getCodistributor

Codistributor object for existing codistributed array

Syntax

```
codist = getCodistributor(D)
```

Description

codist = getCodistributor(D) returns the codistributor object of codistributed array D. Properties of the
object are Dimension and Partition for 1-D distribution; and BlockSize, LabGrid, and Orientation for 2-D
block cyclic distribution. For any one codistributed array, getCodistributor returns the same values on all
workers. The returned codistributor object is complete, and therefore suitable as an input argument for
codistributed.build.

Examples

Get the codistributor object for a 1-D codistributed array that uses default distribution on 4 workers:

```
spmd (4)
    I1 = eye(64,codistributorld());
    codist1 = getCodistributor(I1)
    dim = codist1.Dimension
    partn = codist1.Partition
end
```

Get the codistributor object for a 2-D block cyclic codistributed array that uses default distribution on 4 workers:

```
spmd (4)
    I2 = eye(128,codistributor2dbc());
    codist2 = getCodistributor(I2)
    blocksz = codist2.BlockSize
    partn = codist2.LabGrid
    ornt = codist2.Orientation
end
```

Demonstrate that these codistributor objects are complete:

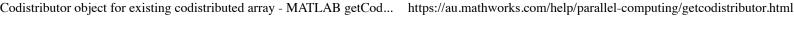
```
spmd (4)
  isComplete(codist1)
  isComplete(codist2)
end
```

See Also

codistributed | codistributed.build | getLocalPart | redistribute

Introduced in R2009b

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