NTT Communications

Cloud^n

Compute (VPC Type OpenNW) API Manual

Ver. 1.1

Edition	Date of Revision	Revision
Ver. 1.0	November 19, 2013	The first edition is created.
Ver. 1.1	February 26, 2014	The end points are corrected.

Contents

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1-1) The List of Cloud^n Compute (VPC Type OpenNW Type) API

Shown below are the API described in this manual.

	Command	Outline	EC2 Compatibility
Asynchronous API processing	queryAsyncJobResult	Tracks/checks the execution status and the result of an asynchronous API	
	listAsyncJobs	Obtains the list of the requests in processing by an execution of an asynchronous API	
Virtual machine operation	listVirtualMachines	Obtains a virtual machine list	O
	deployVirtualMachine (A)	Creates a virtual machine	O
	destroyVirtualMachine (A)	Deletes a virtual machine	O
	rebootVirtualMachine (A)	Restarts a virtual machine	O
	startVirtualMachine (A)	Starts a virtual machine	O
	stopVirtualMachine (A)		O
	resetPasswordForVirtualMachine(A)	Resets the password of a virtual machine	
	changeServiceForVirtualMachine	Changes the service offering (specifications) of a virtual machine	O
	updateVirtualMachine	Changes the property set to a virtual machine	
	recoverVirtualMachine	Repairs a virtual machine	

i The commands with "(A)" at the end are asynchronous methods. When an asynchronous method is executed, the method is registered as an asynchronous job and jobid is issued.

i For the details of the API compatible with EC2, see section 2, "Using the Amazon Web Service EC2 Compatible API."

1-1) The List of Cloud[n] Compute (VPC Type OpenNW Type) API

	Command	Outline	EC2 Compatibility
Service Offering check	listServiceOfferings	Obtains the catalog of selectable virtual machines	
Disk Offering check	listDiskOfferings	Obtains the catalog of selectable disks	
Zone information collection	listZones	Obtains a list of zones	
Template operation	listTemplates	Obtains the list of templates	O
	createTemplate (A)	Creates a template	O
	updateTemplate	Renew the attribute of a template	
	copyTemplate (A)	Copies a template	
	deleteTemplate (A)	Deletes a template	O
	extractTemplate (A)	Creates a URL for downloading a template	
Volume operation	listVolumes	Obtains the list of disk volumes	O
	attachVolume (A)	Attaches a disk to a virtual machine	O
	detachVolume (A)	Detaches a disk form a virtual machine	O
	createVolume (A)	Creates a disk	
	uploadVolume (A)	Uploads a disk	
	deleteVolume (A)	Deletes a disk	O
	extractVolume (A)	Distributes a disk to the outside	
Snapshot operation	listSnapshots	Obtains the list of snapshots	O
	createSnapshot (A)	Creates a snapshot	O
	createSnapshotPolicy	Creates a snapshot policy	
	deleteSnapshotPolicies	Deletes a periodical snapshot policy	
	deleteSnapshot (A)	Deletes a snapshot	O
ISO operation	attachIso	Attaches an ISO image to a VM	O
	detachIso	Detaches an ISO image from a VM	O
	listIsos	Obtains the list of available ISO's	
	updateIso	Renews My ISO	
	deleteIso	Deletes My ISO	
	copyIso	Copies an ISO image in a zone to another zone	O
	extractIso	Issues a link for downloading an ISO	

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	Command	Outline	EC2 Compatibility
Guest OS operation	listOsTypes	Displays the list of the OS's having the operation type prepared on Cloud^n Compute	
	listOsCategories	Displays the list of the OS's having the operation category prepared on Cloud^n Compute	
IP Address operation	associateIpAddress	Obtains a public IP and links it to an account	
	disassociateIpAddress	Dissociates an IP obtained with the account	
	listPublicIpAddresses	Obtains the list of the public IP's owned by the account	
NAT operation	enableStaticNat	Enables the static NAT to the specified IP	O
	createIpForwardingRule	Creates a rule for IP forwarding	
	deleteIpForwardingRule	Deletes a rule of IP forwarding	
	listIpForwardingRules	Displays the list of current IP forwarding rules	
	disableStaticNat	Disables the static NAT rule of the specified IP	O
Virtual router operation	startRouter	Starts a virtual router	O
	rebootRouter	Restarts a virtual router	O
	stopRouter	Stops a virtual router	O
	destroyRouter	Forcefully stops a virtual router	O
	listRouters	Obtains the list of virtual routers	O
	listVirtualRouterElements	Obtains the list of available virtual routers	O
Subnet operation	createNetwork	Creates a subnet	
	deleteNetwork	Deletes a subnet	
	listNetworks	Obtains the list of available subnets	
	updateNetwork	Changes the setting of a subnet	
NIC operation	addNicToVirtualMachine	Adds a NIC to a virtual machine to add it to a subnet	
	removeNicFromVirtualMachine	Deletes a NIC from a virtual machine and deletes it from a subnet	
	updateDefaultNicForVirtualMachine	Changes the default NIC	
	addIpToNic	Assigns an added IP to a NIC	
	removeIpFromNic	Removes an added IP from a NIC	
	listNics	Displays the list of the NIC's of the virtual machines	

	Command	Outline	EC2 Compatibility
VPC operation	createVPC	Creates a VPC	
	listVPCs	Obtains the list of VPC's	
	deleteVPC	Deletes a specified VPC	
	updateVPC	Updates the configuration of a VPC	
	restartVPC	Restarts a VPC	
	listVPCOfferings	Displays the offering list of a VPC	
ACL operation	createNetworkACL	Creates a rule in the access control list of a subnet in a VPC	
	updateNetworkACLItem	Changes a rule added in an access control list	
	deleteNetworkACL	Deletes the rule of a specified access control list	
	listNetworkACLs	Obtains all access control lists	
	createNetworkACLList	Creates the access control list of a subnet in a specified VPC	
	deleteNetworkACLList	Deletes an access control list	
	replaceNetworkACLList	Replaces an ACL specified in the network or private GW	
	listNetworkACLLists	Obtains all access control lists	
VPN operation	createVpnCustomerGateway	Specifies the VPN gateway on the customer's premises	
	createVpnGateway	Creates the VPN gateway of Cloud^n Compute	
	createVpnConnection	Creates a VPN connection	
	deleteVpnCustomerGateway	Deletes the settings of the VPN gateway on the customer's premises	
	deleteVpnGateway	Deletes the VPN gateway of Cloud^n Compute	
	deleteVpnConnection	Deletes a VPN connection	
	updateVpnCustomerGateway	Updates the setting of a VPN connection	
	resetVpnConnection	Resets a VPN connection	
	listVpnCustomerGateways	Obtains the list of the VPN gateway on the customer's premises	
	listVpnGateways	Obtains the list of the VPN gateways of Cloud^n Compute	
	listVpnConnections	Displays the list of the gateways of the VPN connections between sites	
API list reference	listApis	Obtains the list of all available SPI's	

Shown below are the API Server (End Point) provided from this service.

https://vpc-opennw-api.jp-e1.cloudn-service.com/client

The table below shows the parameters commonly used by the API request described later.

Common Request Parameter		
Parameter Name	Description	Required
apikey	Access key ID (*1)	Yes
command	Specifies an API method	Yes
signature	Specifies the electronic signature information on a request	Yes
response	Changes a response from the XML format to the json format by specifying "json" as a value	No
expires	Specifies the expiration period of an API request. A specification is made in the format of strftime(3) with "%Y-%m-%dT%T%z" (*1)	No
signatureVersion	Specifies "3" (※1)	No

i

For how to create a signature (electronic signature information), see "Compute (VLAN Type) API Manual," section "Using the Cloud^n Compute API."

i

(*1) When expires and signatureVersion are used, it is necessary to specify them at the same time.

Common Response (Asynchronous Methods)				
Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		"Asynchronous method name" response	Response container	jobid
		jobid	jobid that is issued when an asynchronous method is called and registered as a job	

i

In the case of a response at an execution of an asynchronous method, the value of the container that saves jobid varies depending on the asynchronous method. For instance, when the method "deployVirtuamMachine" is executed, its response container is "deployvirtualmachineresponse".

1-3) Asynchronous API Processing

queryAsyncJobResult

Outline	Tracks/checks the execution status and the result of an asynchronous API

Request Parameters

Parameter Name	Description	Required
jobid	Specifies jobid that is returned as a return value when an asynchronous API method is executed	Yes

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		queryasyncjobresultresponse	Response container	accountid, userid, cmd, jobstatus, jobporcstatus, jobresultcode, jobresulttype, jobresult, created , jjobid
		accountid	The ID of the account that executed the quest of the asynchronous API	
		userid	The ID of the user that executed the quest of the asynchronous API	
		cmd	The command (method) executed	
		jobstatus	The status of the job	
		jobprocstatus	The status in relation to the advance of the job	
		jobresultcode	The execution result code of the job	
		jobresulttype	The format of the execution result	
		jobresult	(Different depending on the executed job and the called asynchronous method)	
		created	The date and time of the registration of the job	
		jobid	jobid that is returned as a return value when an asynchronous API method is executed	

1-3) Asynchronous API Processing

listAsyncJobs

Outline	Executes an asynchronous API and obtains the list of the requests in execution

Request Parameters

Parameter Name	Description	Required
domainid	Specifies a domain ID. This specification limits a search within the information in the domain and subordinates.	No
account	Limits a search within the information belonging to a specified account. Used with domainid.	No
isrecursive	Specifies true/false (default: false). If true is specified, the information on the sub domain is also included in the scope of a search.	No
keyword	Specifies a keyword to make a search with the keyword	No
listall	Specifyiestrue/false (default: false). Equal to the result of the settings where zoneid and isrecursive=true	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of the responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No

Response

Response (Body)	Format	XML or Json		
	XML / JSON	**Node Name**	**Description**	**Child Node**
		listasyncjobsresponse	Response container	count, asyncjobs
		count	The number of the asynchronous job objects included in the response	
		asyncjobs	The container to save this asynchronous job	accountid, userid, cmd, jobstatus, jobporcstatus, jobresultcode, jobresulttype, jobresult, created , jjobid
		accountid	The ID of the account that executed the quest of the asynchronous API	
		userid	The ID of the user that executed the quest of the asynchronous API	
		cmd	The command (method) executed	
		jobstatus	The status of the job	
		jobprocstatus	The status in relation to the advance of the job	
		jobresultcode	The execution result code of the job	
		jobresulttype	The format of the execution result	
		jobresult	(Different depends on the executed job and the called asynchronous method)	
		created	The date and time of the registration of the job	
		jobid	jobid returned as a return value when an asynchronous API method is executed	

1-4) Virtual Machine Operation

listVirtualMachines

Outline	Obtains a list of virtual machines

Request Parameters		
Parameter Name	Description	Required
account	Used with domainid to specify any account	No
details	Obtains detailed information. The following values can be specified: *all, group, nics, stats, secgrp, tmpl, servoff, iso, volume,* and *min.* In addition, a comma (,) is used as a separator when two or more values are specified.	No
domainid	Specifies domainid	No
groupid	Specifies the ID of a VM group	No
id	Specifies the ID of a virtual machine	No
isoid	Specifies a virtual machine with isoid	No
isrecursive	Includes a subdomain in the scope of a search	No
keyword	Specifies a virtual machine with a keyword	No
listall	Specifies true/false (default: false). Equal to the result of the settings where zoneid and isrecursive=true	No
name	Specifies a virtual machine by its name	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No
state	Specifies a virtual machine by the status (Running, Stopped, etc.) of a virtual machine	No

tags	Specifies a search condition with tag information (key, value)
	Tag information is specified in the format of:
	
	    tags[N].key="sample_key"
	    tags[N].value="sample_value"
	     (N=0, 1, 2, 3, ….)
		No

templateid	Specifies a virtual machine by the template ID	No
zoneid	Specifies a virtual machine by the zone ID	No

1-4) Virtual Machine Operation

listVirtualMachines

Response		
Response (Body)	Format	XML or Json

	XML / JSON	Node Name	Description	Child Node
		listvirtualmachinesresponse	Response container	count, virtualmachine
		count	The number of the virtual machine objects included in a response	
		virtualmachine	The container to save a virtual machine	
		id	The ID of a virtual machine	
		account	The account that owns the virtual machine	
		cpunumber	Of the CPU of the virtual machine	
		cpuspeed	The speed of the CPU	
		cpuused	The use ratio of the CPU	
		created	The date and time of the creation of the virtual machine	
		displayname	The display name of the virtual machine	
		domain	Domain name	
		domainid	The domain ID	
		group		
		groupid		
		guestosid	The ID of the OS	
		haenable	The high availability function enabled or disabled (true/false)	
		hypervisor	Always KVM	
		isodisplaytext		
		isoid		
		isoname		
		memory	The memory size of the virtual machine	
		name	The name of a virtual machine	
		networkkbsread	The amount of network traffic: incoming (KB)	
		networkkbswrite	The amount of network traffic: outgoing (KB)	
		password	Password (when a password reset is executed)	
		passwordenabled	The password reset function enabled or disabled (true/false)	

1-4) Virtual Machine Operation

listVirtualMachines

Response (Cont)				
Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		rootdeviceid		
		rootdevicetype		
		serviceofferingid	The ID of the Service Offering (the specifications of a virtual machine)	
		serviceofferingname	The name of the Service Offering (the specifications of a virtual machine)	
		state	The status of the virtual machine	
		templatedisplaytext	The display name of a template	
		templateid	The ID of the template or ISO at the creation of a virtual machine	
		templatename	The name of the template or ISO at the creation of a virtual machine	
		zoneid	The ID of the zone where a virtual machine is	
		zonename	The name of the zone where a virtual machine is	
		nic	The container to save the information on the Network Interface Card (NIC)	
			id	The ID of the NIC	
			networkid	NetworkのID	
			netmask	netmask of the IP address assigned to the NIC	
			gateway	The IP address of the default gateway	
			ipaddress	The IP address assigned to the NIC	
			traffictype	"Guest"	
			type	"Shared"	
			isdefault	The NIC used regularly or not (always true)	
			macaddress	MAC address	
		securitygroup		
			id	The ID of the security group	
			name	The name of the security group	
			descripton	Description on the security group	
		tags	The container of tag information	
			key	The key information of the tag	
			value	The value of the tag	

1-4) Virtual Machine Operation

deployVirtualMachine (A)

Outline	Creates a virtual machine

Request Parameters

Parameter Name	Description	Required
serviceofferingid	Specifies serviceOfferingId to determine the specifications of a virtual machine.	Yes
templateid	Specifies the ID of a template or the ID of an ISO image used when a virtual machine is created.	Yes
zoneid	Specifies a zone to create a virtual machine.	Yes
account	Used with domainid to specify any account.	No
diskofferingid	Specifies diskofferingid. In the case where templateid is the ID of an ISO image, the disk having the specified diskofferingid is created as a root disk.	No
displayname	Any display name of a virtual machine	No
domainid	Specifies domainid. Specified with an account.	No
group	Specifies any group to a virtual machine.	No
keyboard	Specifies the keyboard machine to a virtual machine. Any of the following values can be specified: de, de-ch, es, fi, fr, fr-be, fr-ch, is, it, jp, nl-be, no, pt, uk, and us.	No
keypair	Specifies the name of keypair of ssh used at a login.	No
name	Specifies any name to a virtual machine.	No
ipaddress	Specifies any private IP address to a virtual machine.	No
networkids	Specifies the ID of a subnet to create a virtual machine.	Yes
userdata	Specifies any data by encoding it based on base64 (up to 2KB after encoded to base64)	No

⚠️ For each parameter value to use "deployVirtualMachine" in these command examples, see the following information.

- serviceofferingid:
  Eastern Japan DC: Plan v1=c6b72b0d-8541-474f-b617-e0051a9b6325
  Plan v2=e4587795-0a9d-4bdf-bed4-25d2e482ee53
  Plan v4=c24ec0f7-2813-44d4-9adb-189fd123cd93
  Plan v8=92c13e3d-8eed-4871-9eac-0d86e3dd4dde

- templateid: The template ID used for creation
  (Obtain from the applicable template information on the Compute console screen.)

- zoneid: The ID of the zone where a creation is made.
  Eastern Japan DC： jp-e1a=80827400-840e-4e14-a0f3-54a998abff82
  jp-e1b=6efc3f02-18b5-4800-b1a4-08431cf89706

1-4) Virtual Machine Operation

deployVirtualMachine (A)

Response (*)				
Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		deployvirtualmachiner esponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchro nous job (if successf ul)	*jobresults (* The value of jobresults of queryJobResuts)*		
		virtualmachine	See listVirtulaMachineのResponse. The status includes Running, and the password includes an initial password.	

i (*) As this is an asynchronous method, only jobid is returned to
the "deployvirtualmachineresponse" container. It is necessary to execute queryAsyncJobResult
to check the result.

1-4) Virtual Machine Operation

destroyVirtualMachine (A)

Outline	Discard a virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		destroyvirtualmachineresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		virtualmachine	See Response of listVirtulaMachine. The status includes Destroyed.	

(*) As this is an asynchronous method, only jobid is returned to the "destroyvirtualmachineresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-4) Virtual Machine Operation

rebootVirtualMachine (A)

Outline	Restarts a virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		rebootvirtualmachineresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		virtualmachine	See Response of listVirtulaMachineThe status includes Running.	

i (*) As this is an asynchronous method, only jobid is returned to
the "rebootvirtualmachineresponse" container. It is necessary to execute queryAsyncJobResult
to check the result.

1-4) Virtual Machine Operation

startVirtualMachine (A)

Outline	Starts a virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		startvirtualmachineresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		virtualmachine	See Response of listVirtulaMachine. The status includes Running.	

i (*) As this is an asynchronous method, only jobid is returned to the"startvirtualmachineresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-4) Virtual Machine Operation

stopVirtualMachine (A)

Outline	Stops a virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes
forced	The flag of a forceful termination. The virtual machine is forcefully set to the status of "Stopped".	No

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		stopvirtualmachineresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		virtualmachine	See Response of listVirtulaMachine. The status includes Stopped.	

i

(*) As this is an asynchronous method, only jobid is returned to the"stopvirtualmachineresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-4) Virtual Machine Operation

resetPasswordForVirtualMachine (A)

Outline	Resets the password of an initial account specified to a virtual machine. To execute this command, the virtual machine needs to be stopped.

Request Parameters		
Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes

Response (*)				
Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		resetpasswordforvirtualmachineresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		virtualmachine	See Response of listVirtulaMachine. The status includes Stopped. In addition, the password includes a new password.	

ⓘ (*) As this is an asynchronous method, only jobid is returned to the" resetpasswordforvirtualmachineresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-4) Virtual Machine Operation

changeServiceForVirtualMachine

Outline	Changes the service offering (specifications) of a virtual machine. To execute this command, the virtual machines needs to be in the stopped status.

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes
serviceofferingid	Specifies a service offering ID	Yes

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		changeserviceforvirtualmachineresponse	Response container	virtualmachine
		virtualmachine	See Response of listVirtulaMachine. The status includes Stopped. In addition, serviiceofferingid, cpunumber, memory, and cpuspeed are changed.	

1-4) Virtual Machine Operation

updateVirtualMachine

Outline	Changes the property of a virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes
displayname	The display name of a virtual machine	No
group	Changes a group. Specifies a group by the name (string).	No
haenable	Enables/disables the high availability function of a virtual machine (specified by true/false)	No
ostypeid	Changes the OS type of a virtual machine (specified by the ID)	No
userdata	Encodes and specifies any date based on base64 (up to 2KB after an encoding to base64)	No

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		updatevirtualmachineresponse	Response container	virtualmachine
		virtualmachine	See Response of listVirtulaMachine. The value specified by the request is returned.	

1-4) Virtual Machine Operation

recoverVirtualMachine

Outline	Recovers a deleted virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a virtual machine	Yes

Response

Response (Body)	Format	XML or Json		
	XML / JSON At the end of an asynchronous job (if successful)	Node Name	Description	Child Node
		recovervirtualmachineresponse	Response container	virtualmachine
		virtualmachine	See Response of listVirtulaMachine.	

⚠️ A virtual machine in the status of "Destroyed" is recovered. You cannot recover a virtual machine if the virtual machine used to be in the status of "Expunging" and completely deleted after that.

1-6) Service Offering

listServiceOfferings

Outline	Obtains the catalog of virtual machines available for Cloud^n Compute VPC Type OpenNW Type

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of the Service Offering	No
keyword	Gives a search condition by a keyword	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No
name	The name of the service offering	No

Response

Response (Body)	Format	XML or Json		
	XML / JSON	**Node Name**	**Description**	**Child Node**
		listserviceofferingsresponse	Response container	count, serviceoffering
		count	The number of the ServiceOffering objects included in the response	
		serviceoffering	The container to save the ServiceOffering object	id, name, displaytext, cpunmber, cpuspeed, memory, created, storagetype, offerha, limitcpuuse, tags, domainid, domain, hosttag, issytem, defaultuse
		id	id of the Service Offering	
		name	The name of the Service Offering	
		displaytext	The display name of the Service Offering	
		cpunumber	The number of the CPU's of the virtual machine	
		cpuspeed	The clock speed (MHz) of the CPU of a virtual machine	
		memory	The memory mounted on a virtual machine	
		created	The date of the registration as the Service Offering	
		storagetype	"Shared"	
		offerha	The high availability function supported or not	
		limitcpuuse	Always "true"	
		tags	Tag information	
		domainid	The ID of the management domain name	
		domain	Management domain name	
		hosttags	Tag information	
		issystem	false	
		defaultuse	false	

1-7) Disk Offering

listDiskOfferings

Outline	Obtains the catalog of the disks available for Cloudⁿ Compute VPC Type OpenNW Type

Request Parameters		
Parameter Name	Description	Required
id	Specifies the ID of the Disk Offering	No
keyword	Gives a search condition by any keyword	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No
name	The name of the Disk offering	No

Response				
Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		listdiskofferingsresponse	Response container	count, diskoffering
		count	The number of the ServiceOffering objects included in the response	
		diskoffering	The container to save the DiskOffering object	id, name, displaytext, disksize, created, storagetype, tags, domainid, domain, iscustomized
		id	id of the Disk Offering	
		name	The name of the Disk Offering	
		displaytext	The display name of the Disk Offering	
		disksize	The size of the disk (GB)	
		created	The date of the registration as the Disk Offering	
		storagetype	"Shared"	
		tags	Tag information	
		domainid	The ID of the management domain name	
		domain	Management domain name	
		iscustomized	The custom size is supported or not.	

1-8) Zone Information

listZones

Outline	Obtains the information on the zone available for Cloud^n Compute VPC Type OpenNW Type

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of the Disk Offering	No
keyword	Gives a search condition by any keyword	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No
name	The name of the Disk offering	No

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		listzonesresponse	Response container	count, serviceoffering
		count	The number of the ServiceOffering objects included in the response	
		zone	The container to save the zone object	id, name, displaytext, cpunmber, cpuspeed, memory, created, storagetype, offerha, limitcpuuse, tags, domainid, domain, hosttag, issytem, defaultuse
		id	The ID of the zone	
		name	The name of the zone	
		created	The date of the registration as the Service Offering	
		domainid	The ID of the management domain name	
		domain	Management domain name	
		domainname	Management domain name	
		networktype	"Basic"	
		securitygroupsenabled	The security group function enabled or not	
		allocationstate	The status of allocation of clusters	
		zonetoken	zone token	
		localstorageenabled	The availability of a local storage	

1-9) Template Operation

listTemplates

Outline	Obtains the list of the templates, originally created templates, etc. provided from the Cloudn Compute VPC Type OpenNW Type service

Request Parameters

Parameter Name	Description	Required
templatefilter	Specifies any of the following: • featured (Note: The filter to obtain the list of the official templates provided from the Cloudn Compute VPC Type OpenNW Type service) • self (Note: The filter to obtain the list of the originally created templates or self-prepared templates) • self-executable (Note: The filter to obtain the list of the templates available for the creation of a VM among the originally created templates and the self-prepared templates) • executable (Note: The filter to obtain the list of the templates available for the creation of a new VM)	Yes
account	Limits a search to the information belonging to the specified account. Used with domainid	No
domainid	Specifies the domain ID. Specifying this ID limits a search to the information in the specified domain and its subordinates.	No
hypervisor	Specifies the hypervisor	No
id	Specifies the ID of a template	No
isrecursive	Includes the templates owned by a subdomain in the scope of a search	No
keyword	Use a keyword for a search	No
listall	Specifies true/false (default: false). Equal to the result of the settings where zoneid and isrecursive=true.	No
name	Specifies the name of a template for a search.	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No
tags	Specifies a search condition with tag information (key, value) Tag information is specified in the format of: tags[N].key="sample_key" tags[N].value="sample_value" (N=0, 1, 2, 3, ….)	No
zoneid	Specifies the zone including a template	No

1-9) Template Operation

listTemplates

Response

Response (Body)	Format	XML or Json

	XML / JSON	Node Name	Description	Child Node
		listtemplatesresponse	Response container	count, template
		count	The number of the template objects included in the response	
		template	The container to save the template object	id, name, displaytext, ispublic, created, isready, passwordenabled, format, isfeatured, crossZones, ostypeid, account, zoneid, zonename, status, size, type, hypervisor, tags, domainid, domain, isextractable, checksum, sshkeyenabled, sourcetemplateid
		id	The ID of the template	
		name	The template name	
		displaytext	The display name of the	
		ispublic	A public template or not (true/false)	
		created	Returns the day and time of the creation of the template	
		isready	Available or not (true/false)	
		passwordenabled	The availability of the password reset function	
		format	The format of the template	
		isfeatured	An official template provided by the Cloud[n] Compute VPC Type OpenNW Type service or not (true/false)	
		crossZones	Managed across zones or not (true/false)	
		ostypeid	The OS Type ID of the template	
		ostypename	The OS Type name of the template	
		account	The account name that owns the template	
		zoneid	The ID of the zone that manages the template	
		zonename	The name of the zone that manages the template	
		status	The status of the template	
		size	The size of the template	
		templatetype	The template type	
		hypervisor	The type of the hyper visor	
		domain	The name of the domain that owns the template	
		domainid	The ID of the domain that owns the template	
		isextractable	Extractable or not (true/false)	
		checksum	The checksum value of the template	
		tags	Tag information	
		sshkeyenabled	The availability of the ssh-key function	
		sourcetemplateid	The ID of the original template of the template	

1-9) Template Operation

createTemplate(A)

Outline	Creates a template

Request Parameters

Parameter Name	Description	Required
displaytext	Specifies the display name of a template	Yes
name	Specifies the name of a template	Yes
ostypeid	Specifies the OS type of a template	Yes
bits	Specifies 32 bits or 64 bits	No
details	Specifies the details of a template (key/value format)	No
ispublic	Specifies whether a public template or not (true/false)	No
passwordenabled	Specifies the availability of a password change	No
snapshotid	Specifies the snapshot ID of the origin of the creation	Yes (*)
templatetag	Specifies the template tag	No
volumeid	Specifies the volume ID of the root disk at the origin of the creation	Yes (*)

i (*) Either snapshotid or volumeid is required. You cannot specify the both at the same time.

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		createtemplateresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		template	See Response of listTemplates.	

(*) As this is an asynchronous method, only jobid is returned to the "createtemplateresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-9) Template Operation

updateTemplate

Outline	Updates the template attribute

Request Parameters

Parameter Name	Description	Required
id	The template ID of the template with the attribute to be updated	Yes
displaytext	Specifies the display name of a template	No
format	Specifies the template format	No
name	Specifies the name of a template	No
ostypeid	Specifies the OS type ID of a template	No
passwordenabled	Specifies the availability of a password change	No

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		updatetemplatesresponse	Response container	
		id	The ID of a template	
		name	Template name	
		displaytext	The display name of a template	
		ispublic	Whether a public template or not (true/false)	
		created	Returns the date and time of the creation of a template	
		isready	Availability (true/false)	
		passwordenabled	The availability of the password reset function	
		format	The format of a template	
		isfeatured	Whether an official template provided from the Cloud^n Compute VPC Type OpenNW Type service (true/false)	
		crossZones	Whether management is made across zones or not (true/false)	
		ostypeid	The OS type ID of a template	
		ostypename	The OS type name of a template	
		hypervisor	The type of the hypervisor	
		domain	The name of the domain owning the template	
		domainid	The ID of the domain owning the template	
		isextractable	Extractable or not (true/false)	
		checksum	The checksum value of the template	
		tags	Tag information	

1-9) Template Operation

copyTemplate(A)

Outline	Copies a template

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of the template to be copied	Yes
destzoneid	Specifies the ID of the zone where the template is copied to	Yes
sourcezoneid	Specifies the ID of the zone where the template is copied from	Yes

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		copytemplateresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		template	See Response of listTemplates.	

i

(*) As this is an asynchronous method, only jobid is returned to the "copytemplateresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-9) Template Operation

deleteTemplate(A)

Outline	Deletes a template

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of the template to be deleted	Yes
zoneid	Specifies the ID of the zone where the template to be deleted belongs	No

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		deletetemplaterespons e	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		success	true is returned if successful and false is returned if not successful	

(*) As this is an asynchronous method, only jobid is returned to the "deletetemplateresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-9) Template Operation

extractTemplate (A)

Outline	Creates a URL for downloading a template

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of the template to be downloaded	Yes
mode	Specifies "HTTP_DOWNLOAD"	Yes
zoneid	Specifies the ID of the zone where the template to be obtained belong	Yes

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		extracttemplateresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		template	The container to save the template object	Id, name, extractid, accountid, state, zoneid, zonename, extraceMode, url
		id	The ID of a template	
		name	Template name	
		extractId	Extracted ID	
		accountid	Account ID	
		state	Status ("DOWNLOAD_URL_CREATED" if successful)	
		Zoneid	Zone ID	
		Zonename	Zone name	
		extractMode	HTTP_DOWNLOAD	
		url	The created URL for downloading	

i (*) As this is an asynchronous method, only jobid is returned to the "extractemplateresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

i Only the templates created based on a root disk can be downloaded. (The templates created based on a snapshot cannot be downloaded.)

1-10) Volume Operation

listVolumes

Outline	Obtains a list of disk volumes

Request Parameters		
Parameter Name	Description	Required
account	Limits a search to the information belonging to the specified account. Used with domainid.	No
details	Specifies a filter over the information to be collected. The following values can be specified: all, vm, account, storage_type, disk_offering, and min. Use a comma (,) as a separator if two or more values are specified.	No
domainid	Specifies a domain ID. Specifying a domain ID limits a search to the information on the specified domain and its subordinates.	No
id	Specifies the ID of a template.	No
isrecursive	Includes the disk volume owned by a subdomain in the scope of a search.	No
keyword	Use a keyword for a search.	No
listall	Specifies true/false (default: false). Equal to the result of the settings where zoneid and isrecursive=true	No
name	Specifies a volume name for a search.	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No
tags	Specifies a search condition with tag information (key, value) Tag information is specified in the format of: 　　tags[N].key="sample_key" 　　tags[N].value="sample_value" 　　(N=0, 1, 2, 3, ….)	Np
type	Specifies the type of a disk volume (ROOT/ DATADISK)	No
virtualmachineid	Gives a search condition by the ID of a virtual machine.	No
zoneid	Gives a search condition by the zone id.	No

1-10) Volume Operation

listVolumes

Response				
Response (Body)	Format	XML or Json		
	XML / JSON	**Node Name**	**Description**	**Child Node**
		llistvolumesresponse	Response container	count, volume
		count	The number of the templates included in the response	
		volume	The container to save the volume object	id,name,zoneid,zonename,type,deviceid,virtualmachineid,vmname,vmdisplayname,vmstate,size,created,state,account,domainid,domain,storagetype,storage,attached,destroyed,serviceofferingid,serviceofferingname,serviceofferingdisplaytext,isextractable,tags, diskofferingid, diskofferingname, diskofferingdisplaytext
		id	The ID of the volume	
		name	Volume name	
		zoneid	The ID of the zone where the volume is managed	
		zonename	The name of the zone where the volume is managed	
		type	The type of the volume (ROOT/DATADISK)	
		deviceid	The ID of a device	
		virtualmachineid	The ID of a virtual machine	
		vmname	The name of a virtual machine	
		vmdisplayname	The display name of a virtual machine	
		vmstate	The status of the virtual machine	
		size	The size of the volume	
		created	The date and time of the creation of the volume	
		state	The status of the volume	
		account	The name of the account that owns the volume	
		domainid	The ID of the domain that owns the volume	
		domain	The name of the domain that owns the volume	
		storagetype	The type of the storage	
		storage	The name of the storage	
		attached	The date and time when the volume is attached to a virtual machine	
		destroyed	Destroyed or not (true/false)	
		serviceofferingid	The ServiceOffering ID of a virtual machine (when the type is ROOT)	
		serviceofferingname	The ServiceOffering name of the virtual machine (when the type is ROOT)	
		serviceofferingdisplaytext	The display name of ServiceOffering of the virtual machine (when the type is ROOT)	
		isextractable	Extractable or not	
		tags	Tag information	

1-10) Volume Operation

listVolumes

Response (Cont)				
Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		diskofferingid	The Disk Offering ID of the virtual machine (when the type is DATADISK)	
		diskofferingname	The name of the Disk Offering of the virtual machine (when the type is DATADISK)	
		diskofferingdisplaytext	The display name of the Disk Offering of the virtual machine (when the type is DATADISK)	

1-10) Volume Operation

attachVolume (A)

Outline	Attaches a volume to a virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a volume	Yes
virtualmachineid	Specifies the ID of a virtual machine as a target	Yes

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		attachvolumeresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		volume	See Response of listVolume.	

i

(*) As this is an asynchronous method, only jobid is returned to the " attachvolumeresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-10) Volume Operation

detachVolume (A)

Outline	Detaches a volume form a virtual machine

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a volume	Yes (*)
virtualmachineid	Specifies the ID of a virtual machine as a target	Yes (*)
deviceid	Specifies deviceid on a virtual machine	Yes (*)

i Either "id" or "deviceid, virtualmachineid" (deviceid and virtualmachineid are specified at the same time) is required.

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		detachhvolumerespon se	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		volume	See Response of listVolume.	

i (*) As this is an asynchronous method, only jobid is returned to the "detachvolumeresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-10) Volume Operation

createVolume (A)

Outline	Creates a volume

Request Parameters

Parameter Name	Description	Required
name	Specifies the name of a volume.	Yes
diskofferingid	Specifies the Disk Offering ID.	Yes (*)
snapshotid	Specifies the snapshot ID.	Yes (*)
zoneid	Specifies the zone ID.	Yes
account	Used with domainid to specify any account.	No
domainid	Specifies domainid. Specified with account.	No

i Either "diskofferingid" or "snapshotid" is required. You cannot specify the both at the same time.

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		createvolumeresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		volume	See Response of listVolume.	

i (*) As this is an asynchronous method, only jobid is returned to the "createvolumeresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-10) Volume Operation

uploadVolume (A)

Outline	Uploads a volume

Request Parameters

Parameter Name	Description	Required
format	Specifies the format of a disk. The following formats can be specified: "QCOW2", "OVA", and "VHD".	Yes
name	Specifies the name of a volume.	Yes
url	Specifies the URL of the source of downloading a volume. The URL is specified by one of the protocols "http" and "https".	Yes
zoneid	Specifies the zone ID.	Yes
account	Used with domainid to specify any account.	No
domainid	Specifies domainid. Specified with an account.	No

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		uploadvolumeresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		volume	See Response of listVolume.	

(*) As this is an asynchronous method, only jobid is returned to the "uploadvolumeresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-10) Volume Operation

deleteVolume

Outline	Deletes a volume

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a volume	Yes

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		deletevolumeresponse	Response container	success
		success	Returns true if successful, or returns false if unsuccessful	

1-10) Volume Operation

extractVolume (A)

Outline	Extracts a volume

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a volume	Yes
mode	Specifies either "HTTP_DOWNLOAD" or "FTP_UPLOAD"	Yes
zoneid	Specifies the ID of the zone where the volume is	Yes
url	Specifies the URL to extract a volume	No

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		extractvolumeresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		volume	The container to save the Volume Object	id,name,extractId,accountid,state,zoneid,zonename,extractMode,url, created, status, storagetype, uploadpercentage
		id	The ID of an extracted volume	
		accountid	The ID of the account that owns an extracted volume	
		created	The date and time when the extracted volume object is created	
		extractId	The ID of an extracted object	
		extractMode	The mode at the time of an extract (HTTP_DOWNLOAD / FTP_UPLOAD)	
		name	The name of the extracted object (Volume)	
		state	The status of the extracted object	
		status	Status	
		storagetype	The type of a storage	
		uploadpercentage	The advance of uploading	
		zoneid	The ID of the zone where the volume object as the source of an extract exists	
		zonename	The name of the zone where the volume object as the source of an extraction exists	
		url	The URL for downloading an extracted object if "HTTP_DOWNLOAD" is specified as the mode, or the URL for uploading an object if "FTP_UPLOAD" is specified	

(*) As this is an asynchronous method, only jobid is returned to the "extractvolumeresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-11) Snapshot Operation

listSnapshots

Outline	Obtains the list of created snapshots

Request Parameters		
Parameter Name	Description	Required
account	Limit a search to the information that belongs to a specified account. Used with domainid.	No
domainid	Specifies a domain ID. Specifying a domain ID limits a search to the information on the specified domain and its subordinates.	No
id	Specifies a snapshot ID.	No
intervaltype	Specifies the intervals for obtaining periodical snapshots (*WEEKLY, MONTHLY.*)	No
isrecursive	Specifies true/ false (default: false). The information on the sub domain is also included within the scope of a search if true is specified.	No
keyword	Specifies a keyword for a search with the keyword.	No
listall	Specifies true/false (default: false). Equal to the result of the settings where zoneid and isrecursive=true	No
name	Specifies a snapshot name.	No
page	Specified with pagesize to specify a page number	No
pagesize	Specifies the number of responses (asynchronous job) included in one request. Specified with page. (Default: 500)	No
snapshottype	Specifies a snapshot type.	No
volumeid	Specifies a disk volume ID.	No

1-11) Snapshot Operation

listSnapshots

Response

Response (Body)	Format	XML or Json		
	XML / JSON	**Node Name**	**Description**	**Child Node**
		listtsnapshotresponse	Response container	count, snapshot
		count	The number of the snapshot objects included in the response	
		snapshot	The container to save the snapshot object	id, account, created, domain, domainid, intervaltype, name, snapshottype, state, volumeid, volumename, volumetype
		id	The ID of a snapshot	
		account	The name of the account that owns a template	
		created	The display name of a snapshot	
		domain	The name of the domain that owns a snapshot	
		domainid	The ID of the domain that owns a snapshot	
		intervaltype	The interval to take periodical snapshots (*WEEKLY, MONTHLY.*)	
		name	The name of a snapshot	
		snapshottype	The type of obtaining a snapshot (MANUAL for manually obtaining a snapshot, or *WEEKLY, MONTHLY* for periodically obtaining snapshots)	
		state	The status of a snapshot BackedUp – Created (usable); Creating – Allocating a snapshot in a primary storage; BackingUp – Backing up in a secondary storage	
		volumeid	The disk volume ID of the source of obtaining a snapshot	
		volumename	The disk volume name of the source of obtaining a snapshot	
		volumetype	The volume type of the disk of the source of obtaining a snapshot (*ROOT, DATADISK.*)	

1-11) Snapshot Operation

createSnapshot (A)

Outline	Creates a snapshot

Request Parameters

Parameter Name	Description	Required
volumeid	Specifies the volume ID of the disk of the source of creating a snapshot	Yes
account	Specifies an account	Yes
domainid	Specifies a domain ID	Yes

Response (*)

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		createsnapshotresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		snapshot	listSnapshotsのResponseを参照。	

i

(*) As this is an asynchronous method, only jobid is returned to the "createsnapshotresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

1-11) Snapshot Operation

createSnapshotPolicy

Outline	Creates a policy of periodical snapshots

Request Parameters

Parameter Name	Description	Required
intervaltype	The intervals of obtaining periodical snapshots (*WEEKLY, MONTHLY.*)	Yes
maxsnaps	The number of the generations of saved snapshots	Yes
schedule	The date and time of obtaining a snapshot WEEKLY: MM:HH:D (D=1-7, 1=Sunday/2=Monday) MONTHLY: MM:HH:DD (1-28)	Yes
timezone	The time zone of the specified date and time of obtaining a snapshot (If in Japan, "Asia/Tokyo" is specified)	Yes
volumeid	The volume ID of the disk as the source of obtaining periodical snapshots	Yes

Response

Response (Body)	Format	XML or Json		
	XML / JSON	**Node Name**	**Description**	**Child Node**
		createsnapshotpolicyresponse	Response container	snapshotpolicy
		snapshotpolicy	The container to save the snapshot policy	id, volumeid, schedule, intervaltype, maxsnaps, timezone
		id	The ID of the policy of periodical snapshots	
		volumeid	The volume ID of the disk as the source of obtaining a snapshot	
		schedule	The date and time of obtaining periodical snapshots	
		intervaltype	The interval of obtaining periodical snapshots	
		maxsnaps	The number of the generations of saved snapshots	
		timezone	The time zone of the date and time of obtaining a snapshot	

i
One policy of periodical snapshots can be created for weekly snapshots and monthly snapshots, respectively. (You cannot create two or more policies.)

1-11) Snapshot Operation

deleteSnapshotPolicies

Outline	Deletes the policy for periodical snapshots

Request Parameters		
Parameter Name	Description	Required
Id	The policy ID of periodical snapshots to be deleted	Yes (*)
ids	The policy ID of periodical snapshots to be deleted (separated by comma)	Yes (*)

i
(*) Either id or ids is required. You cannot specify the both at the same time.

Response				
Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		deletesnapshotpolicies response	Response container	success
		success	Returns true if successful, or returns false if unsuccessful	

1-11) Snapshot Operation

deleteSnapshot (A)

Outline	Deletes a snapshot

Request Parameters

Parameter Name	Description	Required
id	Specifies the ID of a snapshot	Yes
zoneid	Specifies the ID of the zone where a snapshot is	No

Response

Response (Body)	Format	XML or Json		
	XML / JSON	Node Name	Description	Child Node
		deletesnapshotresponse	Response container	jobid
		jobid	jobid issued when an asynchronous method is called and is registered as a job	
	At the end of an asynchronous job (if successful)	*jobresults (* The value of jobresults of queryJobResuts)*		
		success	Returns true if successful, or returns false if unsuccessful	

(*) As this is an asynchronous method, only jobid is returned to the "deletesnapshotresponse" container. It is necessary to execute queryAsyncJobResult to check the result.

2-1) Using the Amazon Web Service EC2 Compatible API

In this service, the same API commands as the EC2 service of Amazon Web Service is provided.

The EC2 API is converted into the Cloud^n Compute API on the server in the Cloud^n service.

The customer who has been using the EC2 API can use an existing EC2 tool for this service.
・Shown below is the URL to have an access to the API:

https://vpc-opennw-apia.jp-e1.cloudn-service.com/awsapi

API queries are executed by using commands (and parameters as necessary). For the procedures, see the following.

> ⚠ To use this API, Java needs to be installed.

The customer who uses the Amazon Web Service EC2 compatible API can issue an API access key and certificate (SOAP format) on his or her own.

For the details, see "Cloud^n Portal Operation Manual," Section 3-3), "Managing the API Access Key/Secret Key."

2-1) Using the Amazon Web Service EC2 Compatible API

This section describes the procedures to obtain the information of a virtual server by using the command "ec2-describe-instances" to display the information on a virtual server.

1

Downloading the EC2API tool

To operate EC2 from the command line, download the tool.

Access the following URL and download the EC2API tool (ec2-api-tools-1.6.2.0.zip) and decompress it in an appropriate place.

http://s3.amazonaws.com/ec2-downloads/ec2-api-tools-1.6.2.0.zip

```
$ wget http://s3.amazonaws.com/ec2-downloads/ec2-api-tools-1.6.2.0.zip
```

2

Specifying the environment variable

Describe the command in a text editor or the like in advance.
(* Fill in an actual number in [ ].)

*Describe as follows: sh, bash system→export, or csh, tesh system→setenv

- export EC2_HOME=/XXXXX/ec2-api-tools

  「/XXXX/」→Describe the place to decompress the EC2API tool.
- export EC2_CERT=/XXXXX/cert.pem

  「/XXXXX/」→Describe the place to save the EC2 public key.
- export EC2_PRIVATE_KEY=/XXXXX/private_key.pem

  「/XXXXX/」→Describe the place to save the EC2 secret key.
- export EC2_URL=   https://vpc-opennw-apia.jp-e1.cloudn-service.com/awsapi
- export PATH=$PATH:$JAVA_HOME/bin:$EC2_HOME/bin
- export JAVA_HOME=/usr/lib/jvm/jre-openjdk/

  Describe the place where java is installed.

*You need to make the settings every time you log in to the terminal.

2-1) Using the Amazon Web Service EC2 Compatible API

3

Copy and save the the certificate and the secret key (the X.509 certificate of the SOPA API and the secret key) for an EC2 access issued at the Cloud^n portal from the portal screen into the place of the key file specified by the settings of the environment variable.

EC2 key file
・cert.pem(X.509 certificate)
・private_key.pem (secret key)

SOAP API

SOAP形式のリクエストを行うためのX.509証明書と秘密鍵です。

Compute(東日本)

X.509証明書

```
-----BEGIN CERTIFICATE-----
MIIDbTCCAlWgAwIBAgIJAIxmYZNJQZYhMAOGCSqGSIb3DQEBBQUAMEwxCzAJBgNV
BAYTAkpQMQ4wDAYDVQQIDAVUb2t5bzEbMBkGA1UECgwST1RUX0NvbWllbmljYXRp
09A4+Eh8kVkEqSexOQ5dRzY=
-----END CERTIFICATE-----
```

秘密鍵

```
-----BEGIN PRIVATE KEY-----
MIIEvgIBADANBgkqhkiG9w0BAQEFAASCBKgwggSkAgEAAoIBAQDrldCPffkI4GQ5
```

4

Executing the API command

The execution result in the XML format is displayed.

```
$ ec2-describe-instances
RESERVATION     439     187:hogehoge
INSTANCE        439     275             terminated              m1.small     2012-03-27T01:13:33-0400     zone 0
monitoring-
BLOCKDEVICE             2012-03-27T01:13:33.000-04:00
RESERVATION     449     187:hogehoge
INSTANCE        449     208             running                 m1.small     2012-03-27T02:43:54-0400     zone 0
monitoring-
BLOCKDEVICE             2012-03-27T02:43:54.000-04:00
RESERVATION     447     187:hogehoge
INSTANCE        447     208             terminated              m1.small     2012-03-27T02:13:29-0400     zone 0
monitoring-
BLOCKDEVICE             2012-03-27T02:13:29.000-04:00
```

Shown below are the API provided from this service.

Instances	Command	Option
Displays the list of virtual servers	ec2-describe-instances	None
Creates a virtual server	ec2-run-instances	[template id]
Restarts a virtual server	ec2-reboot-instances	[virtual machine id]
Starts a virtual server	ec2-start-instances	[virtual machine id]
Stops a virtual server	ec2-stop-instances	[virtual machine id]
Deletes a virtual server	ec2-terminate-instances	[virtual machine id]
Changes a virtual server plan	ec2-modify-instance-attribute	[virtual machine id] -t [offering name]
Template (Image)	Command	Option
Creates a template (Automatically stopped if the virtual server is running)	ec2-create-image	[virtual machine id] -n [template name] --request-timeout [time(sec)]
Displays the list of templates	ec2-describe-images	None
Deletes a template	ec2-deregister	[templateid]
Changes the scope of publication of a template	ec2-modify-image-attribute	[templateid] {-l (-a entity | -r entity)}

2-2) The List of the Amazon Web Service EC2 Compatible API

Shown below are the API provided from this service.

Snapshots	Command	Option
Creates a snapshot	ec2-create-snapshot	[volume id] --request-timeout [time(sec)]
Deletes a snapshot	ec2-delete-snapshot	[snapshot id]
Displays the list of snapshots	ec2-describe-snapshots	None
Volumes	Command	Option
Attaches a disk	ec2-attach-volume	[volume id] -i [virtual machine id]
Deletes a disk	ec2-delete-volume	[volume id]
Displays the list of disks	ec2-describe-volumes	None
Detaches a disk	ec2-detach-volume	[volume id] -i [virtual machine id]