API Changes							
Method name	Old value (820)	New value (830)	Marked backward compatible in 820	Interface (820)	Interface (830)	Rationale for change	Impact
Added Optional Arguments							
ESMF_RegridWeightGen	N/A	checkFlag	No	24.3.1	24.3.1	Allow users to optionally turn on more expensive error checking.	No impact.
ESMF_GridCreate	N/A	routehandle	Yes	31.6.6	31.6.6	Allow user to access the RouteHandle object needed to redistribute the source grid coordinates to the destination grid. To be used in conjunction with the new method ESMF_GridRedist(), section 31.6.53.	No impact.
ESMF_VMEpochEnter	N/A	keepAlloc	No	49.6.14	49.6.14	Option to reduce the memory pressure on the sending side PETs by deallocating internal buffers as soon as the contents has been transferred.	No impact.
Changed Arguments							
ESMF_MeshAddNodes	nodeOwners	optional nodeOwners	No	33.4.5	33.4.5	Remove the requirement that the user provide node owners. If the user doesn't specify which PETs own the nodes, then ESMF generates a consistent set of owners.	No impact.
ESMF_MeshCreate	nodeOwners	optional nodeOwners	No	33.4.7	33.4.7	Remove the requirement that the user provide node owners. If the user doesn't specify which PETs own the nodes, then ESMF generates a consistent set of owners.	No impact.
Added Methods							
ESMF_GridRedist	N/A	N/A	N/A	N/A	31.6.53	Provide an efficient method to redistribute the coordinates from one grid to another. Typically used in conjunction with ESMF_GridCreate(), section 31.6.6.	No impact.
Deprecated Classes	(to be removed in Version 9)						
ESMF_Attribute	N/A	N/A	No	55	55	The underlying implementation for metadata storage has changed and is available through the native ESMF_Info API.	Code that uses the legacy ESMF_Attribute API through derived type, methods, or named constants should migrate to use the ESMF_Info class API.