Time (in minutes) of Openstack deployment depending on the method, the number of computes nodes and the Chameleon site (UC or TACC)												
Chameleon Site	uc					TACC					*	
Number of Compute Nodes	1						8	16	·			
DevStack ( Mitaka ) Add 2 minutes to have Dashboard access	27	27	27	31		28	28	28	28	28	Simple to deploy Maintained by external team	We don't know when the deployment is really over A little longer than the other methods No floating IP: It's more complicated to SSH to VM Admin password hardcoded
xp5k (Literal Approach, with frontend)	33	No multinodes for the moment			No multinodes for the moment					Closest to what is done on Grid'5000	Longest method ( puppet server + frontend to deploy) No floating IP: It's more complicated to SSH to VM Unsecure: No Heat agent: private SSH key hardcoded in template Problem with Network: How to use sharednet without IP conflict?	
liberty.yaml ( shared network ) More packages in controller image	20	20	21	21	25	22	24	26	25	27	We know when the deployment is really over Fastest method Custom admin password	No floating IP: It's more complicated to SSH to VM More image to manage ( one image for controller and one for compute nodes)
liberty_net_isolation.yaml More packages in controller image	20	20	21	21		No n	No network isolation on TACC			TACC	We know when the deployment is really over Fastest method	No floating IP: It's more complicated to SSH to VM More image to manage (one image for controller and one for compute nodes) Not possible on TACC
liberty_multinodes.yaml ( network != glance != controller) Only Puppet agent included in images		23					29					
Controller = puppet srv, shared network Only Puppet agent included in images	24			П		26-28					Faster than Devstack We know when the deployment is really over	No floating IP: It's more complicated to SSH to VM
Controller = puppet srv, isolated network Only Puppet agent included in images	24	24	24	25	26	No n	network isolation on TACC		TACC	Allow floating IP (connection from controller by forwarding SSH agent) We know when the deployment is really over	Needs that the user create a isolated network ( see Chameleon documentation ) Not possible on TACC	
Longest deployment time												
Fastest deployment time												
Instable, needs multiple try to succeed												
Obsolete method												
Note: The same measure at different time of the day can have 2 or 3 min different. Probably due to the site usage. I put the time value that shows up most of the time												
lote: It's sometimes hard to make a deployment with 16 nodes, if we encounter 1 node that is unreachable for any reasons, it blocks the entiere deployment.												
Time between steps in general : 0-4 min depl	oy / 4-8	min h	osts p	opula	te / 8-1	0 min l	bootst	rap pup	pet se	rver / 1	0-17 min controller / 27-21 min compute / done	

Chameleon Site		uc						TACC			<b>*</b>	
Number of Compute Nodes	1	1 2 4 8 16					1 2 4 8 16					
DevStack ( Mitaka ) : Reference Add 2 minutes to have Dashboard access	100%	100%	100%	100%	#DIV/0!	100%	100%	100%	100%	100%	Simple to deploy Maintained by external team	We don't know when the deployment is really over A little longer than the other methods No floating IP: It's more complicated to SSH to VM Admin password hardcoded
xp5k (Literal Approach, with frontend)	122%	No multinodes for the moment				No multinodes for the moment					Closest to what is done on Grid'5000	Longest method ( puppet server + frontend to deploy) No floating IP: It's more complicated to SSH to VM Unsecure: No Heat agent: private SSH key hardcoded in template Problem with Network: How to use sharednet without IP conflict?
liberty.yaml ( shared network ) More packages in controller image	74%	74%	78%	68%	#DIV/0!	79%	86%	93%	89%	96%	We know when the deployment is really over Fastest method	No floating IP : It's more complicated to SSH to VM More image to manage ( one image for controller and one for compute nodes)
liberty_net_isolation.yaml More packages in controller image	74%	74%	78%	68%	#DIV/0!	N	network	isolation	on TAC	c	We know when the deployment is really over Fastest method	No floating IP : It's more complicated to SSH to VM More image to manage (one image for controller and one for compute nodes) Not possible no TACC
liberty_multinodes.yaml ( network != glance != controller) Only Puppet agent included in images	0%	85%	0%	0%	#DIV/0!	0%	104%	0%	0%	0%		
Controller = puppet srv, shared network Only Puppet agent included in images	24					26-28					Faster than Devstack We know when the deployment is really over	No floating IP : It's more complicated to SSH to VM
Controller = puppet srv, isolated network Only Puppet agent included in images	24	24	24	25	26	No network isolation on TACC					Allow floating IP (connection from controller by forwarding SSH agent) We know when the deployment is really over	Needs that the user create a isolated network ( see Chameleon documentation ) Not possible on TACC
> 100%												
< 100%												
Instable, needs multiple try to succeed												
Obsolete method												