API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
System-wide changes						
use ESMF_Mod	use ESMF	All	All	All	Consistency with other software packages	System-wide search and replace
Argument name changes						
stateitemtype	itemtype	17.7.10	17.7.10	ESMF_StateGet	Consistency with other State argument names	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
indicies	indices	20.7.11	22.8.11	ESMF_FieldRegridStore	Correct spelling	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
max	maxPECountPerPET	15.5.21	15.4.21	ESMF_GridCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.22	15.4.22	ESMF_GridCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.23	15.4.23	ESMF_GridCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.21	16.4.21	ESMF_CplCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.22	16.4.22	ESMF_CplCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.23	16.4.23	ESMF_CplCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
pref_intra_process	prefIntraProcess	15.5.21	15.4.21	ESMF_GridCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.22	15.4.22	ESMF_GridCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.23	15.4.23	ESMF_GridCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.21	16.4.21	ESMF_CplCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.22	16.4.22	ESMF_CplCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.23	16.4.23	ESMF_CplCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
pref_intra_ssi	prefIntraSsi	15.5.21	15.4.21	ESMF_GridCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.22	15.4.22	ESMF_GridCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.23	15.4.23	ESMF_GridCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.21	16.4.21	ESMF_CplCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.22	16.4.22	ESMF_CplCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.23	16.4.23	ESMF_CplCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
pref_inter_ssi	prefInterSsi	15.5.21	15.4.21	ESMF_GridCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.22	15.4.22	ESMF_GridCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.23	15.4.23	ESMF_GridCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
		16.4.21	16.4.21	ESMF_CplCompSetVMMaxPEs	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.22	16.4.22	ESMF_CplCompSetVMMaxThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.23	16.4.23	ESMF_CplCompSetVMMinThreads	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
tileListPDe	deToTileMap	22.5.16	24.5.16	ESMF_ArrayGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		29.5.12	31.6.12	ESMF_DistGridGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
minIndexPDimPTile	minIndexPTile	22.5.16	24.5.16	ESMF_ArrayGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		29.5.12	31.6.12	ESMF_DistGridGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
maxIndexPDimPTile	maxIndexPTile	22.5.16	24.5.16	ESMF_ArrayGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		29.5.12	31.6.12	ESMF_DistGridGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
indexCountPDimPDe	indexCountPDe	22.5.16	24.5.16	ESMF_ArrayGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		29.5.12	31.6.12	ESMF_DistGridGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
counts	totalCount	23.3.4	25.3.4	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.5	25.3.5	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.7	25.3.7	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.9	25.3.9	ESMF_LocalArrayGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
lbounds	totalLBound	23.3.4	25.3.4	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.5	25.3.5	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.7	25.3.7	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.9	25.3.9	ESMF_LocalArrayGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
ubounds	totalUBound	23.3.4	25.3.4	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.5	25.3.5	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.7	25.3.7	ESMF_LocalArrayCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.9	25.3.9	ESMF_LocalArrayGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
firstExtra	firstExtraPTile	29.5.5	31.6.5	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
lastExtra	lastExtraPTile	29.5.5	31.6.5	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
minIndex	minIndexPTile	29.5.8	31.6.8	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
		29.5.10	31.6.10	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
maxIndex	maxIndexPTile	29.5.8	31.6.8	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		29.5.10	31.6.10	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
regDecomp	regDecompPTile	29.5.8	31.6.8	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
decompflag	decompflagPTile	29.5.8	31.6.8	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
regDecompFirstExtra	regDecompFirstExtraPTile	29.5.8	31.6.8	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
regDecompLastExtra	regDecompLastExtraPTile	29.5.8	31.6.8	ESMF_DistGridCreate	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
minIndexPDimPDe	minIndexPDe	29.5.12	31.6.12	ESMF_DistGridGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
maxIndexPDimPDe	maxIndexPDe	29.5.12	31.6.12	ESMF_DistGridGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
collocationPDim	collocation	29.5.12	31.6.12	ESMF_DistGridGet	Conform to bounds convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
method	methodflag	15.5.15	15.4.15	ESMF_GridCompSetEntryPoint	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.15	16.4.15	ESMF_CplCompSetEntryPoint	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
attcopyflag	copyflag	33.9.6	35.10.6	ESMF_AttributeCopy	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
copyflag	datacopyflag	20.6.8	22.6.6	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.9	22.6.7	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.10	22.6.8	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.13	22.6.11	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.14	22.6.12	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.15	22.6.13	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.18	22.6.16	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.19	22.6.17	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.20	22.6.18	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.23	22.6.21	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.24	22.6.22	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.25	22.6.23	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.4	24.5.4	ESMF_ArrayCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
		22.5.5	24.5.5	ESMF_ArrayCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.6	24.5.6	ESMF_ArrayCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.7	24.5.7	ESMF_ArrayCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.8	24.5.8	ESMF_ArrayCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		26.3.6	28.3.6	ESMF_LocStreamAddKey	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
docopy	datacopyflag	23.3.7	25.3.7	ESMF_LocalArrayCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		23.3.10	25.3.10	ESMF_LocalArrayGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.23	27.6.35	ESMf_GridGetCoord	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.28	27.6.40	ESMF_GridGetItem	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.33	27.6.44	ESMF_GridSetCoord	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.37	27.6.45	ESMF_GridSetItem	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
terminationflag	endflag	14.4.2	14.4.2	ESMF_Finalize	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
defaultLogType	logkindflag	14.4.1	14.4.1	ESMF_Initialize	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
logtype	logkindflag	42.7.6	43.7.7	ESMF_LogOpen	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
meshLocation	meshloc	20.6.26	22.6.42	ESMF_FieldGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
location	meshloc	20.6.16	22.6.14	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.17	22.6.15	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.18	22.6.16	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.19	22.6.17	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.20	22.6.18	ESMF_FieldCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.6.26	22.6.42	ESMF_FieldGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
dePinFlag	pinflag	43.6.1	44.6.4	ESMF_DELayoutCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		43.6.2	44.6.5	ESMF_DELayoutCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		43.6.4	44.6.7	ESMF_DELayoutGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
regridPoleType	polemethod	20.7.11	22.8.11	ESMF_FieldRegridStore	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		19.7.10	21.5.22	ESMF_FieldBundleRegridStore	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.

| API Change | | | | | | Impact |
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	
zeroflag	zeroregion	19.7.8	21.5.20	ESMF_FieldBundleRegrid	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		19.7.11	21.5.25	ESMF_FieldBundleSMM	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.7.9	22.8.9	ESMF_FieldRegrid	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.7.14	22.8.14	ESMF_FieldSMM	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		21.5.16	23.5.22	ESMF_ArrayBundleSMM	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.32	24.5.32	ESMF_ArraySMM	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
commflag	routesyncflag	20.7.2	22.8.2	ESMF_FieldHalo	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.20	24.5.20	ESMF_ArrayHalo	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.25	24.5.25	ESMF_ArrayRedist	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.32	24.5.32	ESMF_ArraySMM	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
halostartregionflag	startregion	20.7.4	22.8.4	ESMF_FieldHaloStore	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		21.5.9	23.5.13	ESMF_ArrayBundleHaloStore	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		22.5.22	24.5.22	ESMF_ArrayHaloStore	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
statetype	stateintent	17.7.6	17.7.6	ESMF_StateCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		17.7.8	17.7.8	ESMF_StateGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
blockingflag	syncflag	15.5.6	15.4.6	ESMF_GridCompFinalize	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.9	15.4.9	ESMF_GridCompInitialize	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.12	15.4.12	ESMF_GridCompReadRestart	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.13	15.4.13	ESMF_GridCompRun	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.25	15.4.25	ESMF_GridCompWait	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		15.5.26	15.4.26	ESMF_GridCompWriteRestart	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.6	16.4.6	ESMF_CplCompFinalize	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.9	16.4.9	ESMF_CplCompInitialize	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.12	16.4.12	ESMF_CplCompReadRestart	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.13	16.4.13	ESMF_CplCompRun	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		16.4.25	16.4.25	ESMF_CplCompWait	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
		16.4.26	16.4.26	ESMF_CplCompWriteRestart	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.4	45.5.4	ESMF_VMAllFullReduce	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.5	45.5.5	ESMF_VMAllGather	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.6	45.5.6	ESMF_VMAllGatherV	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.7	45.5.7	ESMF_VMAllReduce	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.8	45.5.8	ESMF_VMAllToAllV	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.10	45.5.10	ESMF_VMBroadcast	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.13	45.5.13	ESMF_VMGather	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.20	45.5.20	ESMF_VMRecv	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.21	45.5.21	ESMF_VMReduce	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.22	45.5.22	ESMF_VMScatter	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.24	45.5.24	ESMF_VMSend	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		44.5.25	45.5.25	ESMF_VMSendRecv	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
unmappedDstAction	unmappedaction	19.7.10	21.5.22	ESMF_FieldBundleRegridStore	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		20.7.11	22.8.11	ESMF_FieldRegridStore	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
defaultCalendar	defaultCalKind	14.4.1	14.4.1	ESMF_Initialize	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
calendartype	calkindflag	36.5.8	37.5.4	ESMF_CalendarCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		36.5.12	37.5.8	ESMF_CalendarGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		36.5.16	37.5.11	ESMF_CalendarSet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		36.5.18	37.5.13	ESMF_CalendarSetDefault	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		37.4.11	38.4.11	ESMF_TimeGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		37.4.15	38.4.15	ESMF_TimeSet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		38.4.16	39.4.16	ESMF_TimeIntervalGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		38.4.17	39.4.17	ESMF_TimeIntervalGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		38.4.18	39.4.18	ESMF_TimeIntervalGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		38.4.19	39.4.19	ESMF_TimeIntervalGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
		38.4.25	39.4.25	ESMF_TimeIntervalSet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		39.5.8	40.5.8	ESMF_ClockGet	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
item	itemflag	25.6.5	27.6.5	ESMF_GridAddItem	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.28	27.6.40	ESMF_GridGetItem	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.29	27.6.41	ESMF_GridGetItem	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.30	27.6.42	ESMF_GridGetItem	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
		25.6.37	27.6.45	ESMF_GridSetItem	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
filetype	filetypeflag	27.4.8	29.4.8	ESMF_MeshCreate	Conform to constants convention	If keywords are not used: for optional arguments, add keyword. For required arguments, no impact. If keywords are used: search and replace.
Arguments changed to Fortran list type						
<item>	<item>List	17.7.16	17.7.15	ESMF_StateReplace	Consequence of the standard container behavior	If keywords are not used there use an array constructor. If keywords are used, search and replace the keyword name and use an array constructor.
msgtype	logmsgList	42.7.9	43.7.10	ESMF_LogWrite	Conform to constants convention and provide more flexibility	If keywords are not used there use an array constructor. If keywords are used, search and replace the keyword name and use an array constructor.
msgAllow	logmsgList	42.7.7	43.7.8	ESMF_LogSet	Conform to constants convention and provide more flexibility	If keywords are not used there use an array constructor. If keywords are used, search and replace the keyword name and use an array constructor.
halt	logmsgAbort	42.7.7	43.7.8	ESMF_LogSet	Conform to constants convention and provide more flexibility	If keywords are not used there use an array constructor. If keywords are used, search and replace the keyword name and use an array constructor.
Named constant value changes						
ESMF_GRID_ARBDIM	ESMF_DIM_ARB	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_LOG_ERRPASS	ESMF_LOGERR_PASSTHRU	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_GREGORIAN	ESMF_CALKIND_GREGORIAN	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_JULIAN	ESMF_CALKIND_JULIAN	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_JULIANDAY	ESMF_CALKIND_JULIANDAY	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_MODJULIANDAY	ESMF_CALKIND_MODJULIANDAY	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_NOLEAP	ESMF_CALKIND_NOLEAP	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_360DAY	ESMF_CALKIND_360DAY	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_CUSTOM	ESMF_CALKIND_CUSTOM	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CAL_NOCALENDAR	ESMF_CALKIND_NOCALENDAR	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CHILD_IN_NEW_VM	ESMF_CONTEXT_OWN_VM	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CHILD_IN_PARENT_VM	ESMF_CONTEXT_PARENT_VM	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_ATTCOPY_HYBRID	ESMF_COPY_REFERENCE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_ATTCOPY_REFERENCE	ESMF_COPY_ALIAS	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_ATTCOPY_VALUE	ESMF_COPY_VALUE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DATA_VALUE	ESMF_DATACOPY_VALUE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DATA_REFERENCE	ESMF_DATACOPY_REFERENCE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DECOMP_HOMOGEN	ESMF_DECOMP_BALANCED	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_MODE_FORWARD	ESMF_DIRECTION_FORWARD	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_MODE_REVERSE	ESMF_DIRECTION_REVERSE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_FINAL	ESMF_END_NORMAL	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_KEEPMPI	ESMF_END_KEEPMPI	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_ABORT	ESMF_END_ABORT	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_LOG_SINGLE	ESMF_LOGKIND_SINGLE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_LOG_MULTI	ESMF_LOGKIND_MULTI	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_LOG_NONE	ESMF_LOGKIND_NONE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_LOG_INFO	ESMF_LOGMSG_INFO	N/A	N/A	N/A	Conform to constants convention	Search and replace

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
ESMF_LOG_WARNING	ESMF_LOGMSG_WARNING	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_LOG_ERROR	ESMF_LOGMSG_ERROR	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_SETFINAL	ESMF_METHOD_FINALIZE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_SETINIT	ESMF_METHOD_INITIALIZE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_SETREADRESTART	ESMF_METHOD_READRESTART	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_SETRUN	ESMF_METHOD_RUN	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_SETWRITERESTART	ESMF_METHOD_WRITERESTART	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DE_PIN_PET	ESMF_PIN_DE_TO_PET	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DE_PIN_VAS	ESMF_PIN_DE_TO_VAS	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGRIDPOLE_NONE	ESMF_POLEMETHOD_NONE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGRIDPOLE_ALLAVG	ESMF_POLEMETHOD_ALLAVG	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGRIDPOLE_NPNTAVG	ESMF_POLEMETHOD_NPNTAVG	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGRIDPOLE_TEETH	ESMF_POLEMETHOD_TEETH	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_SUM	ESMF_REDUCE_SUM	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_MIN	ESMF_REDUCE_MIN	N/A	N/A	N/A	Conform to constants convention	Manual replacement
ESMF_MAX	ESMF_REDUCE_MAX	N/A	N/A	N/A	Conform to constants convention	Manual replacement
ESMF_REGRID_METHOD_BILINEAR	ESMF_REGRIDMETHOD_BILINEAR	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGRID_METHOD_PATCH	ESMF_REGRIDMETHOD_PATCH	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGRID_METHOD_CONSERVE	ESMF_REGRIDMETHOD_CONSER	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_COMM_BLOCKING	ESMF_ROUTESYNC_BLOCKING	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_COMM_NBSTART	ESMF_ROUTESYNC_NBSTART	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_COMM_NBTESTFINISH	ESMF_ROUTESYNC_NBTESTFINIS	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_COMM_NBWAITFINISH	ESMF_ROUTESYNC_NBWAITFINIS	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_COMM_CANCEL	ESMF_ROUTESYNC_CANCEL	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DELAYOUT_SERVICE_ACCEPT	ESMF_SERVICEREPLY_ACCEPT	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DELAYOUT_SERVICE_DENY	ESMF_SERVICEREPLY_DENY	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGION_EXCLUSIVE	ESMF_STARTREGION_EXCLUSIVE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_REGION_COMPUTATIONAL	ESMF_STARTREGION_COMPUTAT	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_STATE_IMPORT	ESMF_STATEINTENT_IMPORT	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_STATE_EXPORT	ESMF_STATEINTENT_EXPORT	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_STATE_UNSPECIFIED	ESMF_STATEINTENT_UNSPECIFIE	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_BLOCKING	ESMF_SYNC_BLOCKING	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_VASBLOCKING	ESMF_SYNC_VASBLOCKING	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_NONBLOCKING	ESMF_SYNC_NONBLOCKING	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_MAJOR_VERSION	ESMF_VERSION_MAJOR	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_MINOR_VERSION	ESMF_VERSION_MINOR	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_PATCHLEVEL	ESMF_VERSION_PATCHLEVEL	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_XGRID_SIDEA	ESMF_XGRIDSIDE_A	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_XGRID_SIDEB	ESMF_XGRIDSIDE_B	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_XGRID_BALANCED	ESMF_XGRIDSIDE_BALANCED	N/A	N/A	N/A	Conform to constants convention	Search and replace
Argument type changes						
ESMF_Status	ESMF_FieldStatus_Flag OR	N/A	N/A	N/A	Conform to constants convention	Search and replace
	ESMF_GridStatus_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_AlarmList	ESMF_AlarmList_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CalendarType	ESMF_CalKind_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CompType	ESMF_CompType_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_ContextFlag	ESMF_Context_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_AttCopyFlag	ESMF_Copy_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CopyFlag	ESMF_DataCopy_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DecompFlag	ESMF_Decomp_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_Direction	ESMF_Direction_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DistGridMatch	ESMF_DistGridMatch_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_TerminationFlag	ESMF_End_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_FileFormat	ESMF_FileFormat_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_GeomType	ESMF_GeomType_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_GridConn	ESMF_GridConn_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_GridItem	ESMF_GridItem_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_GridMatch	ESMF_GridMatch_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_Index	ESMF_Index_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_LogType	ESMF_LogKind_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_MsgType	ESMF_LogMsg_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_Method	ESMF_Method_Flag	N/A	N/A	N/A	Conform to constants convention	Manual replacement
ESMF_DePinFlag	ESMF_Pin_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_PoleType	ESMF_PoleKind_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_RegridPole	ESMF_PoleMethod_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_ReduceFlag	ESMF_Reduce_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_RegridMethod	ESMF_RegridMethod_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_CommFlag	ESMF_RouteSync_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_DELayoutServiceReply	ESMF_ServiceReply_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
ESMF_HaloStartRegionFlag	ESMF_StartRegion_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_StateType	ESMF_StateIntent_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_StateItemType	ESMF_StateItem_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_BlockingFlag	ESMF_Sync_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_TypeKind	ESMF_TypeKind_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_UnmappedAction	ESMF_UnmappedAction_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
ESMF_XGridSide	ESMF_XGridSide_Flag	N/A	N/A	N/A	Conform to constants convention	Search and replace
Arguments added						
N/A	importState	15.5.7	15.4.7	ESMF_GridCompGet	Necessary for some uses of Attachable Methods	No impact
N/A	exportState	15.5.7	15.4.7	ESMF_GridCompGet	Necessary for some uses of Attachable Methods	No impact
N/A	gridIsPresent	15.5.7	15.4.7	ESMF_GridCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A	importStateIsPresent	15.5.7	15.4.7	ESMF_GridCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A	exportStateIsPresent	15.5.7	15.4.7	ESMF_GridCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A	configIsPresent	15.5.7	15.4.7	ESMF_GridCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A		16.4.7	16.4.7	ESMF_CplCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A	configFileIsPresent	15.5.7	15.4.7	ESMF_GridCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A		16.4.7	16.4.7	ESMF_CplCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A	clockIsPresent	15.5.7	15.4.7	ESMF_GridCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A		16.4.7	16.4.7	ESMF_CplCompGet	Allows for the determination of the presence of potentially undefined information	No impact
N/A	multiflag	19.6.5	21.5.4	ESMF_FieldBundleAdd	Support multiple items with the same name	No impact
N/A		19.6.6	21.5.6	ESMF_FieldBundleCreate	Support multiple items with the same name	No impact
N/A		21.5.4	23.5.6	ESMF_ArrayBundleCreate	Support multiple items with the same name	No impact
N/A	relaxedflag	19.6.5	21.5.4	ESMF_FieldBundleAdd	Relax condition under which rc\=ESMF_SUCCESS is returned	No impact
N/A		19.6.6	21.5.6	ESMF_FieldBundleCreate	Relax condition under which rc\=ESMF_SUCCESS is returned	No impact
N/A		21.5.4	23.5.6	ESMF_ArrayBundleCreate	Relax condition under which rc\=ESMF_SUCCESS is returned	No impact
N/A	fieldList	19.6.12	21.5.10	ESMF_FieldBundleGet	Allows getting the entire fieldList	No impact
N/A	fieldCount	19.6.13	21.5.8	ESMF_FieldBundleGet	Multiflag requires that the number of fields with a certain name can be queried	No impact
N/A	isPresent	19.6.13	21.5.8	ESMF_FieldBundleGet	Multiflag requires that the presence of a field with a certain name can be queried	No impact
N/A		33.9.7	35.10.7	ESMF_AttributeGet	Address a common use case which requires that the presence of an Attribute can be queried	No impact
N/A		33.9.8	35.10.8	ESMF_AttributeGet	Address a common use case which requires that the presence of an Attribute can be queried	No impact
N/A		33.9.10	35.10.10	ESMF_AttributeGet	Address a common use case which requires that the presence of an Attribute can be queried	No impact
N/A	status	20.6.26	22.6.42	ESMF_FieldGet	Consistently provide partial creation status through an overloaded Get interface	Change the name of the keyword from "iscommited" to "status", change the argument type, and deal with fallout
N/A		25.6.18	27.6.30	ESMF_GridGet	Consistently provide partial creation status through an overloaded Get interface	Change from using ESMF_GridGetStatus() to using ESMF_GridGet() with a "status" argument
N/A	arrayNameList	21.5.6	23.5.10	ESMF_ArrayBundleGet	Make consistent with FieldBundle	No impact
N/A	coordSys	25.6.9	27.6.12	ESMF_GridCreate	Allow user to describe the coordinate system of the Grid	No impact
N/A	sideAToXGridScheme	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	sideBToXGridScheme	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	sideAPriority	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	sideBPriority	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	sideAMaskValues	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	sideBMaskValues	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	storeOverlay	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	offline	28.5.4	30.6.4	ESMF_XGridCreate	Allow XGrid to be created without needing sparse matrix parameters	No impact
N/A	convention	33.9.10	35.10.10	ESMF_AttributeGet	Address a common use case which requires getting Attribute package information by name	No impact

API Change

Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
N/A	purpose	33.9.10	35.10.10	ESMF_AttributeGet	Address a common use case which requires getting Attribute package information by name	No impact
N/A	attPackInstanceName	33.9.10	35.10.10	ESMF_AttributeGet	Address a common use case which requires getting Attribute package information by name	No impact
N/A	trace	42.7.7	42.7.8	ESMF_LogSet	New functionality for debugging	No impact
Arguments removed						
count	N/A	17.7.5	17.7.4	ESMF_StateAdd	Favor array sublist approach to specify a reduced number of items added to a State	Use sublists
nameList	N/A	17.7.6	17.7.6	ESMF_StateCreate	Removed the ability to have a placeholders in a State	Use an empty Field or FieldBundle instead
nestedStateName	N/A	17.7.9	17.7.9	ESMF_StateGet	Favor path syntax to specify a nested State item at any depth	Use the appropriate path syntax
fieldCount	N/A	19.6.5	21.5.4	ESMF_FieldBundleAdd	Favor array sublist approach to specify a reduced number of Fields added to a FieldBundle	Use sublists
	N/A	19.6.6	21.5.6	ESMF_FieldBundleCreate	Favor array sublist approach to specify a FieldBundle created with a reduced number of Fields	Use sublists
packflag	N/A	19.6.6	21.5.6	ESMF_FieldBundleCreate	Remove non-implemented argument	No impact
regridScheme	N/A	19.7.10	21.5.22	ESMF_FieldBundleRegridStore	Information is redundant with that found in the Grid	Specify information when creating Grid
	N/A	20.7.11	22.8.11	ESMF_FieldRegridStore	Information is redundant with that found in the Grid	Specify information when creating Grid
isCommitted	N/A	20.6.26	22.6.42	ESMF_FieldGet	Consistently provide partial creation status through an overloaded Get interface	Change the name of the keyword from "iscommited" to "status", change the argument type, and deal with fallout
arrayCount	N/A	21.5.4	23.5.6	ESMF_ArrayBundleCreate	Favor array sublist approach to specify a reduced number of Arrays added to an ArrayBundle	Use sublists
name	N/A	23.3.9	25.3.9	ESMF_LocalArrayGet	Remove non-implemented argument	No impact
totalLWidth	N/A	25.6.4	27.6.4	ESMF_GridAddCoord	Remove non-implemented argument	No impact
	N/A	25.6.5	27.6.5	ESMF_GridAddItem	Remove non-implemented argument	No impact
totalUWidth	N/A	25.6.4	27.6.4	ESMF_GridAddCoord	Remove non-implemented argument	No impact
	N/A	25.6.5	27.6.5	ESMF_GridAddItem	Remove non-implemented argument	No impact
destroyDistGrid, destroyDELayout	N/A	25.6.6	27.6.6	ESMF_GridCreate	Replaced by automatic garbage collection	No impact
	N/A	25.6.8	27.6.11	ESMF_GridCreate	Replaced by automatic garbage collection	No impact
	N/A	25.6.9	27.6.12	ESMF_GridCreate	Replaced by automatic garbage collection	No impact
docopy	N/A	25.6.33	27.6.44	ESMF_GridSetCoordFromArray	Remove non-implemented argument	No impact
	N/A	25.6.37	27.6.45	ESMF_GridSetItemFromArray	Remove non-implemented argument	No impact
Arguments changed from positional to optional						
vm	N/A	17.7.18	17.7.13	ESMF_StateReconcile	Default behavior is correct for currently supported mode of operation	No impact
fieldList	N/A	19.6.6	21.5.6	ESMF_FieldBundleCreate	Allow creation of empty FieldBundles	Add keyword enforcer
field	N/A	19.6.3	21.5.8	ESMF_FieldBundleGet	Allow retrieval of individual pieces of information	Add keyword enforcer
localDe moved after keyword enforcer	N/A	20.6.27	22.6.43	ESMF_FieldGet	Consistency with ESMF_ArrayGet() and ESMF_GridGetCoord()	Add keyword enforcer
arrayList	N/A	21.5.4	23.5.6	ESMF_ArrayBundleCreate	Allow creation of empty ArrayBundle	Add keyword enforcer
alarmList	N/A	39.5.10	40.5.10	ESMF_ClockGetAlarmList	Allow retrieval of individual pieces of information	Add keyword enforcer
alarmCount	N/A	39.5.10	40.5.10	ESMF_ClockGetAlarmList	Allow retrieval of individual pieces of information	Add keyword enforcer
rcToCheck	N/A	42.7.5	43.7.6	ESMF_LogFoundError	Allow reuse of an optional dummy variable as the actual rcToCheck argument	No impact
Arguments with intent changes						
intent(inout) fieldList	intent(in) fieldList			ESMF_FieldBundleAdd	consistently document the intent of the argument	
no intent - fieldList	intent(in) fieldList			ESMF_FieldBundleCreate	consistently document the intent of the argument	change intent on variable in user code
intent(inout) fieldbundle	intent(in) fieldbundle			ESMF_FieldBundleRead	consistently document the intent of the argument	No impact
intent(inout) srcFieldBundle	intent(in) srcFieldBundle	19.7.10	21.5.22	ESMF_FieldBundleRegridStore	consistently document the intent of the argument	No impact
intent(inout) arrayspec	intent(in) arrayspec	20.6.7	22.6.5	ESMF_FieldCreate	consistently document the intent of the argument	No impact
		20.6.12	22.6.10	ESMF_FieldCreate	consistently document the intent of the argument	No impact
		20.6.17	22.6.15	ESMF_FieldCreate	consistently document the intent of the argument	No impact
		20.6.22	22.6.20	ESMF_FieldCreate	consistently document the intent of the argument	No impact
no intent - farray	intent(in) farray	20.6.9	22.6.7	ESMF_FieldCreate	consistently document the intent of the argument	change intent on variable in user code
		20.6.14	22.6.12	ESMF_FieldCreate	consistently document the intent of the argument	No impact
		20.6.19	22.6.17	ESMF_FieldCreate	consistently document the intent of the argument	No impact
		20.6.24	22.6.22	ESMF_FieldCreate	consistently document the intent of the argument	No impact
intent(inout) grid	intent(in) grid	20.6.29	22.7.1	ESMF_GridGetFieldBounds	consistently document the intent of the argument	No impact
intent(inout) locstream	intent(in) locstream	20.6.30	22.7.2	ESMF_LocStreamGetFieldBounds	consistently document the intent of the argument	No impact
intent(inout) mesh	intent(in) mesh	20.6.31	22.7.3	ESMF_MeshGetFieldBounds	consistently document the intent of the argument	No impact
intent(inout) xgrid	intent(in) xgrid	20.6.32	22.7.4	ESMF_XGridGetFieldBounds	consistently document the intent of the argument	No impact

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
intent(inout) field	intent(in) field	20.7.1	22.8.1	ESMF_FieldGather	consistently document the intent of the argument	No impact
intent(inout) srcField	intent(in) srcField	20.7.5	22.8.5	ESMF_FieldRedist	consistently document the intent of the argument	No impact
		20.7.7	22.8.7	ESMF_FieldRedistStore	consistently document the intent of the argument	No impact
		20.7.8	22.8.8	ESMF_FieldRedistStore	consistently document the intent of the argument	No impact
intent(inout) srcfield	intent(in) srcField	20.7.9	22.8.9	ESMF_FieldRegrid	consistently document the intent of the argument	No impact
		20.7.11	22.8.11	ESMF_FieldRegridStore	consistently document the intent of the argument	No impact
		20.7.12	22.8.12	ESMF_FieldRegridStore	consistently document the intent of the argument	No impact
intent(inout) xgrid	intent(in) xgrid	20.7.12	22.8.12	ESMF_FieldRegridStore	consistently document the intent of the argument	No impact
intent(inout) srcfield	intent(in) srcField	20.7.14	22.8.14	ESMF_FieldSMM	consistently document the intent of the argument	No impact
		20.7.16	22.8.16	ESMF_FieldSMMStore	consistently document the intent of the argument	No impact
		20.7.17	22.8.17	ESMF_FieldSMMStore	consistently document the intent of the argument	No impact
intent(inout) arrayList	intent(out) arrayList	21.5.6	23.5.9	ESMF_ArrayBundleGet	consistently document the intent of the argument	No impact
intent(in) arraybundle	intent(inout) arraybundle	21.5.11	23.5.15	ESMF_ArrayBundleRead	consistently document the intent of the argument	change intent on variable in user code
intent(inout) arrayspec	intent(in) arrayspec	24.5.1	26.5.4	ESMF_ArraySpecGet	consistently document the intent of the argument	No impact
		24.5.4	26.5.5	ESMF_ArraySpecPrint	consistently document the intent of the argument	No impact
		24.5.3	26.5.7	ESMF_ArraySpecValidate	consistently document the intent of the argument	No impact
intent(inout) arrayspec	intent(out) arrayspec	24.5.2	26.5.6	ESMF_ArraySpecSet	consistently document the intent of the argument	No impact
intent(inout) calendar	intent(in) calendar	36.5.12	37.5.8	ESMF_CalendarGet	consistently document the intent of the argument	No impact
	intent(in) calendar	36.5.13	37.5.9	ESMF_CalendarIsLeapYear	consistently document the intent of the argument	No impact
	intent(in) calendar	36.5.15	37.5.10	ESMF_CalendarPrint	consistently document the intent of the argument	No impact
	intent(in) calendar	36.5.20	37.5.15	ESMF_CalendarValidate	consistently document the intent of the argument	No impact
intent(inout) time	intent(in) time	37.4.11	38.4.11	ESMF_TimeGet	consistently document the intent of the argument	No impact
		37.4.12	38.4.12	ESMF_TimeIsLeapYear	consistently document the intent of the argument	No impact
		37.4.14	38.4.14	ESMF_TimePrint	consistently document the intent of the argument	No impact
		37.4.17	38.4.17	ESMF_TimeValidate	consistently document the intent of the argument	No impact
intent(inout) time1	intent(in) time1	37.4.13	38.4.13	ESMF_TimeIsSameCalendar	consistently document the intent of the argument	No impact
intent(inout) time2	intent(in) time2	37.4.13	38.4.13	ESMF_TimeIsSameCalendar	consistently document the intent of the argument	No impact
intent(inout) timeinterval	intent(in) timeinterval	38.4.16	39.4.16	ESMF_TimeIntervalGet	consistently document the intent of the argument	No impact
		38.4.17	39.4.17	ESMF_TimeIntervalGet	consistently document the intent of the argument	No impact
		38.4.18	39.4.18	ESMF_TimeIntervalGet	consistently document the intent of the argument	No impact
		38.4.19	39.4.19	ESMF_TimeIntervalGet	consistently document the intent of the argument	No impact
		38.4.20	39.4.20	ESMF_TimeIntervalNegAbsValue	consistently document the intent of the argument	No impact
		38.4.21	39.4.21	ESMF_TimeIntervalPrint	consistently document the intent of the argument	No impact
		38.4.26	39.4.26	ESMF_TimeIntervalValidate	consistently document the intent of the argument	No impact
intent(inout) startTimeIn	intent(in) startTimeIn	38.4.17	39.4.17	ESMF_TimeIntervalGet	consistently document the intent of the argument	No impact
intent(inout) clock	intent(in) clock	39.5.9	40.5.9	ESMF_ClockGetAlarm	consistently document the intent of the argument	No impact
		39.5.21	40.5.21	ESMF_ClockValidate	consistently document the intent of the argument	No impact
intent(inout) timeStep	intent(in) timeStep	39.5.11	40.5.11	ESMF_ClockGetNextTime	consistently document the intent of the argument	No impact
		39.5.17	40.5.17	ESMF_ClockSet	consistently document the intent of the argument	No impact
intent(inout) startTime	intent(in) startTime	39.5.17	40.5.17	ESMF_ClockSet	consistently document the intent of the argument	No impact
intent(inout) stopTime	intent(in) stopTime	39.5.17	40.5.17	ESMF_ClockSet	consistently document the intent of the argument	No impact
intent(inout) runDuration	intent(in) runDuration	39.5.17	40.5.17	ESMF_ClockSet	consistently document the intent of the argument	No impact
intent(inout) refTime	intent(in) refTime	39.5.17	40.5.17	ESMF_ClockSet	consistently document the intent of the argument	No impact
intent(inout) currTime	intent(in) currTime	39.5.17	40.5.17	ESMF_ClockSet	consistently document the intent of the argument	No impact
intent(inout) alarm	intent(in) alarm	40.6.9	41.6.9	ESMF_AlarmGet	consistently document the intent of the argument	No impact
		40.6.10	41.6.10	ESMF_AlarmIsEnabled	consistently document the intent of the argument	No impact
		40.6.11	41.6.11	ESMF_AlarmIsRinging	consistently document the intent of the argument	No impact
		40.6.12	41.6.12	ESMF_AlarmIsSticky	consistently document the intent of the argument	No impact
		40.6.14	41.6.14	ESMF_AlarmPrint	consistently document the intent of the argument	No impact
		40.6.19	41.6.19	ESMF_AlarmValidate	consistently document the intent of the argument	No impact
		40.6.20	41.6.20	ESMF_AlarmWasPrevRinging	consistently document the intent of the argument	No impact
		40.6.21	41.6.21	ESMF_AlarmWillRingNext	consistently document the intent of the argument	No impact
positional arguments reordered						
farrayPtr, distgrid, ...	distgrid, farrayPtr, ...	22.5.4	24.5.4	ESMF_ArrayCreateFromPtr	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
farrayPtr, distgrid, ...	distgrid, farrayPtr, ...	22.5.5	24.5.5	ESMF_ArrayCreateFromPtrArb	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
farray, distgrid, ...	distgrid, farray, ...	22.5.6	24.5.6	ESMF_ArrayCreateAssmdShape	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
localarrayList, distgrid, ...	distgrid, localarrayList, ...	22.5.7	24.5.7	ESMF_ArrayCreateLocalArray	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
localarrayList, distgrid, ...	distgrid, localarrayList, ...	22.5.8	24.5.8	ESMF_ArrayCreateLocalArrayArb	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
typekind, distgrid, ...	distgrid, typekind, ...	22.5.9	24.5.9	ESMF_ArrayCreateAllocate	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
typekind, distgrid, ...	distgrid, typekind, ...	22.5.10	24.5.10	ESMF_ArrayCreateAllocateArb	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
arrayspec, distgrid, ...	distgrid, arrayspec, ...	22.5.11	24.5.11	ESMF_ArrayCreateAllocateAS	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
arrayspec, distgrid, ...	distgrid, arrayspec, ...	22.5.12	24.5.12	ESMF_ArrayCreateAllocateASArb	Consistency with ESMF_FieldCreate()	Change argument ordering or use keywords
coordTypeKind, distgrid, distgridToGridMap, ...	distgrid, distgridToGridMap, ..., coordTypeKind, ...	25.6.8	27.6.11	ESMF_GridCreateFrmDistGrid	Consistency with other ESMF_GridCreate() interfaces	Change argument ordering or use keywords
coordTypeKind, distgrid, indexArray, ...	distgrid, indexArray, ..., coordTypeKind, ...	25.6.9	27.6.12	ESMF_GridCreateFrmDistGridArb	Consistency with other ESMF_GridCreate() interfaces	Change argument ordering or use keywords
Interface name changes						

API Change

Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
ESMF_FieldGet	ESMF_GridGetFieldBounds	20.6.29	22.7.1	ESMF_GridGetFieldBounds	Conform to standard method naming convention	Manually replace method names
ESMF_FieldGet	ESMF_LocStreamGetFieldBounds	20.6.30	22.7.2	ESMF_LocStreamGetFieldBounds	Conform to standard method naming convention	Manually replace method names
ESMF_FieldGet	ESMF_MeshGetFieldBounds	20.6.31	22.7.3	ESMF_MeshGetFieldBounds	Conform to standard method naming convention	Manually replace method names
ESMF_FieldGet	ESMF_XGridGetFieldBounds	20.6.32	22.7.4	ESMF_XGridGetFieldBounds	Conform to standard method naming convention	Manually replace method names
ESMF_DistGridConnection	ESMF_DistGridConnectionSet	29.5.18	31.7.1	ESMF_DistGridConnectionSet	DistGridConnection was changed to a class	Search and replace on method name, change type of first argument, and deal with fallout
Interfaces added						
N/A	ESMF_StateAddReplace	N/A	17.7.5	ESMF_StateAddReplace	Support for a standard container user interface	ESMF_StateAddReplace() provides the functionality previously supported by ESMF_StateAdd()
N/A	ESMF_FieldBundleAddReplace	N/A	21.5.5	ESMF_FieldBundleAddReplace	Support for a standard container user interface	No impact
N/A	ESMF_FieldBundleGet	N/A	21.5.9	ESMF_FieldBundleGet	Support for a standard container user interface	No impact
N/A	ESMF_FieldEmptyComplete(12)	N/A	22.6.25-36	ESMF_FieldEmptyComplete(12)	Support for a standard partial creation user interface	ESMF_FieldEmptyComplete() provides the functionality previously supported by ESMF_FieldSetCommit()
N/A	ESMF_FieldEmptyCreate	N/A	22.6.37	ESMF_FieldEmptyCreate	Support for a standard partial creation user interface	ESMF_FieldEmptyCreate() provides the functionality previously provided by ESMF_FieldCreateEmpty()
N/A	ESMF_FieldEmptySet(4)	N/A	22.6.38-41	ESMF_FieldEmptySet(4)	Support for a standard partial creation user interface	No impact
N/A	ESMF_ArrayBundleAdd	N/A	23.5.4	ESMF_ArrayBundleAdd	Support for a standard container user interface	No impact
N/A	ESMF_ArrayBundleAddReplace	N/A	23.5.5	ESMF_ArrayBundleAddReplace	Support for a standard container user interface	No impact
N/A	ESMF_ArrayBundleGet	N/A	23.5.8	ESMF_ArrayBundleGet	Support for a standard container user interface	No impact
N/A	ESMF_ArrayBundleGet	N/A	23.5.9	ESMF_ArrayBundleGet	Support for a standard container user interface	No impact
N/A	ESMF_ArrayBundleRemove	N/A	23.5.20	ESMF_ArrayBundleRemove	Support for a standard container user interface	No impact
N/A	ESMF_ArrayBundleReplace	N/A	23.5.21	ESMF_ArrayBundleReplace	Support for a standard container user interface	No impact
N/A	ESMF_ArraySpecAssignment	N/A	26.5.1	ESMF_ArraySpecAssignment	Clearly define behavior of assignment and comparison	No impact
N/A	ESMF_ArraySpecOperator(==)	N/A	26.5.2	ESMF_ArraySpecOperator(==)	Clearly define behavior of assignment and comparison	No impact
N/A	ESMF_ArraySpecOperator(/=)	N/A	26.5.3	ESMF_ArraySpecOperator(/=)	Clearly define behavior of assignment and comparison	No impact
N/A	ESMF_GridCreate	N/A	27.6.8-10	ESMF_GridCreate	Consistency with standard grid user interface	ESMF_GridCreate() provides the functionality previously supported by ESMF_GridCreateShapeTile()
N/A	ESMF_GridCreate1PeriDim	N/A	27.6.16-18	ESMF_GridCreate1PeriDim	Allow easy specification of connections	No impact
N/A	ESMF_GridCreate2PeriDim	N/A	27.6.19-21	ESMF_GridCreate2PeriDim	Allow easy specification of connections	No impact
N/A	ESMF_GridCreateNoPeriDim	N/A	27.6.22-24	ESMF_GridCreateNoPeriDim	Allow easy specification of connections	No impact
N/A	ESMF_GridEmptyCreate	N/A	27.6.29	ESMF_GridEmptyCreate	Support for a standard partial creation user interface	ESMF_GridEmptyCreate() provides the functionality previously supported by ESMF_GridCreateEmpty()
N/A	ESMF_GridEmptyComplete	N/A	27.6.26-28	ESMF_GridEmptyComplete	Support for a standard partial creation user interface	ESMF_GridEmptyComplete() provides the functionality previously supported by ESMF_GridSetCommitShapeTile()
N/A	ESMF_ConfigAssignment	N/A	42.3.1	ESMF_ConfigAssignment	Clearly define behavior of assignment and comparison	No impact
N/A	ESMF_LogAssignment	N/A	43.7.1	ESMF_LogAssignment	Clearly define behavior of assignment and comparison	No impact
N/A	ESMF_DELayoutAssignment	N/A	44.6.1	ESMF_DELayoutAssignment	Clearly define behavior of assignment and comparison	No impact
N/A	ESMF_DELayoutOperator(==)	N/A	44.6.2	ESMF_DELayoutOperator(==)	Clearly define behavior of assignment and comparison	No impact
N/A	ESMF_DELayoutOperator(/=)	N/A	44.6.3	ESMF_DELayoutOperator(/=)	Clearly define behavior of assignment and comparison	No impact
Interfaces removed						
ESMF_StateAdd	N/A	17.7.4	N/A	ESMF_StateAdd	Remove single item container calls	Use array constructor notation to add single items
ESMF_StateGetNeeded	N/A	17.7.11	N/A	ESMF_StateGetNeeded	Unclear usage pattern	Use Attributes attached to a State
ESMF_StateIsNeeded	N/A	17.7.12	N/A	ESMF_StateIsNeeded	Unclear usage pattern	Use Attributes attached to a State
ESMF_StateSetNeeded	N/A	17.7.19	N/A	ESMF_StateSetNeeded	Unclear usage pattern	Use Attributes attached to a State
ESMF_FieldBundleAdd	N/A	19.6.4	N/A	ESMF_FieldBundleAdd	Remove single item container calls	Use array constructor notation to add single items
ESMF_FieldBundleCreate (4)	N/A	19.6.7-10	N/A	ESMF_FieldBundleCreate (4)	Removal of Grid/LocStream/Mesh/XGrid from FieldBundle as well as the addition of optional fieldList to FieldBundleCreate made these interfaces have overlapping functionality	Remove Grid/LocStream/Mesh/XGrid argument
ESMF_FieldBundleGet	N/A	19.6.14	N/A	ESMF_FieldBundleGet	Unsupported access method	Use name lookup, or retrieve entire fieldList and iterate to the position of interest
ESMF_FieldCreateEmpty	N/A	20.6.4	N/A	ESMF_FieldCreateEmpty	Renamed based on new partial creation implementation	Use ESMF_FieldEmptyCreate()
ESMF_FieldSetCommit (8)	N/A	20.6.35-42	N/A	ESMF_FieldSetCommit (8)	Renamed based on new partial creation implementation	Use ESMF_FieldEmptyComplete()
ESMF_GridCreateEmpty	N/A	25.6.13	N/A	ESMF_GridCreateEmpty	Renamed based on new partial creation implementation	Use ESMF_GridEmptyCreate()

API Change						
Old value (520)	New value (520r)	Interfaces affected (520)	Interface (520r)	Method name	Rationale for change	Impact
ESMF_GridCreateShapeTile (3)	N/A	25.6.14-16	N/A	ESMF_GridCreateShapeTile (3)	Renamed based on new shortcut creation implementation	Use new shortcut Grid create methods: ESMF_GridCreateNoPeriDim(), ESMF_GridCreate1PeriDim(), ESMF_GridCreate2PeriDim(), or ESMF_GridCreate().
ESMF_GridGetStatus	N/A	25.6.31	N/A	ESMF_GridGetStatus	Overloaded into ESMF_GridGet()	Use ESMF_GridGet()
ESMF_GridSetCommitShapeTile (3)	N/A	25.6.34-36	N/A	ESMF_GridSetCommitShapeTile (3)	Renamed based on new partial creation implementation	Use ESMF_GridEmptyComplete()
ESMF_CalendarOperator(==) (2)	N/A	36.5.3-4	N/A	ESMF_CalendarOperator(==) (2)	Overloaded into single interface	No impact
ESMF_CalendarOperator(/=) (2)	N/A	36.5.5-6	N/A	ESMF_CalendarOperator(/=) (2)	Overloaded into single interface	No impact
ESMF_CalendarIsLeapYear	N/A	36.5.14	N/A	ESMF_CalendarIsLeapYear	Overloaded into single interface	No impact