem in ESSCMD. For more information, see the online help or HTML documentation for those items.

LOCKTIMEOUT *n*

Limits the amount of time a Spreadsheet Add-in user can hold an exclusive lock.

n

A number of seconds. The default value is 3600 seconds (60 minutes).

LROONSHAREDMBR TRUE | FALSE

Specifies whether shared members have Linked Reporting Objects that are unique from those of their corresponding regular members.

TRUE

LROs related to regular members are unique, and not shared by shared members. The default is TRUE.

FALSE

Shared members have the same LROs as corresponding regular members.

NETDELAY *n*

Specifies the network request delay time.

n

An integer value of 100 or above, expressed in milliseconds. The default value is 200 milliseconds.

NETNPCONNECTTIMEOUT n

Limits the amount of time a Named Pipes network continues to try to connect after an unsuccessful attempt.

n

An integer value, expressed in seconds. The default value is 30 seconds.

NETRETRYCOUNT *n*

Specifies the number of times the network will retry a connection.

n

Integer value for the number of retries. The default value is 600 retries. The minimum value is 300.

NODENAME *server_name*

Identifies the server where your Hyperion Essbase application runs.

server_name

The name of the server where your Hyperion Essbase application is running. NODENAME uses the current server by default.

NUMERICPRECISION *n*

Defines the number of precision digits used by the Hyperion Essbase Report Writer for numerical comparison.

n

Number of precision digits to be considered in the numerical comparison. Acceptable values for *n* are -1 through 15. A value of -1 causes Hyperion Essbase to perform a full comparison. The default value is 4.

OUTLINECHANGELOG TRUE | FALSE

Logs all outline changes into the file *database_name*.OLG. OUTLINECHANGELOG allows database administrators to review the outline revision history and gather enough information to roll back changes if needed.

TRUE

Hyperion Essbase logs outline changes into the file *database_name*.OLG.

FALSE

Hyperion Essbase does not log outline changes. The default is FALSE.

OUTLINECHANGELOGFILESIZE *n*

Sets the maximum file size of the outline change log in bytes. When the outline change log reaches the maximum file size, Hyperion Essbase copies the contents of the file to a separate backup file with the same name as the outline change log file (*database_name*.OLG), but with an .OLB extension.

n

Number of bytes to allocate for the change log. The default is 64,000 bytes. The minimum file size is 8,092 bytes. The maximum file size is 2 megabytes.

PIPEBUFFERSIZE *n*

Defines the size of the buffer used for communication
between the Spreadsheet Extractor and Report Writer.

n

Integer value from 2,048 to 65,534, expressed in bytes.
The default value is 4K (4,096 bytes).

REPTKBYTEBUF

No longer used in `ESSBASE.CFG`. This setting is
now called Retrieval Buffer Size and must be set on a
per-database basis. To set or change this setting, use the
Application Manager Database Settings dialog box, or
issue SetDbStateItem in ESSCMD. For more information,
see the online help or HTML documentation for those
items.

REPTKBYTESORTBUF

No longer used in `ESSBASE.CFG`. This setting is now
called Retrieval Sort Buffer Size and must be set on a
per-database basis. To set or change this setting, choose
Database > Settings in the Application Manager, or enter
SetDbStateItem in ESSCMD. For more information, see
the online help or HTML documentation for those items.

SERVERTHREADS *n*

Overrides the default value for the number of threads the
Server Application may spawn. The default value is
defined by the number of ports. Use this setting to make the
maximum number of threads higher than the default value.

n

The number of threads the Server Application may
produce. Specify an integer between 20 and 500,
inclusive. If you use the `.CFG` setting to specify a
number lower than 20, it is interpreted as 20. If you use
the `.CFG` setting to specify a number higher than 500,
it is interpreted as 500.

The default value depends on the number of available
ports on the server:

Number of Licensed Ports	Default Number of Threads
5 or fewer	5
6–10	10
11 and over	20

Although the maximum value is 500, the maximum
number of threads an operating system can handle might be
much lower. The default value is strongly recommended. If
you want to set this parameter to a value higher than the
default, check with your system administrator, as higher
values can significantly consume system resources.

SSAUDIT *audit_appname audit_dbname log_path*
or
SSAUDITR *audit_appname audit_dbname log_path*

Enable spreadsheet update logging. The two settings are identical in function except that SSAUDITR automatically clears update log files after archiving, and SSAUDIT appends log files after archiving. The ENDARCHIVE command signals SSAUDITR to clear the log files.

audit_appname

Application name.

audit_dbname

Database name.

log_path

Directory where you want the information stored.

Default behavior:

● If SSAUDIT is not specified in the `.CFG` file, spreadsheet update logging is not enabled.

● If SSAUDIT is issued with no arguments, Hyperion Essbase activates spreadsheet logging for all databases in all applications on the server, and puts the log in the default directory:

```
ARBORPATH\app\audit_appname audit_dbname
```

You can use a wildcard, *xxxxx*, to indicate "all" for any argument.

You can issue up to ten (total) SSAUDIT and SSAUDITR statements per application.

SSLOGUNKNOWN TRUE | FALSE

Controls whether Hyperion Essbase logs error messages when it encounters an unknown member name during a spreadsheet operation.

TRUE

Hyperion Essbase displays and logs an error message for each unknown member name that it encounters during a spreadsheet operation. The default is TRUE.

FALSE

Hyperion Essbase does not display error messages when it encounters unknown member names.

SSPROCROWLIMIT *n*

Specifies the maximum number of spreadsheet rows the server processes on a user spreadsheet request.

n

Integer value between 16,384 and 500,000, inclusive. The default value is 250,000.

SUPNA ON |OFF

Specifies whether the Suppress #Missing Rows option in the Hyperion Essbase Spreadsheet Add-in suppresses the display of cells for which a user has no access (in addition to suppressing `#MISSING` rows).

ON

The Suppress #Missing Rows option in the Hyperion Essbase Spreadsheet Add-in suppresses the display of cells for which a user has no access.

 OFF

The Suppress #Missing Rows option in the Hyperion Essbase Spreadsheet Add-in does not suppress the display of cells for which a user has no access. The default is OFF.

TIMINGMESSAGES TRUE | FALSE

Controls whether Hyperion Essbase logs the duration of each spreadsheet and report query in the application log file.

TRUE

Hyperion Essbase logs the duration of all spreadsheet and report queries in the application log file. The log file also records a timestamp of the query's execution. The default setting is TRUE.

FALSE

Hyperion Essbase does not log the duration of spreadsheet and report queries in the application log file.

UPDATECALC TRUE | FALSE

Specifies whether intelligent calculation is turned on or off by default.

TRUE

Intelligent calculation is turned on. Hyperion Essbase calculates only updated blocks and their dependent parents.

FALSE

Intelligent calculation is turned off. Hyperion Essbase calculates all data blocks, regardless of whether they have been updated.

Client File Settings

NETDELAY *n*

Specifies the network request delay time.

n

An integer value of 100 or above, expressed in milliseconds. The default value is 200 milliseconds.

NETNPCONNECTTIMEOUT *n*

Limits the amount of time a Named Pipes network continues to reattempt connection after an unsuccessful connect attempt.

n

An integer value, expressed in seconds. The default value is 30 seconds.

NETRETRYCOUNT *n*

Specifies the number of times the network will retry a connection.

n

An integer value. The default value is 600 retries. The minimum value is 300.