
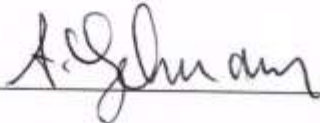


Cloud service provider disclosure

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: AUCTORIZIUM PTE LTD Primary address: 173A THOMSON ROAD GOLDHILL CENTRE SINGAPORE 307623 Web address: http://auctorizium.com Contact name: R RAJESHKUMAR Contact number: +65 6885 9303	
Certification Body Contact Information	
Company name: TÜV Rheinland Singapore Pte Ltd Web address: www.tuv.com Contact name: Andreas Gehrmann Contact email: andreas.gehrmann@tuv.com	
Cloud Service Provider Background	
Overview of service offering: Data Hosting Service for the ICAO Public Key Directory (Software as a Service). Service includes: Compute, Storage, Network connectivity, Data Backup, Application development, Integrity Check for Data	
Service model:	
<input type="checkbox"/> Virtual machine instances owned by the user	
<input checked="" type="checkbox"/> Network facilities	
<input checked="" type="checkbox"/> Compliance with applicable standards	
Deployment model:	
<input type="checkbox"/> Private cloud	
<input type="checkbox"/> Community cloud	
<input checked="" type="checkbox"/> Hybrid cloud	
<input type="checkbox"/> Public cloud	
Tier:	
<input checked="" type="checkbox"/> Level 1	

Level 2

Level 3

No.	Criteria	Description	Remarks
Legal and Compliance			
1.	Right to audit	<p>The user has the right to audit:</p> <ul style="list-style-type: none"><input type="checkbox"/> Virtual machine instances owned by the user<input checked="" type="checkbox"/> Network facilities<input checked="" type="checkbox"/> Compliance with applicable standards<input type="checkbox"/> Technical controls<input checked="" type="checkbox"/> Policies and governance<input type="checkbox"/> Data centre facilities<input type="checkbox"/> Others _____<input type="checkbox"/> None <p>Regulators recognised by Singapore law have the right to audit:</p> <ul style="list-style-type: none"><input type="checkbox"/> Virtual machine instances owned by the user<input type="checkbox"/> Network facilities<input checked="" type="checkbox"/> Compliance with applicable standards<input type="checkbox"/> Technical controls<input type="checkbox"/> Policies and governance<input type="checkbox"/> Data centre facilities<input type="checkbox"/> Others _____<input type="checkbox"/> None <p>Audit / assessment reports that can be made available on request:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Penetration test<input type="checkbox"/> Threat and vulnerability risk assessment<input checked="" type="checkbox"/> Vulnerability scan<input checked="" type="checkbox"/> Audit reports (e.g. Statement on Standards for Attestation Engagements (SSAE) No. 16, Reporting on Controls at a Service Organisation)	
2.	Compliance	The following guidelines / standards / regulations are adhered to:	



		<input checked="" type="checkbox"/> Singapore Personal Data Protection Act <input checked="" type="checkbox"/> ISO / IEC 27001 <input type="checkbox"/> ISO 9000 <input type="checkbox"/> ISO / IEC 20000 <input type="checkbox"/> CSA Open Certification Framework <input type="checkbox"/> PCI-DSS <input type="checkbox"/> Others _____	
Data Control			
3.	Data ownership	<p>All data on the cloud service is owned by the cloud user except for: _____</p> <p>The cloud User retains the ownership on the derived data or attributes of cloud usage except for the following:</p> <input type="checkbox"/> Advertising or marketing <input checked="" type="checkbox"/> Statistics analysis on usage <input type="checkbox"/> Others _____	
4.	Data retention	<p>Data deleted by the user is retained as follows:</p> <input type="checkbox"/> Minimum data retention period is: _____ <input type="checkbox"/> Maximum data retention period is: _____ <input checked="" type="checkbox"/> Deleted immediately <p>Log data is retained for a period of:</p> <input checked="" type="checkbox"/> Minimum data retention period as follows: 5 years <input type="checkbox"/> Maximum data retention period is: _____ <input type="checkbox"/> Not retained <p>User data is retained for a period of:</p> <input checked="" type="checkbox"/> Minimum data retention period is: 5 years <input type="checkbox"/> Maximum data retention period is: _____ <input type="checkbox"/> Not retained <p>The following types of data are available for download by the cloud user:</p> <input type="checkbox"/> Log data <input type="checkbox"/> Other _____	



5.	Data sovereignty	<p>The primary data locations are:</p> <p><input checked="" type="checkbox"/> Singapore</p> <p><input checked="" type="checkbox"/> Asia Pacific: Bangkok</p> <p><input type="checkbox"/> Europe _____</p> <p><input type="checkbox"/> United States</p> <p><input type="checkbox"/> Other _____</p> <p>The backup data locations are:</p> <p><input type="checkbox"/> Singapore</p> <p><input type="checkbox"/> Asia Pacific _____</p> <p><input type="checkbox"/> Europe _____</p> <p><input type="checkbox"/> United States</p> <p><input type="checkbox"/> Other _____</p> <p>No. of countries in which data centres are operated: 5</p> <p>The user's data stored in the cloud environment will never leave the locations specified in item 5:</p> <p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> Yes, except as required by law</p> <p><input type="checkbox"/> Yes, except as noted: _____</p> <p><input type="checkbox"/> No</p> <p>User's consent is required prior to transferring data to a location not specified in item 5 or a third party:</p> <p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> Yes, except as required by law</p> <p><input type="checkbox"/> Yes, except as noted: _____</p> <p><input type="checkbox"/> No</p> <p><i>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.</i></p>	
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6.	Non-disclosure	<input checked="" type="checkbox"/> Non-disclosure agreement template can be provided by Cloud Service Provider <input type="checkbox"/> Cloud Service Provider may use customer's NDA (pending legal review)	
Provider Performance			
7.	Availability	<p>The committed network uptime is:</p> <input checked="" type="checkbox"/> 99.97% <input type="checkbox"/> Varies according to price plan <p>The committed system uptime is:</p> <input checked="" type="checkbox"/> 99.97% <input type="checkbox"/> Varies according to price plan <p>The cloud environment has the following single points of failure:</p> <input type="checkbox"/> _____ <input checked="" type="checkbox"/> none	
8.	BCP / DR	<input checked="" type="checkbox"/> Disaster recovery protection <input type="checkbox"/> Backup and restore service <input type="checkbox"/> User selectable backup plans <input type="checkbox"/> Escrow arrangements <input type="checkbox"/> No BCP / DR is available <input type="checkbox"/> RPO _____ <input type="checkbox"/> RTO _____ <input type="checkbox"/> Others, please specify: _____ _____	
9.	Liability	<p>The following terms are available for the users on failure of the provider to meet the service commitment:</p> <input type="checkbox"/> Network failure Liability: _____ <input type="checkbox"/> Infrastructure failure Liability: _____ <input type="checkbox"/> Virtual machine instance failure Liability: _____	Covered by SLA in individual contracts.



		<input type="checkbox"/> Migrations Liability: _____ <input type="checkbox"/> Unscheduled downtime Liability: _____ <input type="checkbox"/> Database failure Liability: _____ <input type="checkbox"/> Monitoring failure Liability: _____	
Service Support			
10.	Change management	The Cloud Service Provider has established the following for changes, migrations, downtime, and other potential interruptions to cloud services: <input checked="" type="checkbox"/> Communication plan and procedures for proactive notification <input checked="" type="checkbox"/> Assistance in migration to new services when legacy solutions are discontinued <input checked="" type="checkbox"/> Ability to remain on old versions for a defined time period <input checked="" type="checkbox"/> Ability to choose timing of impact	
11.	Self-service provisioning and management portal	Provide self-service provisioning and management portal for users to manage cloud services: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe the functions of the self-service provisioning and management portal provided: <input checked="" type="checkbox"/> Allow role-based access control (RBAC) <input type="checkbox"/> Manage resource pools (e.g. VMs, storage, and network) and service templates <input type="checkbox"/> Track and manage the lifecycle of each service <input type="checkbox"/> Track consumption of services <input type="checkbox"/> Others: _____	
12.	Incident and problem management	Delivery mode of support: <input checked="" type="checkbox"/> Access via email	



		<input type="checkbox"/> Access via portal <input checked="" type="checkbox"/> Access via phone support <input checked="" type="checkbox"/> Direct access to support engineers Availability of support: <input type="checkbox"/> 24 x 7 <input checked="" type="checkbox"/> During office hours support, please specify the hours of operations: 08:00 to 22:00 <input type="checkbox"/> After office hours support, please specify the hours of operations: _____ Service response time: 2 hours The following are available to users upon request: <input type="checkbox"/> Permanent access to audit records of customer instances <input checked="" type="checkbox"/> Incident management assistance Incident response time: 2 hours Mean time to repair on detection of faults: 6 hours	
13.	Billing	The following billing modes are available (please elaborate granularity of charges and measurement): <input type="checkbox"/> Pay per usage _____ (up to per min/hour/day/month for compute/storage for IaaS/PaaS, and per user per hour/day/month/year for SaaS) <input type="checkbox"/> Fixed pricing _____ (up to yearly/monthly/daily) <input type="checkbox"/> Other pricing model _____ <input checked="" type="checkbox"/> Not disclosed <input type="checkbox"/> Available billing history: _____ Months	Billing details are covered by confidentiality clause in contracts
14.	Data portability	Importable VM formats: _____ Downloadable formats: LDIF Supported operating systems: ALL Language versions of supported operating systems: _____ Supported database formats: X.500 API:	



		<input checked="" type="checkbox"/> Common LDAP <input type="checkbox"/> Customised _____ Upon service termination, data is available through: <input type="checkbox"/> Physical media <input checked="" type="checkbox"/> Standard methods as described above <input type="checkbox"/> Other methods _____ _____	
15.	Access	Type of access to the service is through: <input checked="" type="checkbox"/> Public access <input type="checkbox"/> Private access (e.g. VPN, dedicated link) <input type="checkbox"/> IPv6 access is supported <input checked="" type="checkbox"/> Other access methods : 2-way SSL, One way SSL with username/password Public access speed (shared bandwidth) in Mbps: 2Mbps	
16.	User management	<input type="checkbox"/> Identity management <input checked="" type="checkbox"/> Role based access control <input type="checkbox"/> Federated access model <input type="checkbox"/> Integration with Identity management solutions <input type="checkbox"/> Others _____	
17.	Lifecycle	The cloud user may select the following for service upgrades and changes: <input type="checkbox"/> Automatic provisioning <input checked="" type="checkbox"/> User customisable provisioning	
Security Configurations			
18.	Security configuration enforcement checks	Security configuration enforcement checks are performed: <input checked="" type="checkbox"/> Manually <input checked="" type="checkbox"/> Using automated tools How often are enforcement checks being performed to ensure all security configurations are applied? Monthly	



19.	Multi-tenancy	<input type="checkbox"/> Distinct physical hosts <input type="checkbox"/> Distinct physical network infrastructure <input checked="" type="checkbox"/> Virtual instance grouping <input type="checkbox"/> User definable security domains <input type="checkbox"/> User customisable firewall <input type="checkbox"/> User definable access policies	Controlled using ACIs in X.500 directory
Service Elasticity			
20.	Capacity elasticity	<p>The following capacity elasticity options are available:</p> <input type="checkbox"/> Programmatic interface to scale up or down <input type="checkbox"/> Mean time to start and end new virtual instances _____ <input type="checkbox"/> Alerts to be sent for unusual high usage <input type="checkbox"/> Minimum performance during peak periods _____ <input type="checkbox"/> Minimum duration to scale up computing resources _____ <input type="checkbox"/> Minimum additional capacity guaranteed per account (number of cores and GB memory) _____	Service Levels in terms of Response times are defined in individual contracts. Capacity management is not done by user
21.	Network resiliency and elasticity	<p>The following network resiliency and elasticity options are available:</p> <input checked="" type="checkbox"/> Redundant Internet connectivity links <input type="checkbox"/> Redundant Internal connectivity <input type="checkbox"/> Selectable bandwidth up to _____ Mbps <input type="checkbox"/> Maximum usable IPs _____ <input type="checkbox"/> Load balancing ports _____ <input type="checkbox"/> Load balancing protocols _____ <input checked="" type="checkbox"/> Anti-DDOS protection systems or services <input checked="" type="checkbox"/> Defence-in-depth mechanisms, please specify: IPS+Firewall <input checked="" type="checkbox"/> Network traffic isolation, please specify: Network Segmentation with dual firewall layer <input checked="" type="checkbox"/> Shared or dedicated bandwidth, please specify: Dedicated bandwidth of 2 Mbps <input type="checkbox"/> QoS traffic control services <input checked="" type="checkbox"/> Alerts to be sent for unusual high usage <input type="checkbox"/> Minimum performance during peak periods _____	



		<input type="checkbox"/> Minimum period to scale up network throughput _____	
22.	Storage redundancy and elasticity	<p>The following storage redundancy and elasticity options are available:</p> <input type="checkbox"/> Redundant storage connectivity links within each data centre <input checked="" type="checkbox"/> Redundant storage connectivity links between data centres belonging to the same cloud <input type="checkbox"/> Storage traffic isolation, please specify: _____ _____ <input type="checkbox"/> Shared or dedicated storage network bandwidth, please specify: _____ _____ <input type="checkbox"/> Quality of service storage traffic control services <input type="checkbox"/> Maximum storage capacity for entire cloud, please specify: _____ _____ <input type="checkbox"/> Maximum storage capacity for single user, please specify: _____ _____ <input type="checkbox"/> Maximum expandable storage, please specify: _____ _____ <input type="checkbox"/> Alerts to be sent for unusual high usage <input type="checkbox"/> Minimum storage I / O performance during peak periods _____ <input type="checkbox"/> Minimum period to scale up storage I / O throughput _____	

