## Cloud service provider disclosure

The form is to be completed for each cloud service provided. For questions not applicable or not disclosed, indicate accordingly in the remarks.

## **Cloud Service Provider Contact Information**

Company name: SoftLayer, Technologies Inc.

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Dallas TX 75240

Web address: <a href="http://www.softlayer.com">http://www.softlayer.com</a>

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Dallas TX 75240

Contact number: +1 (214) 442-0600

Information Security Liason: SoftLayer Trust and Assurance

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Dallas TX 75240

trust\_and\_assurance@wwpdl.vnet.ibm.com

+1 (214) 442-0600

Abuse Requests: Abuse Department

14001 North Dallas Pkwy

Suite M100

Dallas TX 75240

<u>abuse@softlayer.com</u> +1 (214) 442-0605

Other Related Affiliates for MTCS Services:

SoftLayer Technologies Asia Private Limited (Singapore Operations)

Registration# 201118816K

29A International Business Park

S180

Jurong East, Singapore 609934

SoftLayer Technologies Hong Kong Limited (Hong Kong Operations)

Registration# 62393483
33 Chun Choi Street
Suites 210 and 230
Tseung Kwan O Industrial Estate, NT, HK
SoftLayer Dutch Holdings, B.V. (SoftLayer Contracting Entity)
Registration# NL 52461041
Paul van Vlissingenstraat 16
1096BK Amsterdam
The Netherlands
IBM Singapore Pte. Ltd, c/o Jason Teo (IBM Contracting Entity)
9 Changi Business Park Central 1
The IBM Place
Singapore 486048
Certification Body Contact Information
Company name: ISC Pte Ltd
Web address: http://isc-worldwide.com/
Contact name: Indranil Mukherjee
Contact email: indy@isc-global.net
Contact email: indy@isc-global.net  Cloud Service Provider Background
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Contact email: indy@isc-global.net  Cloud Service Provider Background  Overview of service offering:  SoftLayer provides Infrastructure as a Service (laaS) to customers worldwide. SoftLayer offers bare metal servers that are dedicated to single customers.
Contact email: indy@isc-global.net  Cloud Service Provider Background  Overview of service offering:  SoftLayer provides Infrastructure as a Service (laaS) to customers worldwide.  SoftLayer offers bare metal servers that are dedicated to single customers.  SoftLayer offers multi-tenant public cloud instances, single-tenant private
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	☐ Hybrid clo	ud	
	□ Public clou	ud	
Tier:			
	Level 1		
	⊠ Level 2		
	Level 3		
No.	Criteria	Description	Remarks
Lega	I and Compliance	е	
1.	Right to audit	The user has the right to audit:	
		☑ Virtual machine instances owned by the user	Customers can perform their own
		☐ Network facilities	compliance audit on their virtual infrastructure
		☐ Compliance with applicable standards	(servers, network, storage, etc.).
		☐ Technical controls	SoftLayer makes
		☐ Policies and governance	numerous certifications and
		☐ Data centre facilities	attestations available to customers to verify
		Others	compliance such as SOC 2, multiple ISO
		□ None	standards, PCI, etc.
		Regulators recognised by Singapore law have the right to audit:	Regulators get full access to SoftLayer.
		☑ Virtual machine instances owned by the user	Physical access is allowed if there is a
		Network facilities     ■     Network facilities     Network facilities     ■     Network facilities     Netw	demonstrated need after review of
		☐ Compliance with applicable standards	certifications, documentation, and
		□ Technical controls	evidence has been performed.
		□ Policies and governance	
		□ Data centre facilities (see SoftLayer documents)	
		Others	
		☐ None	
		Audit / assessment reports that can be made available on request:	
		☐ Penetration test	
		☐ Threat and vulnerability risk assessment	

		<ul> <li>☐ Vulnerability scan</li> <li>☐ Audit reports (e.g. Statement on Standards for Attestation Engagements (SSAE) No. 16, Reporting on Controls at a Service Organisation)</li> </ul>	
2.	Compliance	The following guidelines / standards / regulations are adhered to:	See <a href="http://www.softlayer.c">http://www.softlayer.c</a> <a href="http://www.softlayer.c">om/compliance</a>
		⊠ Singapore Personal Data Protection Act	SoftLayer also has
		⊠ ISO / IEC 27001	ISO 27017 and 27018 certificates,
		☐ ISO 9000	and FedRAMP
		☐ ISO / IEC 20000	Agency Authority to Operate in the United States.
		CSA Open Certification Framework	The Singapore
		⊠PCI-DSS	Personal Data Protection Act was
		☐ Others_SSAE 16 SOC1 Type II	assessed and the appropriate agreements were
			executed in early 2015. SoftLayer uses IBM's Singapore DPO, Lorinne Yoong.
			Dr O, Lonnine roong.
Data	Control		SoftLayer customers
3.	Data ownership	All data on the cloud service is owned by the cloud user except for: log data related to the infrastructure stack	own all right, title, and interest on their data.
		The cloud User retains the ownership on the derived data or attributes of cloud usage except for the following:	See http://www.softlayer.c om/legal
		Advertising or marketing	for more information.
		⊠ Statistics analysis on usage	
		Others_	Data on de-
4.	Data retention	Data deleted by the user is retained as follows:	provisioned servers or failed hard disks is
		☐ Minimum data retention period is:	overwritten using US
		Maximum data retention period is:	DoD 7-pass wipe algorithms before returned into a pool
		□ Deleted immediately	of available
		Log data is retained for a period of:	resources. Internal laaS log data from incidents,
		Minimum data retention period as follows: 1 year	access controls, or change management
		Maximum data retention period is:	is kept for a minimum of one year. This log
		☐ Not retained (Customer data)	data is not shared with customers, but

		User data is retained for a period of:	with regulators when required.
		☐ Minimum data retention period is:	Log data for customer owned virtual servers
		☐ Maximum data retention period is:	is in the responsibility of the customer.
		<ul><li>✓ Not retained</li><li>The following types of data are available for download by the cloud</li></ul>	Log data related to the customer
		user:	workload on the delivery network and
		⊠ Log data	customer portal usage logs are available for
		Other	customer review and download and are the customer's responsibility.
5.	Data	The primary data locations are:	Customers will be able to choose
	sovereignty	⊠ Singapore	between two MTCS certified data centres (Hong Kong,
		⊠ Asia Pacific <u>Hong Kong</u>	Singapore) as primary and backup
		☐ Europe	data locations. SoftLayer will never
		☐ United States	move data out of the selected data centre
		Other	(see http://www.softlayer.c
		The backup data locations are:	om/privacy- agreement) unless asked by the
		Singapore Said Basifia Hann Kann	customer. In case of maintenance or
		☐ Asia Pacific Hong Kong	hardware failures virtual machines may
		☐ Europe	be migrated to other servers at the
		Other	customer's direction, but will always stay in the selected data
		No. of countries in which data centres are operated: 11 (all), 2 (MTCS certified)	centre.
		The user's data stored in the cloud environment will never leave the locations specified in item 5:	For a complete list of all data centres and their accreditation status see
		⊠ Yes	www.softlayer.com/da ta-centers It is the customer's
		Yes, except as required by law	responsibility to set up high availability
		Yes, except as noted:	and disaster recovery procedures. SoftLayer offers load
		□ No	balancers, storage replication services, and free-of-charge

		User's consent is required prior to transferring data to a location not specified in item 5 or a third party:  Yes  Yes, except as required by law  Yes, except as noted:  No  Note: Cloud users are responsible for determining the impact of data protection and data sovereignty laws on the locations where data is stored. In addition, users should understand the risks associated with relevant laws that may allow for law enforcement or other government access to data in-transit or storage with Cloud Service Providers.	private virtual network interlinks between the data centres enable these solutions to customers.
6.	Non- disclosure	<ul> <li>☑ Non-disclosure agreement template can be provided by Cloud Service Provider</li> <li>☑ Cloud Service Provider may use customer's NDA (pending legal review)</li> </ul>	
Provi	der Performance	· · · · ·	
7.	Availability	The committed network uptime is:  \[ \sum 100 \% \]  \[ \sum Varies according to price plan \]  The committed system uptime is:  \[ \sum 100 \%  (for the cloud management portal and infrastructure, excluding the virtual machine or bare-metal server managed by a client – see right side)  \[ \sum Varies according to price plan \]  The cloud environment has the following single points of failure:  \[ \sum \text{Physical infrastructure in each data centre is redundant (N+1 model), including the network connections from client access points to data centre ("Point of Presence") and between data centres. The cloud management infrastructure and customer portal are active-active configured and fail over seamlessly in case of an outage. Customer servers can be ordered with redundant power supply and redundant network cards. Storage can optionally be ordered as RAID array. The Power Distribution Units and Hypervisors are potential single points of failure. However, client best practices eliminate these points of failure. Clients are encouraged to implement their own backup and recovery strategies for such situations, or to implement active-active or active-standby clustering via a second application instance at a backup/secondary	SoftLayer provides the cloud infrastructure up to the provisioned operating system above the hypervisor for virtual servers, and up to the physical server for bare-metal servers. SoftLayer's SLA for those parts of the cloud environment it controls (as stated on <a href="http://www.softlayer.com/legal">http://www.softlayer.com/legal</a> ) is 100%. Unavailability caused by misconfiguration of the operating system or a component above caused by the client are not included as an SLA violation.
		data centre leveraging SoftLayer's storage replication and load balancing features. Another potential single point of failure can be the uplink from customer's data centre to SoftLayer's access points.	

		It is recommended that customer establish two direct links to primary and secondary/backup data centre to mitigate that risk.	
		☐ none	SoftLayer offers
8.	BCP / DR	□ Disaster recovery protection	various ways to
		☐ Backup and restore service	backup customer's data (see http://www.softlayer.c
		☐ User selectable backup plans	om/backup), and disaster recovery
		☐ Escrow arrangements	plans (see also question #5).
		☐ No BCP / DR is available	However as SoftLayer does not
		☐ RPO	own or have access
		☐ RTO	to customer's data, it is in the responsibility
			of the customer to choose the right
		Others, please specify:	options for an
			appropriate backup and disaster recovery
			plan. SoftLayer does not determine or
			manage backups for
			customers.
			SoftLayer guarantees
9.	Liability	The following terms are available for the users on failure of the provider to meet the service commitment:	the availability of its laaS infrastructure as
		·	described in
		Network failure	http://cdn.softlayer.co m/SoftLayer_MSA.pd
		Liability: http://cdn.softlayer.com/SoftLayer MSA.pdf	<u>f</u>
		Liability: <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">http://cdn.softlayer.com/SoftLayer MSA.pdf</a> <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">MSA.pdf</a> <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">Infrastructure failure</a>	<u>f</u> Handling of failures
			<u>f</u>
		☐ Infrastructure failure	Handling of failures above the provided virtual or bare-metal
			Handling of failures above the provided virtual or bare-metal server are the responsibility of the
		<ul> <li>☑ Infrastructure failure</li> <li>Liability: <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">http://cdn.softlayer.com/SoftLayer MSA.pdf</a></li> <li>☐ Virtual machine instance failure</li> </ul>	Handling of failures above the provided virtual or bare-metal server are the responsibility of the
		☑ Infrastructure failure Liability: <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">http://cdn.softlayer.com/SoftLayer MSA.pdf</a> ☐ Virtual machine instance failure Liability:	Handling of failures above the provided virtual or bare-metal server are the responsibility of the
		<ul> <li>☑ Infrastructure failure</li> <li>Liability: <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">http://cdn.softlayer.com/SoftLayer MSA.pdf</a></li> <li>☐ Virtual machine instance failure</li> <li>Liability:</li> <li>☐ Migrations</li> </ul>	Handling of failures above the provided virtual or bare-metal server are the responsibility of the
		☑ Infrastructure failure Liability: <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">http://cdn.softlayer.com/SoftLayer MSA.pdf</a> ☐ Virtual machine instance failure Liability: ☐ Migrations Liability:	Handling of failures above the provided virtual or bare-metal server are the responsibility of the
		☑ Infrastructure failure Liability: <a href="http://cdn.softlayer.com/SoftLayer MSA.pdf">http://cdn.softlayer.com/SoftLayer MSA.pdf</a> ☐ Virtual machine instance failure Liability: ☐ Migrations Liability: ☐ Unscheduled downtime	Handling of failures above the provided virtual or bare-metal server are the responsibility of the
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		Liability:			
Servi	Service Support				
10.	Change management	The Cloud Service Provider has established the following for changes, migrations, downtime, and other potential interruptions to cloud services:  Communication plan and procedures for proactive notification  Assistance in migration to new services when legacy solutions are discontinued  Ability to remain on old versions for a defined time period  Ability to choose timing of impact	SoftLayer has a communication plan in place as described in the SOC2 report available to all customers. Communication between customer and SoftLayer staff are managed via the notification system accessible via the customer self-service portal. In addition, unplanned events and incidents are announced via email, twitter, forum posts, or "yellow" notifications at the portal (see <a href="http://blog.softlayer.com/tag/notifications">http://blog.softlayer.com/tag/notifications</a> ).		
11.	Self-service provisioning and management portal	Provide self-service provisioning and management portal for users to manage cloud services:  Yes  No  If yes, describe the functions of the self-service provisioning and management portal provided:  Allow role-based access control (RBAC)  Manage resource pools (e.g. VMs, storage, and network) and service templates  Track and manage the lifecycle of each service  Track consumption of services  Others:	The self-service portal is available at <a href="http://www.softlayer.com/portal">http://www.softlayer.com/portal</a> . Customers can add new cloud administrators/operat ors for their virtual infrastructure and grant each user control over certain SoftLayer services (storage, network, etc.) or restrict management capabilities to certain servers.		
12.	Incident and problem management	Delivery mode of support:  ☑ Access via email	See http://www.softlayer.c om/support. In addition to phone and email, support team can be reached		

		<ul> <li>☑ Access via portal</li> <li>☑ Access via phone support</li> <li>☑ Direct access to support engineers (via live chat)</li> </ul>	via live chat on the self-service customer portal. Expect a helpful response within 20 minutes of your ticket submission.
		Availability of support:	
		⊠ 24 x 7	
		☐ During office hours support, please specify the hours of operations:	
		After office hours support, please specify the hours of operations:	
		Service response time: _ use commercially reasonable efforts to respond to new incidents within 20 minutes and provide answers back by the next business day	
		The following are available to users upon request:	
		Permanent access to audit records of customer instances	
		☐ Incident management assistance	
		Incident response time:	
		Mean time to repair on detection of faults:	
13.	Billing	The following billing modes are available (please elaborate granularity of charges and measurement):	SoftLayer servers can be paid on an hourly or monthly basis.
		□ Pay per usage: Hourly/Monthly (up to per min/hour/day/month for compute/storage for laaS/PaaS, and per user per hour/day/month/year for SaaS)	Other services like public network traffic or storage are based on usage.
		Fixed pricing(up to yearly/monthly/daily)	For a complete
		Other pricing model	overview of services and pricing see
		☐ Not disclosed	www.softlayer.com under "PRODUCTS & SERVICES".
		Available billing history:TBDMonths	
14.	Data portability	Importable VM formats: ISO, VHD	For image import see <a href="http://knowledgelayer.com/proced">http://knowledgelayer.softlayer.com/proced</a>
	p	Downloadable formats: <u>VHD</u>	ure/import-image.
		Supported operating systems: CentOS, RedHat Enterprise Linux, Ubuntu, Microsoft Server	For exporting images see
		Standard Language versions of supported operating systems: not restricted	http://knowledgelayer. softlayer.com/faq/wha t-image-importexport-

		Supported database formats: not limited  API:  Common Object Storage can be automated using the OpenStack Object Storage API or tools. Import/Export operations can be automated using the SoftLayer API on top of SoftLayer Object Storage.  Customised  Upon service termination, data is available through:  Physical media  Standard methods as described above  Other methods  USB, DVD, CD data can be sent to SoftLayer as part of its data transfer service (see http://knowledgelayer.softlayer.com/topic/data-transfer-service	<u>feature</u>
15.	Access	Type of access to the service is through:  ☐ Public access ☐ Private access (e.g. VPN, dedicated link) ☐ IPv6 access is supported IPv6 is natively supported (see http://www.softlayer.com/network). ☐ Other access methods	SoftLayer offers a variety of VPN access (see http://knowledgelayer .softlayer.com/topic/vpn).  In addition customers can connect their company's intranet via so called direct-links through Point-of-Presence directly with the SoftLayer network (see http://www.softlayer.com/direct-link).
16.	User management	<ul> <li>☑ Identity management         (for cloud administrators on self-manage portal, additionally two-factor authentication is supported as described at <a href="http://knowledgelayer.softlayer.com/procedure/what-two-factor-authentication">http://knowledgelayer.softlayer.com/procedure/what-two-factor-authentication</a>         )     </li> <li>☑ Role based access control</li> <li>for cloud administrators on self-manage portal, see #12 for more</li> </ul>	User management for users of the provisioned servers is in the responsibility of the customer and customer is free to use any on premise or off premise IAM solution for that.

The cloud user may select the following for service upgrades and changes:  ☐ Automatic provisioning ☐ User customisable provisioning ☐ User customisable provisioning ☐ Intuitive service upgrades and changes: ☐ (http://soortal), voortal), voortall, voortal	eyer offers and the to use self- e portal softalyer.com/p which gives Il control about bloyment para- s, including an
(SoftLayer allows to integrate other IAM solutions for cloud administrators on self-manage portal via API  http://sldn.softlayer.com/reference/softlayerapi )  □ Others  The cloud user may select the following for service upgrades and changes:  □ Automatic provisioning □ User customisable provisioning □ User customisable provisioning	e to use self- e portal /softalyer.com/p which gives Il control about oloyment para- s, including an
administrators on self-manage portal via API <a href="http://sldn.softlayer.com/reference/softlayerapi">http://sldn.softlayer.com/reference/softlayerapi</a> )  Others  The cloud user may select the following for service upgrades and changes:  Automatic provisioning  Automatic provisioning  User customisable provisioning  administrators on self-manage portal via API  but provision in a service upgrades and intuitive service (http://som.service upgrades and changes:  User customisable provisioning  all deplayers  administrators on self-manage portal via API  but provision in a service upgrades and intuitive service upgrades and intuitive service (http://som.service upgrades and intuitive service upgrades and upgrades and upgrades and upgrades and upgrades upgrades and upgrades upgrades and upgrades upgrade	e to use self- e portal /softalyer.com/p which gives Il control about oloyment para- s, including an
The cloud user may select the following for service upgrades and changes:  □ Others □ The cloud user may select the following for service upgrades and changes: □ Automatic provisioning □ Others □ SoftLay intuitive service (http://sortal), voice (http:	e to use self- e portal /softalyer.com/p which gives Il control about oloyment para- s, including an
The cloud user may select the following for service upgrades and changes:  ☐ Automatic provisioning ☐ User customisable provisioning ☐ User customisable provisioning ☐ SoftLay intuitive service ( <a href="http://score">http://score</a> you full all deplay meters	e to use self- e portal /softalyer.com/p which gives Il control about oloyment para- s, including an
The cloud user may select the following for service upgrades and changes:  □ Automatic provisioning □ User customisable provisioning □ User customisable provisioning □ User customisable provisioning □ User customisable provisioning □ Intuitive service upgrades and changes: □ (http://source.) □ volume (	e to use self- e portal /softalyer.com/p which gives Il control about oloyment para- s, including an
<ul> <li>✓ Automatic provisioning</li> <li>✓ User customisable provisioning</li> <li>✓ User customisable provisioning</li> <li>✓ meters</li> </ul>	which gives Il control about bloyment para- s, including an
☐ User customisable provisioning all deplements al	oloyment para- s, including an
machin	cale option to dditional virtual nes when
needed	
suppor powerf (http://s	orchestration is rted via a ful API /sldn.softlayer.c rerence/softlaye
Security Configurations	
18. Security Security configuration enforcement checks are performed:  SoftLay the man network.	
checks	abilities, ious activity, etwork activity
How often are enforcement checks being performed to ensure all security configurations are applied?  Via a consideration of the security configuration of th	tentralized ty Operations r. All networks anaged by the ork Operations r for DDoS and network ty issues.
of the confirmation infrastructure of the confirmation of the conf	
,	

		<ul> <li>□ Distinct physical network infrastructure</li> <li>□ Virtual instance grouping</li> <li>□ User definable security domains</li> <li>□ User customisable firewall</li> <li>□ User definable access policies</li> </ul>	and multi-tenant environments to dedicated servers and security devices (load balancers, firewalls, etc.). Only the network is always virtualized using VLAN tagging on top of SoftLayer's physical network. For dedicated servers, storage, and security devices please see http://www.softlayer.c om/bare-metal- servers , http://www.softlayer.c om/Quantastor and http://www.softlayer.c om/network- appliances.
Servi	ce Elasticity		
20.	Capacity elasticity	The following capacity elasticity options are available:  ☐ Programmatic interface to scale up or down	SoftLayer comes with a powerful API which allows to perform all operations available
		☐ Mean time to start and end new virtual instances	via the self-service customer portal also via latest
		☐ Alerts to be sent for unusual high usage	programming languages, such as
		☐ Minimum performance during peak periods	C#, Perl, PHP, Ruby, Python, etc. (see
		☐ Minimum duration to scale up computing resources	http://sldn.softlayer.c om/article/SoftLayer-
		☐ Minimum additional capacity guaranteed per account _ (number of cores and GB memory)	API-Overview).
21.	Network resiliency and	The following network resiliency and elasticity options are available:	For network see <a href="http://www.softlayer.c">http://www.softlayer.c</a> om/network.
	elasticity	□ Redundant Internet connectivity links	SoftLayer has different types of IP
		□ Redundant Internal connectivity	addresses, depending on your
		⊠ Selectable bandwidth up to 2x20.000Mbps	setup and needs (e.g. own cloud on bare-
			metal server, public IP addresses, etc.).
		☑ Load balancing ports <u>80,443,53,110,25,21, etc.</u>	See http://knowledgelayer
		☑ Load balancing HTTP, HTTPS, FTP, POP3, DNS, etc	.softlayer.com/articles

			/static-and-portable- ip-blocks
		Defence-in-depth mechanisms, please specify:  Host based IPS, Antivirus, Malware  Network based firewalls, WAF, IDS, IPS	for details. For load balancer see <a href="http://knowledgelayer">http://knowledgelayer</a> <a href="mailto:softlayer.com/faqs/2">.softlayer.com/faqs/2</a>
		<ul> <li>☑ Network traffic isolation, please specify:         VLAN tagging IEEE 802.1         ☐ Shared or dedicated bandwidth, please specify: Shared         ☐ QoS traffic control services         ☐ Alerts to be sent for unusual high usage         ☐ Minimum performance during peak periods</li></ul>	To network based IDS/IPS see http://www.softlayer.com/firewalls under "Fortigate Security Appliance".  For host based security see http://www.softlayer.com/tipe/www.softlayer.com/firewalls under "Fortigate Security Appliance".
		☐ Minimum period to scale up network throughput	om/security-software.
22.	Storage redundancy and elasticity	The following storage redundancy and elasticity options are available:	SoftLayer provides a variety of different storage architectures
		<ul> <li>         ⊠ Redundant storage connectivity links within each data centre     </li> <li>         □ Redundant storage connectivity links between data centres belonging to the same cloud     </li> </ul>	(object/SWIFT storage, NAS, SAN, etc.). Some are shared, some are also
		Storage traffic isolation, please specify: <u>VLAN tagging IEEE</u> 802.1	available as dedicated storage. Please see http://www.softlayer.c om/cloud-storage
		Shared or dedicated storage network bandwidth, please specify:  No bandwidth limits	
		Quality of service storage traffic control services	
		☐ Maximum storage capacity for single user, please specify:	
		Unlimited	
		☐ Maximum expandable storage, please specify:	
		Unlimited	
		Alerts to be sent for unusual high usage	

	☐ Minimum storage I / O performance during peak periods	
	☐ Minimum period to scale up storage I / O throughput	