

**pure-stlmap and pure-stlvec functions**  
**2012-02-23**

Construction						
stlmap	stlset	stlmap	stlmsset	stlthmap	stlthset	stlvec
emptystlmap mkstlmap (kcmp,dflt,vcmp,veql) mkstlmap (kcmp,dflt,vcmp) mkstlmap (kcmp,dflt) mkstlmap kcmp stlmap xs stlmap sv stlmap smrng	emptystlset   mkstlset kcmp stlset xs stlset sv stlset ssrng	emptystlmap mkstlmap (kcmp,dflt,vcmp,veql) mkstlmap (kcmp,dflt,vcmp) mkstlmap (kcmp,dflt) mkstlmap kcmp stlmap xs stlmap sv stlmap smrng	emptystlmsset   mkstlmsset kcmp stlmsset xs stlmsset sv stlmsset smsrng	emptystlthmap   stlthmap xs stlthmap sv stlthmap shm	emptystlthset   stlthset xs stlthset sv stlthset shs	emptystlvec mkstlvec x n   stlvec xs stlvec sv
Information						
stlmap	stlset	stlmap	stlmsset	stlthmap	stlthset	stlvec
(#) sm stl::empty sm stl::distance smrng stl::count sm key stl::bounds smrng stl::container_info smrng	(#) ss stl::empty ss stl::distance ssrng stl::count ss key stl::bounds ssrng stl::container_info ssrng	(#) smm stl::empty smm stl::distance smrng stl::count smm key stl::bounds smrng stl::container_info smrng	(#) sms stl::empty sms stl::distance smsrng stl::count sms key stl::bounds smsrng stl::container_info smsrng	(#) shm stl::empty shm  stl::count shm key  stl::container_info shm stl::bucket_size shm n stl::shmap_reserve shm mlf n	(#) shs stl::empty shs  stl::count shs key  stl::container_info shs stl::bucket_size shs n stl::shsap_reserve shs mlf n	(#) sv stl::empty sv    stl::bounds svrng  stl::reserve sv n stl::capacity sv
Modification						
stlmap	stlset	stlmap	stlmsset	stlthmap	stlthset	stlvec
insert sm elm insert sm xs insert sm v insert sm smrng insert sm sv insert_or_replace sm elm insert_or_replace sm xs insert_or_replace sm v insert_or_replace sm sv insert_or_replace sm smrng replace sm key val replace_with fun sm (key,val) erase sm erase (sm,key1,key2) erase (sm,key) stl::swap sm1 sm2	insert ss elm insert ss xs insert ss v insert ss ssrng insert ss sv   erase ss erase (ss,key1,key2) erase (ss,key) stl::swap ss1 ss2	insert smm elm insert smm xs insert smm v insert smm smrng insert smm sv  replace smm key vals  erase smm erase (smm,key1,key2) erase (smm,key) stl::swap smm1 smm2	insert sms elm insert sms xs insert sms v insert sms smrng insert sms sv   erase sms erase (sms,key1,key2) erase (sms,key) stl::swap sms1 sms2	insert shm elm insert shm xs insert shm v insert shm shm2 insert shm sv insert_or_replace sm elm insert_or_replace sm xs insert_or_replace sm v insert_or_replace shm sv  replace shm key val  erase shm erase (shm,key) stl::swap shm1 shm2	insert shs elm insert shs xs insert shs v insert shs shs2 insert shs sv   erase shs erase (shs,key) stl::swap shs1 shs2	insert (sv, p) elm insert (sv, p) xs insert (sv, p) v insert (sv, p) svrng insert (sv, p) sv   replace sv p x  erase sv erase (sv, f, l) erase (sv, p)
Access						
stlmap	stlset	stlmap	stlmsset	stlthmap	stlthset	stlvec
member sm key (l) sm key first sm last sm stl::next_key sm key stl::prev_key sm key	member ss key (l) ss key first ss last ss stl::next_key ss key stl::prev_key ss key	member smm key (l) smm key first smm last smm stl::next_key smm key stl::prev_key smm key	member sms key (l) sms key first sms last sms stl::next_key sms key stl::prev_key sms key	member shm key (l) shm key	member shs key (l) shs key	(l) sv p first sv last sv
Conversions						
stlmap	stlset	stlmap	stlmsset	stlthmap	stlthset	stlvec
members smrng stream smrng keys smrng vals smrng stl::vector smrng stlvec smrng	members ssrng stream ssrng  stl::vector ssrng stlvec ssrng	members smmrng stream smmrng keys smmrng vals smmrng stl::vector smmrng stlvec smmrng	members smsrng stream smsrng  stl::vector smsrng stlvec smsrng	members shm  keys shm vals shm stl::vector shm stlvec shm	members shs   stl::vector shs stlvec shs	members svrng   stl::vector svrng const_stlvec sv
Functional Programming						
stlmap	stlset	stlmap	stlmsset	stlthmap	stlthset	stlvec
catmap fun smrng colcatmap fun smrng colmap fun smrng do fun smrng filter p smrng foldl fun x smrng foldl1 fun smrng foldr fun x smrng foldr1 fun smrng listmap fun smrng map fun smrng rowcatmap fun smrng rowmap fun smrng	catmap fun ssrng colcatmap fun ssrng colmap fun ssrng do fun ssrng filter p ssrng foldl fun x ssrng foldl1 fun ssrng foldr fun x ssrng foldr1 fun ssrng listmap fun ssrng map fun ssrng rowcatmap fun ssrng rowmap fun ssrng	catmap fun smmrng colcatmap fun smmrng colmap fun smmrng do fun smmrng filter p smmrng foldl fun x smmrng foldl1 fun smmrng foldr fun x smmrng foldr1 fun smmrng listmap fun smmrng map fun smmrng rowcatmap fun smmrng rowmap fun smmrng	catmap fun smsrng colcatmap fun smsrng colmap fun smsrng do fun smsrng filter p smsrng foldl fun x smsrng foldl1 fun smsrng foldr fun x smsrng foldr1 fun smsrng listmap fun smsrng map fun smsrng rowcatmap fun smsrng rowmap fun smsrng	catmap fun shm colcatmap fun shm colmap fun shm do fun shm filter p shm foldl fun x shm foldl1 fun shm  listmap fun shm map fun shm rowcatmap fun shm rowmap fun shm	catmap fun shs colcatmap fun shs colmap fun shs do fun shs filter p shs foldl fun x shs foldl1 fun shs  listmap fun shs map fun shs rowcatmap fun shs rowmap fun shs	catmap fun svrng colcatmap fun svrng colmap fun svrng do fun svrng filter p svrng foldl fun x svrng foldl1 fun svrng foldr fun x svrng foldr1 fun svrng listmap fun svrng map fun svrng rowcatmap fun svrng rowmap fun svrng

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Comparison	stlset	stlmap	stlmsset	stlhmap	stlhset	stlvec
(==) sm1 sm2	(==) ss1 ss2	(==) smm1 smm2	(==) sms1 sms2	(==) shm1 shm2	(==) shs1 shs2	(==) sv1 sv2
(~) sm1 sm2	(~) ss1 ss2	(~) smm1 smm2	(~) sms1 sms2	(~) shm1 shm2	(~) shs1 shs2	(~) sv1 sv2
(>) smrng1 smrng2	(>) ssrng1 ssrng2	(>) smmrng1 smmrng2	(>) smsrng1 smsrng2			
(>=) smrng1 smrng2	(>=) ssrng1 ssrng2	(>=) smmrng1 smmrng2	(>=) smsrng1 smsrng2			
(<) smrng1 smrng2	(<) ssrng1 ssrng2	(<) smmrng1 smmrng2	(<) smsrng1 smsrng2			
(<=) smrng1 smrng2	(<=) ssrng1 ssrng2	(<=) smmrng1 smmrng2	(<=) smsrng1 smsrng2			
stl::map_equal smrng1 smrng2	stl::map_equal ssrng1 ssrng2	stl::map_equal smmrng1 smmrng2	stl::map_equal smsrng1 smsrng2	stl::map_equal shm1 shm2	stl::map_equal shs1 shs2	

Set Operations	stlset	stlmap	stlmsset	stlhmap	stlhset	stlvec
stl::map_difference smrng1 smrng2	stl::map_difference ssrng1 ssrng2	stl::map_difference smmrng1 smmrng2	stl::map_difference smsrng1 smsrng2			
stl::map_includes smrng1 smrng2	stl::map_includes ssrng1 ssrng2	stl::map_includes smmrng1 smmrng2	stl::map_includes smsrng1 smsrng2			
stl::map_intersection smrng1 smrng2	stl::map_intersection ssrng1 ssrng2	stl::map_intersection smmrng1 smmrng2	stl::map_intersection smsrng1 smsrng2			
stl::map_merge smrng1 smrng2	stl::map_merge ssrng1 ssrng2	stl::map_merge smmrng1 smmrng2	stl::map_merge smsrng1 smsrng2			
stl::map_symmetric_difference smrng1 smrng2	stl::map_symmetric_difference ssrng1 ssrng2	stl::map_symmetric_difference smmrng1 smmrng2	stl::map_symmetric_difference smsrng1 smsrng2			
stl::map_union smrng1 smrng2	stl::map_union ssrng1 ssrng2	stl::map_union smmrng1 smmrng2	stl::map_union smsrng1 smsrng2			

Direct C Calls	stlset	stlmap	stlmsset	stlhmap	stlhset	stlvec
stl::sm_member sm key	stl::ss_member ss key	stl::smm_member smm key	stl::sms_member sms key	stl::shm_member shm key	stl::shs_member shs key	
stl::sm_get sm key	stl::ss_get ss key	stl::smm_get smm key	stl::sms_get sms key	stl::shm_get shm key	stl::shs_get shs key	stl::sv_get sv int
stl::sm_put sm key val	stl::ss_put ss key val	stl::smm_put smm key val	stl::sms_put sms key val	stl::shm_put shm key val	stl::shs_put shs key val	stl::sv_put sv int val

Iterators	stlset	stlmap	stlmsset	stlhmap	stlhset	stlvec
stl::begin sm	stl::begin ss	stl::begin smm	stl::begin sms			
stl::pastend sm	stl::pastend ss	stl::pastend smm	stl::pastend sms			
stl::find sm key	stl::find ss key	stl::find smm key	stl::find sms key			
stl::find_with_default		stl::find_with_default				
stl::iterator smitr	stl::iterator ssitr	stl::iterator smmitr	stl::iterator smsitr			
stl::l_bound sm key	stl::l_bound ss key	stl::l_bound smm key	stl::l_bound sms key			
stl::u_bound sm key	stl::u_bound ss key	stl::u_bound smm key	stl::u_bound sms key			
stl::lu_bounds sm key	stl::lu_bounds ss key	stl::lu_bounds smm key	stl::lu_bounds sms key			
stl::range_info smrng	stl::range_info ssrng	stl::range_info smmrng	stl::range_info smsrng			
stl::inc smitr	stl::inc ssitr	stl::inc smmitr	stl::inc smsitr			
stl::dec smitr	stl::dec ssitr	stl::dec smmitr	stl::dec smsitr			
stl::move smitr n	stl::move ssitr n	stl::move smmitr n	stl::move smsitr n			
(==) smitr1 smitr2	(==) ssitr1 ssitr2	(==) smmitr1 smmitr2	(==) smsitr1 smsitr2			
stl::beginp smitr	stl::beginp ssitr	stl::beginp smmitr	stl::beginp smsitr			
stl::endp smitr	stl::endp ssitr	stl::endp smmitr	stl::endp smsitr			
stl::get_info smitr	stl::get_info ssitr	stl::get_info smmitr	stl::get_info smsitr			
stl::get smitr	stl::get ssitr	stl::get smmitr	stl::get smsitr			
stl::get_key smitr	stl::get_key ssitr	stl::get_key smmitr	stl::get_key smsitr			
stl::get_val smitr	stl::get_val ssitr	stl::get_val smmitr	stl::get_val smsitr			
put smitr val	put ssitr val	put smmitr val	put smsitr val			
stl::insert_elm sm (elm, smitr)	stl::insert_elm ss (elm, ssitr)	stl::insert_elm smm (elm, p)	stl::insert_elm sms (elm, p)			
stl::insert_elm sm elm	stl::insert_elm ss elm	stl::insert_elm smm elm	stl::insert_elm sms elm			
erase (sm, smitr1, smitr2)	erase (ss, ssitr1, ssitr2)	erase (smm, smmitr1, smmitr2)	erase (sms, smsitr1, smsitr2)			
erase (sm, smitr)	erase (ss, ssitr)	erase (smm, smmitr)	erase (sms, smsitr)			

Key to Abbreviations	Meaning
Symbol	
sm	a stlmap
ss	a stlset
smm	a stlmap
sms	a stlmsset
shm	a stlhmap
shs	a stlhset
sv	a stlvec
smrng	a range defined on a stlmap
ssrng	a range defined on a stlset
smmrng	a range defined on a stlmap
smmset	a range defined on a stlmsset
svrng	a range defined on a stlvec
smitr	an iterator defined on a stlmap
smmitr	an iterator defined on a stlmap
n	an int
key	a pure expression
val	a pure expression
elm	an element - for map: (key=>val), for set val
xs	a list of elm
v	a vector of elm
sv	a stlvec of elm
fun	a function