

# PBblas/ MatUtils

---

[Go Up](#)

## IMPORTS

PBblas | PBblas.Types | PBblas.internal | PBblas.internal.Types |  
PBblas.internal.MatDims |

## DESCRIPTIONS

### **MODULE** MatUtils

MatUtils
----------

Provides various utility attributes for manipulating cell-based matrixes

**SEE** Std/PBblas/Types.Layout\_Cell

### Children

1. [GetWorkItems](#) : Get a list of work-item ids from a matrix containing one or more work items
  2. [InsertCols](#) : Insert one or more columns of a fixed value into a matrix
  3. [Transpose](#) : Transpose a matrix This attribute supports the myriad interface
-

## FUNCTION GetWorkItems

MatUtils \

<code>DATASET(Layout_WI_ID)</code>	<b>GetWorkItems</b>
<code>(DATASET(Layout_Cell) cells)</code>	

Get a list of work-item ids from a matrix containing one or more work items

**PARAMETER** cells A matrix in Layout\_Cell format

**RETURN** DATASET(Layout\_WI\_ID), one record per work-item

**SEE** PBblas/Types.Layout\_Cell

**SEE** PBblas/Types.Layout\_WI\_ID

---

## FUNCTION InsertCols

MatUtils \

<code>DATASET(Layout_Cell)</code>	<b>InsertCols</b>
<code>(DATASET(Layout_Cell) M, UNSIGNED cols_to_insert=1, value_t insert_val=1)</code>	

Insert one or more columns of a fixed value into a matrix. Columns are inserted before the first original column. This attribute supports the myriad interface. Multiple independent matrixes can be represented by M.

**PARAMETER** M the input matrix

**PARAMETER** cols\_to\_insert the number of columns to insert, default 1

**PARAMETER** insert\_val the value for each cell of the new column(s), default 0

**RETURN** matrix in Layout\_Cell format with additional column(s)

---

## FUNCTION Transpose

MatUtils \

<code>DATASET(Layout_Cell)</code>	<b>Transpose</b>
<code>(DATASET(Layout_Cell) M)</code>	

Transpose a matrix This attribute supports the myriad interface. Multiple independent matrixes can be represented by M.

**PARAMETER** M A matrix represented as DATASET(Layout\_Cell)

**RETURN** Transposed matrix in Layout\_Cell format

**SEE** PBblas/Types.Layout\_Cell

---