

AT&T NetBond[®] User Guide

AWS Public and Private

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1 About AT&T NetBond®

AT&T NetBond is a network-enabled cloud solution that allows you to extend your MPLS (multi-protocol label switching) Virtual Private Network (VPN) to a cloud service provider for the delivery of business applications through fast and highly secure connectivity.

AT&T NetBond uses patented technology that implements Software Defined Network (SDN) capabilities, providing traffic routing flexibility and integration of VPN to cloud service providers. From a security perspective, AT&T NetBond isolates traffic from the Internet and from other cloud traffic reducing exposure to risks and attacks such as DDoS (Distributed Denial of Service).

AT&T NetBond allows you to create highly-secure, private and reliable connectivity to cloud services in minutes without additional infrastructure investments and long term contract commitments.

This guide is designed to help you order and configure your AT&T NetBond VLANs using the Amazon Web Services service.

For more information about AT&T NetBond, please refer to the following links:

- AT&T Cloud Solutions Portal
- <u>AT&T Enterprise Services Website</u>
- AT&T Cloud Solutions Service Guide

2 Ordering AT&T NetBond

To order AT&T NetBond, you need the following:

- A contract that must be signed, and countersigned by AT&T.
- An AT&T Cloud Solutions Account that is activated in the AT&T Cloud Solutions portal.

The following sections describe how to complete each of these.

2.1 Contract

Your AT&T Account Manager will help you with your contract questions. There are specific documents that need to be signed before NetBond can be used with your VPN:

- Existing AT&T Cloud Services Customers: Review and sign the AT&T Cloud Services Pricing Addendum
- New AT&T Cloud Services Customers: Review and sign the AT&T Cloud Services Pricing Schedule



2.2 Activating Your AT&T Cloud Solutions Account

Once the AT&T Cloud Services contract is countersigned by AT&T and your account is set up in the AT&T Cloud Solutions portal (<u>synaptic.att.com</u>), you will receive a welcome email with instructions for how to activate your AT&T Cloud Solutions Account.

Note: Before provisioning AT&T NetBond, you will want to have an account with a Cloud Service Provider (CSP) that is partnered with NetBond

3 Provisioning Amazon Web Services Service

For first time AWS customers, log onto aws.amazon.com and setup an account. You will use your Commercial AWS account number to connect to AT&T Netbond.

4 Provisioning AT&T NetBond

Once your AT&T NetBond connection has been established, log into the AT&T Cloud Solutions portal with the credentials you received from the "Welcome" email.

Select the "Products" option from the top menu, select "AT&T NetBond" under the Network Enablement option, then click "Buy Now" for NetBond:



	Products	Solution Providers	My Account	s	earch Welcom	e Thomas I My Pr	
Home / Products AT&T Cloud Serv How can AT&T Cloud Serv Reduce infrastruct costs by aligning b expense with busin value	ud So vices help your ure usiness hess our API	Jution business pursu Gain highly to your critic applications from virtual Add enviror upgrades, r developmen quickly and	S secure access ical and data Ily anywhere ments for tew app nt, or testing easily	 Reduce your cost decreasing stora decreasing stora stora decreasing stora stora decreasing stora decreasing stora decreasing stora decreasing stora decreasing stora decreasing storage s	ets by the adving the during the second the second	o et-up ees why our customers of cloud *	pay-as- you-go
See more about AT&T Clo	oud Services						
right for your business	w	hat We Off	ier>>	What Do You Need	? Security Feature	es Sup	port Level
AT&T Synaptic Con Buy Now Learn More	npute ca	cloud-based s	server mand	Infrastructure	A multi-layered sec model	urity Standard	and Enhanced
AT&T Synaptic Sto Buy Now Learn More	rage s	lexible, cloud- torage on der	-based mand	Infrastructure	A multi-layered sec model	urity Standard	d and Enhanced
AT&T NetBond Buy Now Learn More	Flexi VPI	ble, high-perf N/cloud conn	orming, Ir action Ir	ifrastructure/Network	A multi-layered sec model	urity Supp	ort included
IBM CMS with AT. NetBond	&T A fu	lly managed, ure cloud with	highly- h SLAs	Infrastructure	A multi-layered sec model	urity Suppo	rt is included

Figure 4-1: Product Options on the AT&T Cloud Solutions Portal



4.1 Provisioning AT&T NetBond – Configure Service

After selecting the NetBond service (shown in figure 4-1), you will see the "Configure Service" screen shown in figure 4-2.

AT&T FRASTRUCTURE a service Solutions	onfigure Service 2 Payn	nent Info 3 Confirm Order		
Select an Account:				
AT&T Cloud Services Demo&				
Select a SubAccount:				
Select a Service Group				
Calast a sus int				
Select a service:				
AT&T Synaptic Storage as a Service Cloud-based virtual data storage with on-demand scalability, pay-as-you-go pricing and the enterprise-class security of the AT&T network. IBM Cloud Managed Service with AT&T NetBond				
AT&T Remote Backup as a Se Cloud-based backup and recovery	rvice for business continuity and protection			
AT&T Synaptic Storage as a S Easy-to-use, enterprise-grade file	ervice ³⁸⁴ with Enterprise File Sync and Shar sync and share	e		
O SoftLayer services	sight airs of actuate within and hybrid aloud some	a di di a ca		
A Cloud provider that provides the A T&T NetBond	right mot or private, public and hybrid cloud cap	Dinges.		
AT&T NetBond provides a flexible	and highly-secure connection between a custome	's VPN and cloud services providers.		
Pidk a support plan:				
	O Subscreent Subscreed Support	Enterprise Enhanced Support		
Base Support	Subaccount Enhanced Support			
Base Support (Included in service price)	(+\$19.95 / Month) Note: Subaccount Enhanced support does not apply to SoftLayer services	(+\$99.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support	(+\$19.95 / Month) Note: Subaccount Enhanced support does not apply to SoftLayer services Included coverage for Subaccount:	(+599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country:		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with coline support and technical services.	(+519-95/ Month) Note: Subaccount Enhanced support does not apply to SoftLayer "services Included coverage for Subaccount:	(+ 599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US (7)		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with online support and technical resources.	(+519.95/ Month) Note: Subaccount Enhanced support does not apply to SoftLayer "services Included coverage for Subaccount: (?) This fee-based support covers any chord	(+599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US (?)		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with online support and technical resources.	(+519.95/ Month) Note: Subaccount Enhanced support does not apply to SoftLayer "services Included coverage for Subaccount: (7) This fee-based support covers any cloud service you have today as well as new	(+599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US (?) This fee-based support covers any cloud		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with online support and technical resources.	(+519.95/ Month) Note: Subaccount Enhanced support does not apply to SoftLayer "services Included coverage for Subaccount: This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided unview	(+599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US (?) This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with online support and technical resources.	(+15.95/ Month) Note: Subaccount Enhanced support does not apply to SoftLayer [®] services Included coverage for Subaccount: This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides	(+599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US (?) This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with online support and technical resources.	(+519.95/ North) Note: Subaccount Enhanced support does not apply to SoftLayer [®] services Included coverage for Subaccount: (?) This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our ATAT Cloud Services terbicial support team available to scheme	(+599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US ⑦ This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our ATBT Cloud Service*		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with online support and technical resources.	(+519.95/ North) Note: Subaccount Enhanced support does not apply to SoftLayer [®] services Included coverage for Subaccount: (*) This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our ATAT Cloud Services technical support team available by phone or email to answer your questions	(+ 599.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US ⑦ This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our AT&T Cloud Services technical support team available by phone		
Base Support (Included in service price) Base support is included with each cloud service at no additional cost. Base support provides AT&T Cloud Services users with online support and technical resources.	(+51.95/ Month) Note: Subaccount Enhanced support does not apply to SoftLayer "services Included coverage for Subaccount: This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our ATAT Cloud Services technical support team available by phone or email to answer your questions 24x7x365.	(+ \$99.95 / Month) Note: Enterprise Enhanced support does not apply to SoftLayer services Included coverage for Country: US ⑦ This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our AT&T Cloud Services technical support team available by phone or email to answer your questions 24x7x365.		

Figure 4-2: Configure Service Screen on the AT&T Cloud Solutions Portal

The following table describes the options on the Configure Service screen, and the action that should be taken for each.

When you have selected your options, click Continue.



Option	Action			
Account	Select an account from the dropdown			
SubAccount	Select a subaccount from the dropdown			
Service	Select AT&T NetBond			
Pick a Support Plan – For additional details on support, see <u>section 7.0</u>	 Select one of the following plans: Base Support (Included with each cloud service at no additional cost) Subaccount Enhanced Support (+\$19.95 / month) Enterprise Enhance Support (+\$99.95 / month) 			

Table 4-1: Order NetBond

4.2 Provisioning AT&T NetBond – Payment Info

Click "Continue" when you see the Payment Confirmation screen:

Note: NetBond services are contract-based so "Invoice" will be the only selection.

Check Out			
AT&T INFRASTRUCTURE as a service Solutions	Configure Service	Payment Info	Confirm Order
Payment:			
			Continue

Figure 4-3: Payment Confirmation Screen



4.3 Provisioning AT&T NetBond – Confirm Order

The Confirm Order Screen (figure 4-5) will allow you to:

- Review a summary of your service purchase.
- Check box to acknowledge that you are purchasing AT&T NetBond.
- Enter a promotional code. If your AT&T account team has provided you with a promotional code, enter it into the "Promotion" box and click "Update Total".
- Submit your order by clicking the "Place My Order" button.

Ch	eck Out				
INF a s	AT&T RASTRUCTURE a service Solutions	1. Configure Service	2. Payment Info	Confirm Orde	r
	Service Purchase Sum	imary:			
	Service Name	Туре	Unit/Price	Total (USD)	
	AT&T AT&T NetBond SM (Remove this Service)	Pay Per Use	Pricing	Variable (Based On Usage)	
				Subtotal:	Variabl
				Discount:	
				Promotion:	
				Tax:	Variable
				Total:	Variable
				Rates as Per Contract Number: 201	20913YL516
	By checking this box, I at reviewed the rate plan ar Promotional Code: (*C Enter only one code per order. Promotional codes are case se Promotion:	cknowledge that I am (a) purchasing a service Id tax rate upon providing appropriate notice. optional) nsitive.	with variable monthly cost base	ed on usage and (b) that I have	
	Use of AT&T Cloud Services (AT& applicable terms, including, all appl as revised by AT&T, the AT&T Bus (<u>sg</u> _CustomPreviewer?attachn the Agreement). Please read the Ag- establish an account for AT&T Clou	T Synaptic Strage as a Service or AT&T Synaptic Co icable license terms, contained in the agreement acci- ness Services Guide for Enterprise Hosting Services entId=o0PC000000BxuMAR), and the AT&T Ar prement carefully. If you do not agree to comply with d Services and do not use the Services.	mpute as a Service, collectively, the spted at the time of your order or pre (which may be found at the following thorized use Policy (which may be the Agreement and all of its terms (Services) is subject to acceptance of sented to you when using the Services or URL: http://serviceguidenew.att.com ound at www.att.com/aug) (collectively including any license terms), do not Place My Order	

Figure 4-4: Confirm Order

Once you click on "Place My Order", the order confirmation message should appear (Fig. 4-5) which includes your order key number. Save this page and refer to the order key number if you need to contact the AT&T Cloud Solutions Support team.





Figure 4-5: Order Confirmation Screen



5 Configuring AT&T NetBond with Amazon Web Services

To continue with the configuration of AT&T NetBond with Amazon Web Services, you will need to create a Virtual Network Connection (VNC).

Select Manage VNCs and VLANs as shown on the screen in figure 5-1.



Figure 5-1: Manage Service Option

Select Create VNC as shown on the screen in Figure 5-2

M	lanage AT&T NetBond
	Select Provider: Select a provider Select Location: ALL Create VNC Refresh
	ALL
	How do I
	You have more than one Cloud Service Partner associated with your account. To view your Virtual Network Connections and related information please select a partner from the drop down menu above.

Figure 5-2: Create VNC



The Create VNC screen will open.

	reate VNC		
Select Pro	vider: Select a provider	• 🤊	ate
Loc	ation: Select a Location	٠	
VNCN	ame:	0	
Select	VPN: TST_VPN125	* ?	
Community	Value O True 🖲 False 🕐		
Band Commit	width ment	-	
(IN M	ops):		
		Cancel Create	the

Figure 5-3: VNC Information

The following table describes the options on the Create VNC screen, and the action that should be taken for each. When you have selected your options, click Continue.

Option	Action
Provider	Select the provider to be added to this Virtual Network Connection (VNC).
Location	Select the location for this VNC.
VNC name	Choose a VNC name that will be recognizable to your organization.
	Note: There is a 64-character limit for VNC names.
VPN	From the dropdown list, select the AT&T MPLS VPN you wish to use for AT&T NetBond connectivity. If the VPN ID is missing, contact your AT&T account team for assistance.
Bandwidth Commitment	Use the Slider control to set your monthly bandwidth commitment based on your company requirements. A Minimum Bandwidth Commitment can be adjusted prior to the end of each billing cycle to minimize overage charges. See section <u>6.1</u> for more information.
Community Value Tag	Certain Cloud Service Providers have a limit to the number of routes they can receive. If a customer network exceeds this limit, then it is advised to include a set of summarized routes tagged with the 8030:999 community value. By selecting "Community Value Tagging" on the AT&T Synaptic Portal VNC configuration, AT&T will only accept routes from an AT&T VPN



Option	Action
	that has this community value.
	The options for Community Value Tagging are "True" or "False".
	Note: For Amazon Web Services this will always be "False".

Table 5-1: VNC Creation

Next, you will need to assign a Virtual Local Area Network (VLAN) to the VNC. By assigning a VLAN to a VNC, you are allowing a virtual connection to occur between AT&T NetBond and the CSP.

On the "Manage AT&T NetBond" screen, click the **Service Provider** dropdown menu and select Amazon Web Services. Next, select the location you created the VNC for this CSP.

Click the "Assign VLAN" button (shown in figure 5-4).

Select Provider: Amazon Web Services	•	Select Location: US-WEST
US-WEST		
* West Public		X Delete
VNC Settings	Edit	VLAN Settings
VNC name: West Public		There are no volvas assigned to this vice. Tou need to assign at least one volva to this vice
Bandwidth Commitment		to be able to use this service. Assign VLAN
A0 Mbps VPN Selected VPN: TST_VPN125 Assigned VLANs IP address:		to be able to use this service.

Figure 5-4: Assign VLAN Button



The Assign VLAN screen will open

	Assig	n a VLAN		Ť
Amazor	VNC:	West Public		at
Amazor	VLAN Name*:		?	
_	Direct Subnet*:		?	-
	Direct Subnet Prefix*:	/29	?	
	Routing Domain*:	Please Select	• ?	
	AWS Account Id*:		?	
ment			Cancel Su	omit

Figure 5-5: Assign a VLAN Screen

The following table describes the options on the Assign VLAN screen, and the action that should be taken for each.

When you have selected your options, click Continue.

Option	Action
VLAN Name	Enter the VLAN name of your choice. Consider using a similar name to what the VNC was named in section 4.1. The limit for this is 19 characters.
Direct Subnet	Enter a PRIVATE network address of a /29 subnet that you have allocated to this VPN. Do not include the "/29" subnet mask. The subnet should be sourced out of your enterprise IP address space. This needs to be a publicly registered subnet.
Direct Subnet Prefix	The /29 is standard and cannot be changed
Routing Domain	Select from Public / Private routing domains based on the AWS service you are using.
AWS Account ID	Enter your Commercial AWS account number in this field. This will orchestrate you VLAN to your Commercial AWS Account.

Table 5-2: VLAN Creation

Note: A separate VNC is required for each routing domain. Private Routing domains can have up to 50 VLANs per VNC.



Your VLAN connection is now in a *Confirming* state until you accept the VLANs in your Commercial AWS Account.

/NC Settings	Edit	VLAN Settings	
Location: US-WEST VNC name: TESTVNC2AWS		Assigned VLANs Assign a new VLAN	
Bandwidth Commitment		Disconnect	
100 Mbps VPN Selected VPN: ATTE_VPN1_US Assigned VLANs IP address:		VLAN Status: VLAN name: Direct Subnet: Direct Subnet Prefix: Routing Domain: Partner Service Key:	Confirming 2 Confirming 2 To learn more about VLAN status and activation, refer to the Service Activation Guid for your Cloud Service Provider. TESTprivate091115 10.43.53.0 29 88661fd9-419e-4385-a3dc-bb5184022658 8d2804ed-cr0d-43cc-8abd-6524af16ae6
10.43.53.0 Available Routing Domains: PRIVATE			

Figure 5-6: Manage AT&T NetBond – Assigning a VLAN

Log into your AWS account to accept this new VLAN connection that has just been created. On the Virtual Interfaces screen you will see two new VLANs "pending acceptance". These two VLANs are the Primary and Secondary links from your NetBond Connection. You will need to accept both VLANs.

Note: VLANs not accepted in 10 days will be deleted. Accepting only one VLAN will result in both being deleted after 10 days.

Private Routing Domain connections to AWS shall be active within 10 minutes from accepting the VLANs in the AWS Virtual Interface screen.

Public Routing Domain connections to AWS will be held in a confirming state while AWS verifies that the publicly routed IP addresses that have been assigned to your connection by AT&T are registered to AT&T and authorized for your company to use. AT&T will create a Letter of Authorization (LOA) for these IP addresses and send to AWS after your VLANs have been accepted in the Virtual Interface screen. The following steps will need to be completed to active your Public AWS virtual intereface:

1. AT&T On-Boarding team shall turn down customers BGP on AT&T side of connection.



- 2. AT&T shall collect the following information from your Public AWS connection.
 - BGP ASN
 - AT&T Peer IP address
 - Amazon Peer IP address
 - NATed IP address
 - Customer VIF (ID)
- 3. AT&T On-boarding team shall add the information listed in step 1 to a Letter of Authorization (LOA) and send to AWS at <u>directconnect-requests@amazon.com</u>
- 4. AWS DirectConnect Service team shall verify the IP address are authorized for use for the customer by AT&T.
- 5. Upon verification, AWS shall activate the Virtual Interfaces. This takes up to 72 hours from the time that the LOA is submitted to AWS.
- 6. Customer shall notify AT&T On-Boarding team that their Virtual Interface connection is active
- 7. AT&T On-Boarding Team shall bring up customers BGP session

Note: During which time a status screen shown in Figure 5-6 will have a **Confirming** status shown. There is a *Refresh* button in the upper and lower-right corners that can be clicked to check provisioning status.

Note: Accepted VLANs to AWS Public services will stay in "pending" status on your AWS Virtual Interfaces screen for 72 hours while AWS completes a verification process. Please reference the AWS guide to AWS Direct Connect for question with AWS Virtual Interfaces.

The VLAN status shown in Figure 5-6 will change to **Active** once AWS has verified that the IP Addresses are registered to AT&T and your company is authorized to use them.

At this point, connectivity has been established between your AT&T MPLS VPN and your newly created Commercial AWS account.



6 Managing AT&T NetBond with Amazon Web Services

After logging in, you will be in the "My Dashboard" view of your account screen. You can manage the details of your AT&T NetBond account and use the Shortcuts for common tasks, as shown in the following figure.



Figure 6-1: Shortcuts in the My Dashboard View of the My Account Screen

6.1 Managing Your Minimum Bandwidth Commitment

For your customer connection, select a minimum bandwidth commitment (MBC) by Virtual Network Connection (VNC) and select the capacity commitment in Mbps, which is a fixed rate. Overage rates will apply for sustained capacity over the package commitment levels. Overage rates will be calculated by measuring bandwidth demand, in bits per second, for a VNC for each five minute period during the month, inbound to the VNC and outbound from the VNC. AT&T will select the 95th percentile five-minute usage period of the larger direction (inbound or outbound). Divide by 1,000,000 to obtain the sustained bandwidth volume in Mbps (Megabits per second).

- It is advised that you generate daily and/or monthly reports to view your 95th In/Out percentiles.
- Minimum Bandwidth changes must be made prior to the last day of the AT&T NetBond billing cycle which is the 9th calendar day of each month.

To monitor your usage, hover over "My Account" and click "Reports" figure 6-2.



CLOUD Product	s Solution My Providers Account		
Account Management	Service Management	Reports	Quick Links
/iew My Dashboard	E UAT_Test1	UAT_Test1	Knowledge Center
Manage Account	E AT&T NetBond	AT&T NetBond	Billing
Manage Subaccount	Manage Service	AT&T Cloud Compute	Ticketing
Manage Users	AT&T Synaptic Compute		Audit Log
Manage Roles and Permissions	Manage Service		
view My Profile			

Figure 6-2: Accessing Reports for Your Account

Both Daily and Monthly Bandwidth Usage Reports are available, as shown in figures 6-3 and 6-4.

125						
My Re	eports AT&T NetBor	nd Bandwidth Billing R	eport.			
Output Data I	Level: Daily -	Start Month-Year:	lanuary 👻 2015	End Month-Year:	January 👻	2015 👻
Provider:	elect	VNC Nan	ne: All		* Run Re	port

Figure 6-3: Daily Reports

MyR	eports AT&T NetBor	nd Bandwidth Billing R	leport.					
Output Data	Level: Monthly v	Star Month-Year:	January 👻 2015	End Month-Year:	June	*	2015 🗸	
Provider:	elect	VNC Nar	ne: All		~		oort [R
					_		. 100000	

Figure 6-4: Monthly Reports



You can manage your Minimum Bandwidth Commitment (MBC) from the "Manage VNCs & VLANs" screen accessed from the My Account drop down. Click "Edit" next to "VNC Settings" (shown in Figure 6-5).

		Create VNC
	Select Location: US-Richa	
US-Richardson, TX		
Central 1		💥 De
VLAN Test is in the proce	ess of assigning to VNC Central 1. I	t may take some time
VNC Settings	Edit /LAN Settings	
Location: US-Richardson, TX	Assigned VLANs Assign a r	new VLAN
VNC name: Central 1	Tect	
Firewall Status:		
Bandwidth Commitment		
	Disconnect	A trium
155 Mbps		 To learn more about VLAN status and activation, refer to the Service Activation Gui
	VLAN Status: VLAN name:	for your Cloud Service Provider. Test
VPN	Direct Subnet:	172.16.0.0
Selected VPN: TEST_POA91_AVPN2 Assigned VLANs IP address:	Partner Service Key:	27 9d2e096a-31fb-4de8-b523-a482df0441eb
172.16.0.0		

Figure 6-5: MBC Settings



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You can then drag the slider to your desired Bandwidth Commitment level (see Figure 6-6), and click submit to save your changes.

Select Provider: VMware	Select Location: ALL	Create VNC Create VNC
ALL		
Central 1		💥 Del
VNC Settings	VLAN Settings	
Firewall Status:	Disconnect	Verifying ?
VPN Selected VPN: TEST_POA91_AVPN2 Assigned VLANS IP address:	VLAN Status: VLAN name: Direct Subnet: Direct Subnet Prefix: Partner Service Key: PEER_ASN:	activation, refer to the Service Activation Guid for your Cloud Service Provider. Test 172.16.0.0 29 9d2e096a-31fb-4de8-b523-a482df0441eb 12345

Figure 6-6: Adjusting the MBC



6.2 Managing Subaccount Disconnects

If you need to disconnect a subaccount from your AT&T NetBond Service go to "My Dashboard", and click "Manage Subaccount" under Shortcuts (figure 6-7).



Figure 6-7: Manage Subaccount

Select the subaccount to be disconnected and click "Delete Subaccount" (figure 6-8).



Figure 6-8: Delete Subaccount

Upon successful deletion of the subaccount, the status will change to "DISCONNECTED" as shown in figure 6-9.



lanage	Subacco	unt		
Accounts	Subaccounts	Users	Roles & Permissions	My Profile
Select Account:	AT&T CLOUD Test - AVP	N from / 🗸		
Show all Subacc	ounts or filter by letter:			ABCDEFG
J	st - AVPN from	S_34156 34156 AT&T CLOU	D Test - AVPN from AP to US #	2
AP to US #2 -	Statu	s: DISCONNE	CTED	

Figure 6-9: Subaccount Status

7 Troubleshooting and Support

If you are unable to connect to applications hosted by a Cloud Service Provider (CSP) across your NetBond connection, use the following troubleshooting steps. This will begin to isolate the issue and make it easier for Technical Support to assist you.

The Troubleshooting Diagram (figure 7-1) shows the troubleshooting steps that are described in this section.

Please note that additional steps may be necessary with your Cloud Service Provider or other AT&T teams.



Figure 7-1: Private Troubleshooting Diagram





Figure 7-2: Public Troubleshooting Diagram

7.1 Ping from an Endpoint on MPLS Network

Attempt a ping from an endpoint on your MPLS network (Point A in the Troubleshooting Diagram) to the IP assigned to the CSP edge router (Point C).

Note: This is the second IP received from the NetBond VLAN.

7.1.1 If the Ping is Successful

If the ping is successful, it indicates the following:

- 1. The MLPS-VPN connection is good from the customer endpoint (Point A) thru the MPLS network, and thru the NetBond connection (Point B) to the CSP edge router (Point C).
- **2.** If the connection is successful for pings and trace routes, the issue may be with your CSP. Engage your CSP directly.

7.1.2 If the Ping is Not Successful

If the ping is not successful, perform the following troubleshooting steps:

- 1. Check for VLAN IPs (Points B and C) in the routing tables on the customer edge routers (Point A).
 - a. If the VLAN IPs are NOT in the routing tables, the issue could be with the AVPN or NetBond. Please submit a NetBond ticket via the AT&T Cloud Portal.
 - b. If the VLAN IPs are in the routing tables, go to step two.
- Perform a trace route from the endpoint on the MLPS network (Point A) to the CSP CE (Point C) IPs. Determine where the trace route dies – then go to step three or four.
- 3. If the trace route dies before AT&T IPE (Point B):

- a. Check with your internal network engineer to verify network connectivity across the customer network.
- b. If all connectivity tasks in the customer network are good, there could be a problem in the AT&T MPLSVPN (AVPN) network. Please submit a trouble ticket with the AT&T VPN Care team.
- 4. If the trace route dies at the AT&T IPE (point B), there could be a problem in the NetBond connection. Please submit a NetBond ticket via the AT&T Cloud Portal.

7.2 Technical Support

If you are still unable to resolve your connection issue after walking through the troubleshooting steps in Section 7.1, utilize the "Chat Now" option under "My Dashboard" as shown in figure 7-2.

+ AT&T CLOUD Test - AVPN from AP to US	How do I?	To access your services, to expand the subaccour select your service.	please click on the "+" t you wish to view and	Shortcuts Manage Account Manage Subacount Add/Remove Users Manage Roles and P View/Pay my Bill View my Notification Cancel my User Acc View my Accounts P Reset my Password Cancel/Reactivate m Account	s ermissions Preferences ount references IV Company
Service Status Legend: Service Disruptions Service Failure Overall Service Status ATAT Medical Imaging and Information Management. ATAT Synaptic Storage as a Service	Ticket Sum Compute: 0 ope open 0 in proc	mary sunt √ie n 0 in progress NetBor press	Interess AT&T Synap Store all the you use. AT&T Medica Access all o with our cent	ted in other clou tic Storage as a Service data you want. Simply I Imaging & Information Your patients' medical trailized cloud solution.	d solution3 pay for what In Management Images anytime

Figure 7-3: My Services: Technical Support - Chat Now

You also have the option to submit a service ticket. To submit a service ticket, use the following steps:

- 1. Select Quick Links and then "Ticketing"
- 2. Select the appropriate subaccount and click "New Ticket" (figure 7-3).



Home / My Dashboard / Ticketing
Online Support
Subaccount
Currently there are no existing tickets for Subaccount UAT_Test1.Please click on the new ticket button to create new trouble ticket.
UAT_Test1 V New Ticket

Figure 7-4: Submitting a Service Ticket Step Two

- 3. On the Open New Ticket Screen (figure 7-4), complete the following ticket information fields:
 - Cloud Service Select AT&T NetBond
 - Priority Level: Select the appropriate priority level from the following options:

Portal Priority	Status Response	Status Update Interval
Critical	15-30 min	30 min – 1 hour
High	30 min – 1 hour	2 hours
Normal	2 hours	Daily
Low	1 business day	Daily

Table 7-1: Priority Levels for Service Tickets

- Issue Summary: Select the appropriate Issue Summary.
- Issue Description: Provide details regarding the issue you are experiencing.
- Click "Submit".



Selected Account: AT&T CLO	JD Test - AVPN from	n AP to US #2	
Selected SubAccount: UAT_T	est1		
Cloud Service*:	1	(ssue Summary*:	
Select One	•		~
Priority*:	1	ssue Description:	
Normal 🗸	1		
This is Service Impacting			

Figure 7-5: Open a Service Ticket Detail Screenshot

- 4. To receive an email confirmation that your ticket has been submitted, you may need to update your profile to "I wish to receive ticket notifications" the default is automatically set to "I do not wish to receive ticket notifications". To do this:
 - Hover over "My Account" and select "View My Profile" (figure 7-5).
 - Choose "Edit" and "My notifications preferences" and select "I wish to receive ticket notifications" (figure 7-5).

	Subaccounts	Users	Roles & Per	rmissions	My Profile	
My User	Details		▶ Edit	Username User ID: Password:	assword	► Reset
My notion	fications prefe	Demo8 v				• Edit
My notif Select Acco	fications prefe	Demo8 v cations.]			Edit
My notif Select Acco O I do not v U wish to	fications prefe	Demo8 v cations.	>			Edit
My notif Select Acco I do not v Select Acco	fications prefe unt AT&T Cloud Services receive tickets notifications totifications to my primary - mary email address: thom.	Demo8 v cations. email address.				• Edit
My noti Select Acco I do not v U wish to Send N Prin	fications prefe int AT&T Cloud Services ish to receive tickets notifi- receive tickets notifications otifications to my primary mary email address: thomason otifications to my alternate	Demo8 v cations. , email address. as.j.forner@att.cc email address.	m			Edit

Figure 7-6: Manage/Edit Profile

7.3 Support Plan Details

In addition to Base Support, which is included with each cloud service at no additional cost, Enhanced Support is available per-subaccount or per-enterprise account.

7.3.1 Base Support

Base support is included with each cloud service at no additional cost, providing AT&T Cloud Services users with online support and technical resources.

7.3.2 Enhanced Support

Enhanced support is available for \$19.95/month per subaccount and/or \$99.95/month per enterprise (per country). This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our AT&T Cloud Services technical support team available by phone or email to answer your questions 24 x 7 x 365.

To upgrade your Support Plan, select "Manage Accounts" and click "Upgrade" under Service Level (figure 7-6). Next, pick a Support Plan that best meets your company needs (figure 7-7).



100 C 100	Cubaccounts	Hears	Dolos & Dermissions	MuDrofile	
CCOUNTS	Subaccounts	Users	Koles & Permissions	Myrrottle	
TRT CLOUD Tes					of Settings
	2 AT&T	CLOUD Tes	t - AVPN from AP to US #2		Support Level:
					Basic (US) Upgrade
	Company:	AT&T CLOUD T	est - AVPN from AP to US #2		Cancel Account
	Enterprise	Manager:			Add Enterprise Manager
	ORTTEST For	rZeroOne			Add New Subaccount
	Edit Profile	Replace			Summary
	Countries				Number of Subaccounts:
	us		3		
					Account Service Summary
	Invoices				Notes and a

Figure 7-7: Upgrade a Support Plan

AT&T CLOUD Test - AVPN fro 🗸	
k a support plan:	
ubaccount Enhanced Support \$19.95 / Month)	Enterprise Enhanced Support (+\$99.95 / Month)
want enhanced support for the subaccount:	I want enhanced support in the Country:
Select a Service Group	United States v ?
is fee-based support covers any cloud service you have today well as new ones that you may add tomorrow. In addition to e resources provided under base support, enhanced support ovides access to our AT&T Cloud Services technical support am available by phone or email to answer your questions Ix7x365.	This fee-based support covers any cloud service you have today as well as new ones that you may add tomorrow. In addition to the resources provided under base support, enhanced support provides access to our AT&T Cloud Services technical support team available by phone or email to answer your questions 24x7x365.

Figure 7-8: Pick a Support Plan

