

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,codistributor1d());
    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

