

Cheatsheet for pure-stllib Containers
2012-03-02

Construction	stlset	stlmap	stlmsset	stlshmap	stlshset	stlvec
emptystlmap	emptystlset	emptystlmap	emptystlmsset	emptystlshmap	emptystlshset	emptystlvec
mkslmap (kcmp,dflt,vcmp,veql)		mkslmap (kcmp,dflt,vcmp,veql)				mkslvec x n
mkslmap (kcmp,dflt,vcmp)		mkslmap (kcmp,dflt,vcmp)				
mkslmap (kcmp,dflt)		mkslmap (kcmp,dflt)				
mkslmap kcmp	mkslset kcmp	mkslmap kcmp	mkslmsset kcmp			
stlmap xs	stlset xs	stlmap xs	stlmsset xs	stlshmap xs	stlshset xs	stlvec xs
stlmap sv	stlset sv	stlmap sv	stlmsset sv	stlshmap sv	stlshset sv	stlvec sv
stlmap smrng	stlset smrng	stlmap smrng	stlmsset smrng	stlshmap shm	stlshset shs	

Information	stlset	stlmap	stlmsset	stlshmap	stlshset	stlvec
(#) sm	(#) ss	(#) smm	(#) sms	(#) shm	(#) shs	(#) sv
stl::empty sm	stl::empty ss	stl::empty smm	stl::empty sms	stl::empty shm	stl::empty shs	stl::empty sv
stl::distance smrng	stl::distance smrng	stl::distance smrng	stl::distance smrng			
stl::count sm key	stl::count ss key	stl::count smm key	stl::count sms key	stl::count shm key	stl::count shs key	
stl::bounds smrng	stl::bounds smrng	stl::bounds smrng	stl::bounds smrng			stl::bounds svrng
stl::container_info smrng	stl::container_info smrng	stl::container_info smrng	stl::container_info smrng	stl::container_info shm	stl::container_info shs	
				stl::bucket_size shm n	stl::bucket_size shs n	
				stl::shmap_reserve shm mlf n	stl::shs_reserve shs mlf n	
						stl::reserve sv n
						stl::capacity sv

Modification	stlset	stlmap	stlmsset	stlshmap	stlshset	stlvec
insert sm elm	insert ss elm	insert smm elm	insert sms elm	insert shm elm	insert shs elm	insert (sv, p) elm
insert sm xs	insert ss xs	insert smm xs	insert sms xs	insert shm xs	insert shs xs	insert (sv, p) xs
insert sm v	insert ss v	insert smm v	insert sms v	insert shm v	insert shs v	insert (sv, p) v
insert sm smrng	insert ss smrng	insert smm smrng	insert sms smrng	insert shm shm2	insert shs shs2	insert (sv, p) svrng
insert sm sv	insert ss sv	insert smm sv	insert sms sv	insert shm sv	insert shs sv	insert (sv, p) sv
insert_or_replace sm elm				insert_or_replace sm elm		
insert_or_replace sm xs				insert_or_replace sm xs		
insert_or_replace sm v				insert_or_replace sm v		
insert_or_replace sm sv				insert_or_replace shm sv		
insert_or_replace sm smrng						
replace sm key val		replace smm key vals		replace shm key val		replace sv p x
replace_with fun sm (key,val)						
erase sm	erase ss	erase smm	erase sms	erase shm	erase shs	erase sv
erase (sm,key1,key2)	erase (ss,key1,key2)	erase (smm,key1,key2)	erase (sms,key1,key2)			erase (sv, f, l)
erase (sm,key)	erase (ss,key)	erase (smm,key)	erase (sms,key)	erase (shm,key)	erase (shs,key)	erase (sv, p)
stl::swap sm1 sm2	stl::swap ss1 ss2	stl::swap smm1 smm2	stl::swap sms1 sms2	stl::swap shm1 shm2	stl::swap shs1 shs2	

Access	stlset	stlmap	stlmsset	stlshmap	stlshset	stlvec
member sm key	member ss key	member smm key	member sms key	member shm key	member shs key	
(l) sm key	(l) ss key	(l) smm key	(l) sms key	(l) shm key	(l) shs key	(l) sv p
first sm	first ss	first smm	first sms			first sv
last sm	last ss	last smm	last sms			last sv
stl::next_key sm key	stl::next_key ss key	stl::next_key smm key	stl::next_key sms key			
stl::prev_key sm key	stl::prev_key ss key	stl::prev_key smm key	stl::prev_key sms key			

Conversions	stlset	stlmap	stlmsset	stlshmap	stlshset	stlvec
members smrng	members smrng	members smrng	members smrng	members shm	members shs	members svrng
stream smrng	stream smrng	stream smrng	stream smrng			
keys smrng		keys smrng		keys shm		
vals smrng		vals smrng		vals shm		
stl::vector smrng	stl::vector smrng	stl::vector smrng	stl::vector smrng	stl::vector shm	stl::vector shs	stl::vector svrng
stlvec smrng	stlvec smrng	stlvec smrng	stlvec smrng	stlvec shm	stlvec shs	const_stlvec sv

Functional Programming	stlset	stlmap	stlmsset	stlshmap	stlshset	stlvec
catmap fun smrng	catmap fun smrng	catmap fun smrng	catmap fun smrng	catmap fun shm	catmap fun shs	catmap fun svrng
colcatmap fun smrng	colcatmap fun smrng	colcatmap fun smrng	colcatmap fun smrng	colcatmap fun shm	colcatmap fun shs	colcatmap fun svrng
colmap fun smrng	colmap fun smrng	colmap fun smrng	colmap fun smrng	colmap fun shm	colmap fun shs	colmap fun svrng
do fun smrng	do fun smrng	do fun smrng	do fun smrng	do fun shm	do fun shs	do fun svrng
filter p smrng	filter p smrng	filter p smrng	filter p smrng	filter p shm	filter p shs	filter p svrng
foldl fun x smrng	foldl fun x smrng	foldl fun x smrng	foldl fun x smrng	foldl fun x shm	foldl fun x shs	foldl fun x svrng
foldl1 fun smrng	foldl1 fun smrng	foldl1 fun smrng	foldl1 fun smrng	foldl1 fun shm	foldl1 fun shs	foldl1 fun svrng
foldr fun x smrng	foldr fun x smrng	foldr fun x smrng	foldr fun x smrng	foldr fun x shm	foldr fun x shs	foldr fun x svrng
foldr1 fun smrng	foldr1 fun smrng	foldr1 fun smrng	foldr1 fun smrng			foldr1 fun svrng
listmap fun smrng	listmap fun smrng	listmap fun smrng	listmap fun smrng	listmap fun shm	listmap fun shs	listmap fun svrng
map fun smrng	map fun smrng	map fun smrng	map fun smrng	map fun shm	map fun shs	map fun svrng
rowcatmap fun smrng	rowcatmap fun smrng	rowcatmap fun smrng	rowcatmap fun smrng	rowcatmap fun shm	rowcatmap fun shs	rowcatmap fun svrng
rowmap fun smrng	rowmap fun smrng	rowmap fun smrng	rowmap fun smrng	rowmap fun shm	rowmap fun shs	rowmap fun svrng

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Comparison

stlmap	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

stlmap	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

stlmap	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

stlmap	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

Symbol	Meaning
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
smsrng	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