

# Multiple Meshes in S-ALE

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# Multiple Meshes: Merged (Same PID)

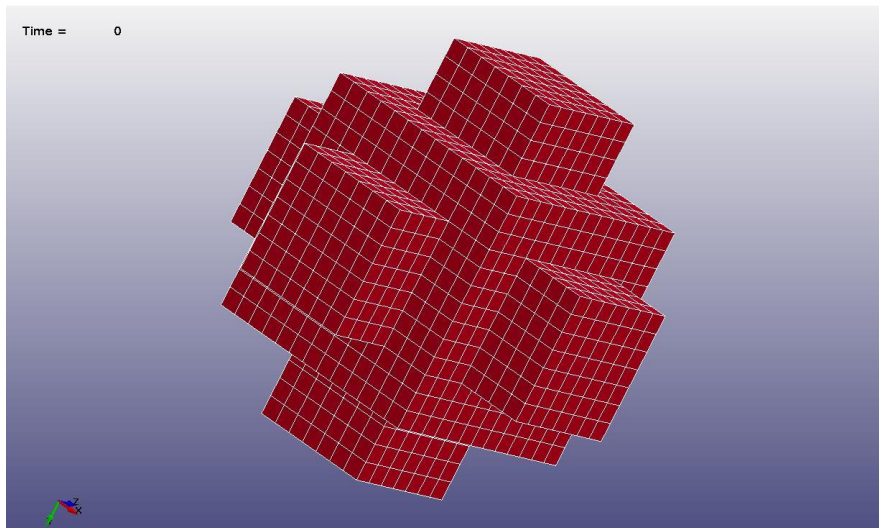
- Multiple \*ALE\_STRUCTURED\_MESH cards; using SAME PartID to merge meshes.
- Nodes merged; Connectivity modified; MPP sharing updated; all automated.

## \*ALE\_STRUCTURED\_MESH

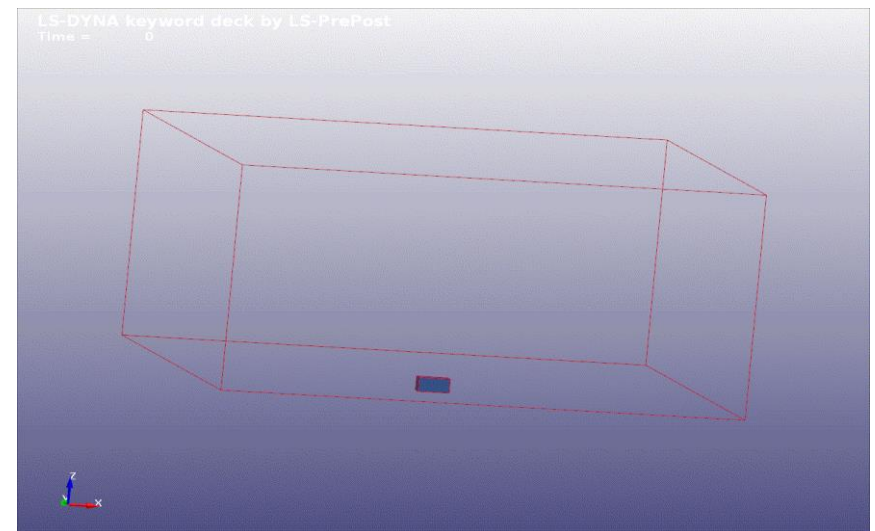
MSHID	PID	NBID	EBID	
1	1001	10001	10001	
CPIDX	CPIDY	CPIDZ	NID0	LCSID
1001	1002	1003	101	123

## \*ALE\_STRUCTURED\_MESH

MSHID	PID	NBID	EBID	
2	1001	50001	50001	
CPIDX	CPIDY	CPIDZ	NID0	LCSID
2001	2002	2003	101	123



Seven meshes merged.



Soil & HE (bottom) needs a much smaller mesh box than air.. 6 million elements reduced to 4 million.

# Multiple Meshes: Independent (Different PIDs)

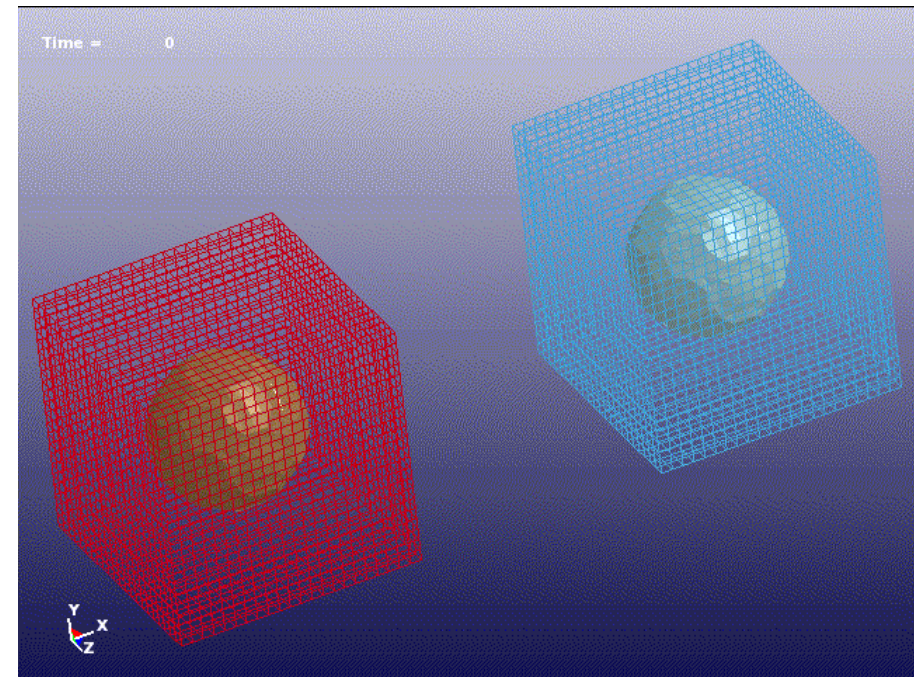
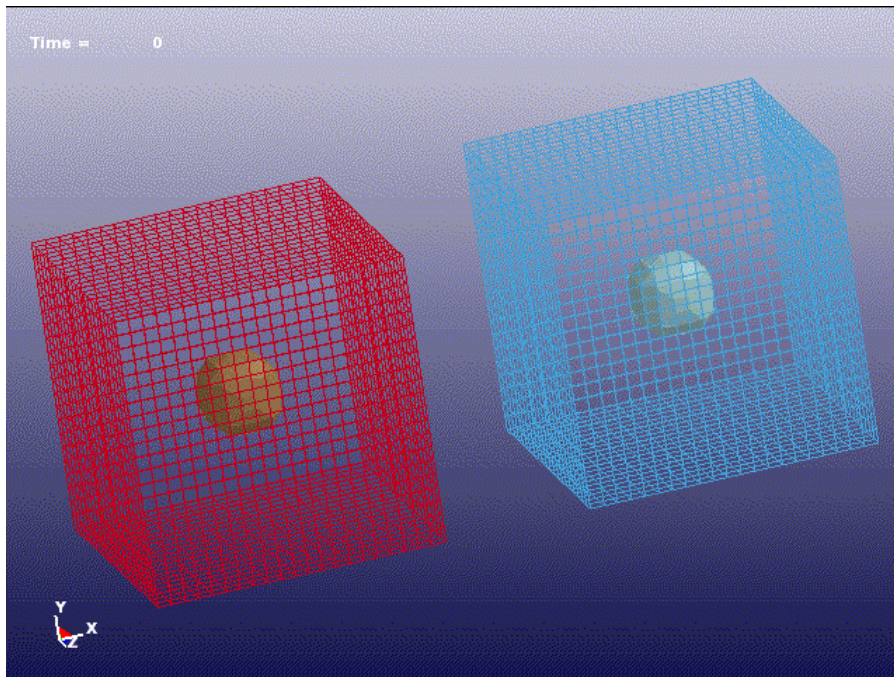
\*ALE\_STRUCTURED\_MESH

MSHID	PID	NBID	EBID	
1	1001	10001	10001	
CPIDX	CPIDY	CPIDZ	NID0	LCSID
1001	1002	1003	101	123

\*ALE\_STRUCTURED\_MESH

MSHID	PID	NBID	EBID	
2	2001	50001	50001	
CPIDX	CPIDY	CPIDZ	NID0	LCSID
2001	2002	2003	201	123

Two pressurized airbags, each inside an independent S-ALE mesh.



Contact between bags DISABLED

Contact between bags ENABLED