



BeyondTrust

Remote Support Appliance Interface 6.0 (/appliance)

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Secure Remote Access Appliance Overview

BeyondTrust was the first to introduce an appliance-based approach to remote support. Our patented deployment model - the Secure Remote Access Appliance - is a highly secure option for deploying remote support.

The Secure Remote Access Appliance, whether physical or virtual, resides at your facility or data center, under your security measures. This deployment model offers more control over security, giving you a safe way to integrate remote support with identity management and making it easy to export reporting data and videos for a complete audit trail.

Anatomy of the Secure Remote Access Appliance



The Secure Remote Access Appliance uses two administrative web interfaces to isolate hardware administration from user management, **/appliance** and **/login**.

Pictured: The BeyondTrust B400Appliance

Appliance Administration

Web Interface **/appliance**

Used for:

- Installing and configuring hardware
- Upgrading BeyondTrust software

Resource

The Secure Remote Access Appliance Administration Guide

User Administration

Web Interface **/login**

Used for:

- Managing users and workflows
- Reporting on support activity
- Creating and using integrations

Resource

The BeyondTrust Administrative Guide

Using this Guide

For security reasons, BeyondTrust has separated administration of the appliance from user administration.

Accordingly, this guide focuses exclusively on administration of the Secure Remote Access Appliance. Information on user administration (the /login web interface) can be found in the [BeyondTrust Admin Interface](#).

Secure Remote Access Appliance Web Interface

This guide is designed to help you administer the Secure Remote Access Appliance through its **/appliance** web interface. The appliance serves as the central point of administration and management for your BeyondTrust sites.

Use this guide only after an administrator has performed the initial setup and configuration of the Secure Remote Access Appliance as detailed in the [Secure Remote Access Appliance Hardware Installation Guide](https://www.beyondtrust.com/docs/remote-support/getting-started/deployment/hardware) at www.beyondtrust.com/docs/remote-support/getting-started/deployment/hardware. Once BeyondTrust is properly installed, you can begin supporting customers immediately. Should you need any assistance, please contact at www.beyondtrust.com/support.

Log into the Appliance Administrative Interface

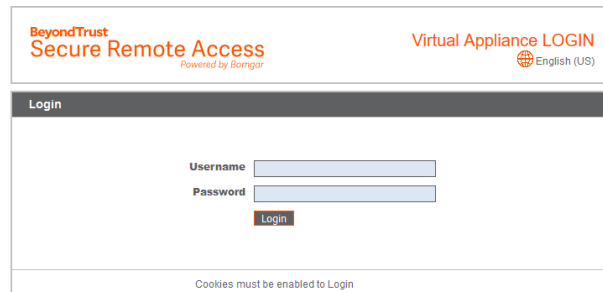
After installation of the appliance, log into the Secure Remote Access Appliance administrative interface by going to your appliance's public URL followed by **/appliance** (e.g., <http://support.example.com/appliance>).

Default Username: **admin**

Default Password: **password**

You are prompted to change the administrative password the first time you log in.¹

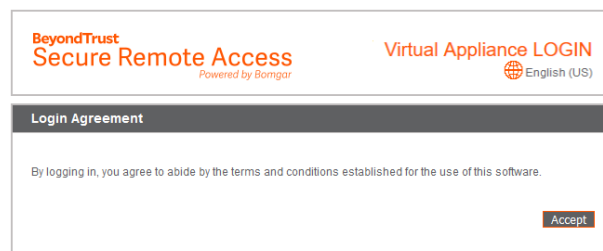
You may restrict access to the login screen by enabling a prerequisite login agreement that must be confirmed before the login screen is displayed.



If you wish to enable the prerequisite login agreement, please see "Appliance Administration: Restrict Accounts, Networks, and Ports, Set Up Syslog, Enable Login Agreement, Reset Admin Account" on page 27.



Note: For security purposes, the administrative username and password for the `/appliance` interface are distinct from those used for the `/login` interface and should be managed separately.



¹Passwords must be at least 8 characters in length and include each of the following: an uppercase letter, a lowercase letter, a number and a special symbol.

Status

Basics: View Appliance Details

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
BASICS	HEALTH					

The **Basics** page gives you information about your Secure Remote Access Appliance and allows you to monitor your system. You can also set your local time to any valid global time zone. The system time is displayed in UTC by default.

Appliance Statistics	
Appliance Model	Virtual Appliance (8xv2)
Host Hypervisor	VMware
Serial Number	4C7F1-08C2B8-4D88E-E90C8
System GUID	45c2d4803a4a057ba332eaf7a12332
Base Software Version	5.5.0 (37722-83159a53520c1101030ba01579d279d0098d)
Service Pack	29
System Architecture	x64
Firmware Version	5
Firmware Build Date	Fri Aug 09, 2019 15:25:56 UTC
System Up-Time	37 days, 21:19
Processes	0.03, 0.05, 0.00 (0)
System Time	Mon Sep 16, 2019 13:34:49 UTC
Time Zone	UTC <input type="button" value="v"/>

In nearly all scenarios, this setting can be left unchanged. BeyondTrust discourages multiple sites on one appliance. However, if your setup requires more than one site responding to one IP address, select a default site to respond should someone enter the IP address directly rather than the domain name. If more than one DNS entry directs to this IP address and you select **No Default**, an error message appears if someone tries to access your site by entering the IP address.

Default Site	
This feature is deprecated and will be removed in a future release. To achieve the same functionality, please see our Public Portal documentation here	
No Default	<input type="button" value="Save Changes"/>

From this page, you can also reboot or shut down your Secure Remote Access Appliance. Although rebooting your appliance is not required, you may want to make a monthly reboot part of your regular maintenance. You do not need physical access to the appliance in order to perform this reboot.

Reboot Shut Down	
<input type="button" value="Reboot This Appliance"/>	
<input type="button" value="Shut Down This Appliance"/>	

Please do not do the following unless instructed to do so by BeyondTrust Technical Support: Clicking the **Reset Appliance to Factory Defaults** button reverts your Secure Remote Access Appliance to its factory state. This completely removes all data, configuration settings, sites, and certificates from your appliance. Once the appliance is reset, it also powers itself off.

Reset Appliance To Factory Defaults	
<input type="button" value="Reset Appliance To Factory Defaults"/>	
<small>NOTES: Resetting the appliance to its factory default state will remove all sites, remove all data, remove all configuration and remove all certificates. After resetting, all custom network configuration will be lost. It will be necessary to have physical access to the appliance to reconfigure it. The appliance will power itself off after resetting. You will have to contact BeyondTrust Support to obtain a new install package.</small>	

Health: View RS Virtual Appliance Health Details




STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
BASICS	HEALTH					



Note: The **Health** tab is visible only for sites supported by a RS Virtual Appliance or Cloud Appliance.

The **Health** page allows you to monitor the state of your virtual or cloud appliance. It displays information pertaining to how many CPUs are in use as well as the amount of memory and storage being used. View the **Status** and **Notes** columns for suggestions on how to improve the health of your appliance.

Hardware Health

	Value	Status	Notes
CPU	Count: 8 Model: Intel(R) Xeon(R) CPU E5-2697 v3 @ 2.60GHz Speed: 2593.993 MHz Reservation: 0 MHz Limit: Unlimited		<ul style="list-style-type: none"> Consider allocating a CPU Reservation to this VM of at least 500 MHz to help maintain functionality when the host's CPUs are under contention.
Memory	Physical: 16051 MiB Used: 15342 MiB Swap Used: 1187.33203125 MiB Reservation: 0 MiB Limit: 3145727 MiB Host Ballooning: 0 MiB Host Swapping: 0 MiB		<ul style="list-style-type: none"> Memory swapping could indicate that this appliance is undersized for the current workload. Consider allocating a Memory Reservation to this VM for the full amount of physical memory to avoid host swapping, which is detrimental to performance.
Storage	Total Space: 279.998 GiB		

Users

Change Password and Username, Add User

STATUS

USERS

NETWORKING

STORAGE

SECURITY

UPDATES

SUPPORT

USERS

SAML

Here, you can add, edit or delete administrative users for the /appliance interface. You can also change an administrator's username, display name, or password. BeyondTrust recommends changing your password regularly to insure protection against unauthorized access.

i Please see "[Appliance Administration: Restrict Accounts, Networks, and Ports, Set Up Syslog, Enable Login Agreement, Reset Admin Account](#)" on page 27 to set account restriction rules including password expiry and history.

Note: You must have at least one user account defined. The Secure Remote Access Appliance comes with one account predefined, the admin account. You can keep just the admin account, create additional accounts, or replace the admin account.

User Accounts				
<input type="text"/>		<input type="button" value="Search"/>	<input type="button" value="Clear"/>	<input type="button" value="Create New User"/>
Total Users: 3				
Username	Display Name	Consecutive Failed Logins		
admin	admin	0	<input type="button" value="Edit"/>	
adumas	Alexandre Dumas	0	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
epoe	Edgar Poe	0	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
Total Users: 3				
<input type="checkbox"/> - The user is locked out.				

User:: Add

Username

ggordon

Display Name

George Gordon

Password

New Password

Confirm New Password

NOTE: Passwords must be at least 8 characters long and must contain at least one uppercase character, one lowercase character, one number, and one special character.

SAML: Set Up Authentication through a SAML Identity Provider



Configure your appliance to allow users to authenticate to the /appliance interface using SAML.



Note: To use SAML authentication, you must have an identity provider such as Okta, OneLogin, Azure AD, or ADFS.

To set up the connection, start with the **Service Provider Settings** section. If your identity provider (IDP) allows you to upload metadata from the service provider (SP), click **Download Service Provider Metadata**. This gives you an XML file that you can upload to your IDP when creating the application. Alternatively, copy and paste the **Entity ID** and **SSO URL** into your IDP.



Tip: The **Entity ID** may be called **Audience URI** in your identity provider.

By default, **SAML Payload Encryption** is disabled, but you may generate or upload a private key to enable it. To have the appliance generate a private key and certificate, select **Generate Private Key** and click **Save Changes**. Then, click **Download SP Certificate** and upload the generated certificate to your identity provider. To provide the private key and certificate yourself, select **Upload Private Key**, choose the certificate file, and enter its password, if needed. You must upload the same certificate file to your identity provider.

After saving the application in your identity provider, you may have the option to download its metadata. If so, upload that file to your appliance with the **Upload Identity Provider Metadata** button. Alternatively, copy and paste the **Entity ID** and **Single Sign-On Service URL** into your appliance, in the **Identity Provider Settings** section.



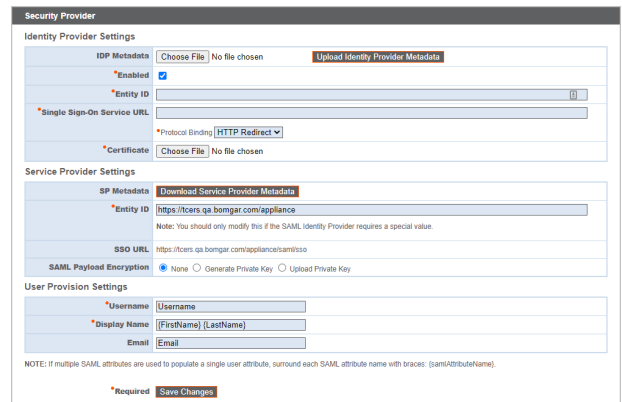
Tip: The **Entity ID** may be called **Identity Provider Issuer** or **Issuer URL**, and the **Single Sign-On Service URL** may be called **SAML 2.0 Endpoint**.

Protocol Binding determines whether an HTTP POST occurs or whether the user is redirected to the sign-on URL. Leave this set to **HTTP Redirect** unless otherwise required by your identity provider. You must also provide the IDP **Certificate**, which you can download from the IDP.

Under **User Provision Settings**, map the **Username**, **Display Name**, and **Email** to the corresponding attributes in your identity provider.

Click **Save Changes** to save the SAML configuration.

Now, on the /appliance login page, users will see a link to **Use SAML Authentication** below the **Login** button. Users who have been assigned to the application created in your IDP can click this link to log in. If they are not already signed into the IDP, they will be redirected to the IDP to log in before being redirected back to /appliance.



Networking

IP Configuration: Configure IP Address and Network Settings

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
IP CONFIGURATION	STATIC ROUTES	SNMP				

Companies with advanced network configurations can configure multiple IP addresses on the appliance's ethernet ports. Using multiple ports can enhance security or enable connections over non-standard networks. For example, if employees are restricted from accessing the internet but need to provide off-network support, using one port for your internal private network and another for the public internet allows users worldwide to access systems without breaching your network security policies.

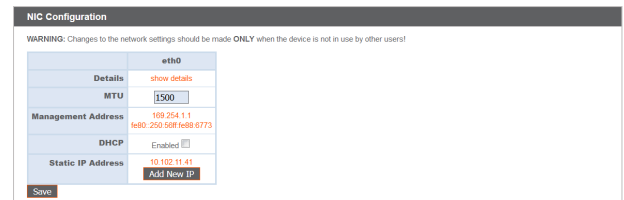
NIC teaming combines your system's physical network interface controllers (NICs) into a single logical interface. NIC teaming operates in "Active-Backup" mode. One of the NICs is used to carry all network traffic. If the link on that NIC is lost for any reason, the other NIC becomes active. Before activating NIC teaming, please ensure that both NICs are connected to the same network segment (subnet) and that you have IP addresses configured on only one of the existing NICs.



Note: If you are using a virtual or cloud appliance environment, the **Enable NIC Teaming** option is not available.

Although multiple IP addresses can be assigned to each NIC, do not configure either NIC such that it has an IP address that is in the same subnet as an IP address on the other NIC. In this scenario, packet loss occurs with packets originating from the IP on the NIC that does not have the default gateway. Consider the following example configuration:

- eth0 is configured with the default gateway of 192.168.1.1
- eth0 is assigned with 192.168.1.5
- eth1 is assigned with 192.168.1.10
- Both eth0 and eth1 are connected to the same subnet switch



NIC Configuration

WARNING: Changes to the network settings should be made ONLY when the device is not in use by other users!

eth0	
Details	show details
MTU	1500
Management Address	192.168.1.1 eth0: 250.558.668.6773
DHCP	Enabled <input type="checkbox"/>
Static IP Address	10.102.11.41 Add New IP

[Save](#)

Given this configuration, traffic from both NICs are sent to the default gateway (192.168.1.1) regardless of which NIC received traffic. Switches configured with dynamic ARP send packets randomly to either eth0 (192.168.1.5) or eth1 (192.168.1.10), not both. When eth0 receives these packets from the switch destined for eth1, eth0 drops the packets. Some switches are configured with static ARP. These switches drop all packets received from eth1 since this NIC does not have the default gateway and is not present in the static ARP table of the gateway. If you wish to configure redundant NICs on the same subnet, use NIC teaming.

By default, Dynamic Host Configuration Protocol (DHCP) is enabled for your appliance. DHCP is a network protocol that uses a DHCP server to control the distribution of network parameters, such as IP addresses, allowing systems to automatically request these parameters. This reduces the need to manually configure settings. In this case, when checked, an IP address is obtained from the DHCP server and is removed from the pool of available IP addresses.



Note: To learn more about DHCP, please see [Dynamic Host Configuration Protocol \(DHCP\)](https://docs.microsoft.com/en-us/windows-server/networking/technologies/dhcp/dhcp-top) at <https://docs.microsoft.com/en-us/windows-server/networking/technologies/dhcp/dhcp-top>.

Click **Show Details** to view and verify transmission and reception statistics for each ethernet port on the appliance.

NIC Configuration			
WARNING: Changes to the network settings should be made ONLY when the device is not in use by other users!			
		eth0	eth1
Details	Interface	eth0	eth1
	MAC Address	00:30:48:b8:ce:1c	00:30:48:b8:ce:1d
	Link Detected	Yes	No
	Link Speed	1000 Mbps	
	Link Duplex	Full	
	RX packets	37500912	0
	RX bytes	9693866569	0
	RX errors	0	0
	RX dropped	149550	0
	TX packets	7962467	0
	TX bytes	325260708	0
	TX errors	0	0
TX dropped	0	0	
Collisions	0	0	
MTU	1500	1500	
Management Address	169.254.1.1 fe80::200:48f:b808:ce1c	none	
IP Address	10.10.28.240	192.168.1.213 [disabled]	
Add New IP Save			
<input type="checkbox"/> Enable NIC Teaming <small>NOTE: NIC Teaming allows you to combine your system's physical NICs into a single logical NIC. This operates in "Active-Backup" mode. One of the NICs will be used to carry all network traffic. If the link on that NIC is lost for any reason, the other NIC will become active. Before activating NIC Teaming, please ensure that both NICs are connected to the same network segment (routed), and that you only have IP addresses configured on one of the existing NICs.</small> Save			

Under the **Global Network Configuration** section, configure the hostname for your Secure Remote Access Appliance.

Global Network Configuration	
Hostname	rcers.qa.bomgar.com
IPv4 Default Gateway	10.102.10.1 Using Device: eth0
IPv6 Default Gateway	Using Device: eth0
Custom DNS Servers	10.10.12.190
<small>NOTE: Optional. Enter a list of IP addresses, one per line, to be used for DNS lookups.</small> <input type="checkbox"/> Fallback to Public DNS Servers <small>NOTE: If no DNS servers are configured above, or if they are unreachable, enabling this setting will cause the Secure Remote Access Appliance to use the publicly-available DNS servers from OpenDNS. For more information about OpenDNS, please visit www.opendns.com.</small>	
Respond to Ping	<input checked="" type="checkbox"/>
NTP Server	clock.bomgar.com <small>NOTE: This setting is used to keep the system clock in sync with an NTP time server. You may enter a single hostname or IP address. "clock.bomgar.com" is the default.</small>
Save Changes	
WARNING: Changes to the network settings should be made ONLY when the device is not in use by other users!	

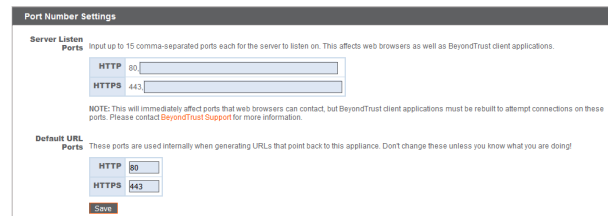


Note: The hostname field does not need to meet any technical requirements. It does not affect what hostname client software or remote users connect to. (To make these changes, see **/login > Status > Information > Client Software Is Built to Attempt**. If the hostname attempted by the client software needs to change, notify BeyondTrust Technical Support of the needed changes so that Support can build a software update.) The hostname field exists primarily to help you distinguish between multiple Secure Remote Access Appliances. It is also used as the local server identifier when making SMTP connections to send email alerts. This is useful if the **SMTP Relay Server** specified at **/appliance > Security > Email Configuration** is locked down. In this case, the configured hostname might have to match the reverse-DNS lookup of the appliance's IP address.

Assign a default gateway, selecting which ethernet port to use. Enter an IP address for one or more DNS servers. If DHCP is enabled, the DHCP lease provides you with a default gateway as well as a listing of DNS servers in order of preference. Any statically configured DNS servers listed in the **Custom DNS Servers** field are attempted to be reached first, followed by DNS servers received from DHCP. In the event that these local DNS servers are unavailable, the **Fallback to OpenDNS Servers** option enables the Secure Remote Access Appliance to use publicly available DNS servers from OpenDNS. For more information about OpenDNS, visit www.opendns.com.

Allow your appliance to respond to pings if you wish to be able to test if the host is functioning. Set the hostname or IP address for a Network Time Protocol (NTP) server with which you wish your Secure Remote Access Appliance to synchronize.

Two settings are available in the **Port Number Settings** area: **Server Listen Ports** and **Default URL Ports**. When configuring these, keep in mind that connections made to valid ports may be rejected by network restrictions set in **/appliance > Security > Appliance Administration** and in **/login > Management > Security**. The opposite is also true: connections made to invalid ports are rejected even if such connections satisfy network restrictions.

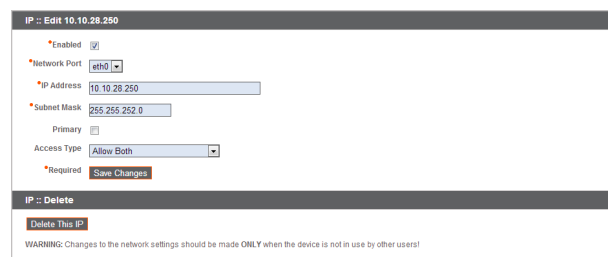


The **Server Listen Ports** section allows you to configure ports for the appliance to listen on. You may specify up to 15 comma-separated ports for HTTP and 15 comma-separated ports for HTTPS. Each port may appear only once in any field, and it may appear in only one field, not both. The appliance responds to HTTP connections made to any of the ports listed in the HTTP field, and the appliance responds to HTTPS connections made to any of the ports in the HTTPS field. You cannot change the built-in listen ports (80 and 443).

To access the appliance on a given port using a browser requires that you enter the port in the URL of the browser (e.g., support.example.com:8200). Clients downloaded from the appliance attempt connections to the ports listed on the **/login > Status > Information** page under **Client Software Is Built to Attempt**. These ports are not configurable from **/login** or **/appliance**. To change them, you must contact BeyondTrust Support and have a new update built for your appliance. Once installed, the update sets the **Attempt** ports as specified by BeyondTrust Support in the parameters of the update.

Default URL Ports are used when generating URLs that point back to the appliance, such as session keys generated from the representative console. When the default ports are blocked on the network (or can be expected to fail for any other reason), you can change the default URL ports to have generated URLs spawn with the ports that you specify. Whatever ports you enter should also be listed in the **Server Listen Ports**; otherwise, the default ports are not connected. For example, if you enter **8080** in the **Default URL Port** field, make sure **8080** is also in the **HTTP** or **HTTPS Listen Port** field. Unlike the listen port fields, you cannot enter more than one port in either of the URL port fields. You cannot enter the same port in both fields.

When adding or editing an IP address, choose whether that IP should be enabled or disabled. Select the network port on which you would like this IP to function. The **IP Address** field sets an address to which your appliance can respond, while **Subnet Mask** enables BeyondTrust to communicate with other devices.



When editing an IP address that is on the same subnet as another IP address for this appliance, choose if this IP address should be **Primary**. When this box is checked, the appliance designates this IP address to be the primary or originating IP address for the subnet. This helps, for example, to ensure that any network traffic originating from the appliance on that subnet matches and complies with defined firewall rules.

From **Access Type**, you can restrict access over this IP to the public site or customer client. Use **Allow Both** to allow access for both the public site and customer client.



Note: To restrict access to the **/login** interface, set network restrictions under **/login > Management > Security**. To restrict access to the **/appliance** interface, set network restrictions under **/appliance > Security > Appliance Administration**.

When viewing the management IP address¹, the **Telnet Server** dropdown provides three settings: **Full**, **Simplified** and **Disabled**, as detailed below. These settings change the menu options of the telnet server that is available only on this private IP and that can be used in



¹Do not delete or modify the management IP address.

emergency recovery situations. Since the telnet feature is specifically tied to the built-in private IP, it does not appear under any other configured IP addresses.

Setting	Function
Full	Enables the telnet server with full functionality
Simplified	Allows four options: View FIPS Error , Reset to Factory Defaults , Shutdown , and Reboot
Disabled	Completely disables the telnet server

Static Routes: Set Up Static Routes for Network Communication

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
IP CONFIGURATION	STATIC ROUTES	SNMP				

Should a situation exist in which two networks are unable to talk to each other, you can establish a static route so that an administrator with a computer on one network can connect through the Secure Remote Access Appliance to a computer on the other network, provided that the appliance is in a place where both networks can communicate with it individually.

Only advanced administrators should attempt to set up static routes.

Static Routes

IPv4

Destination Network	Netmask	Next Hop	Interface
0.0.0.0	0	10.10.30.1	eth0
			eth0

IPv6

Destination Network	Prefix Length	Next Hop	Interface
::	0	2620:104:6000:30::1	eth0
			eth0

NOTE: This is used for advanced network configuration. Take care to define things correctly.
To delete an existing route clear all the fields, and save the changes.

Save Changes

WARNING: Changes to the network settings should be made **ONLY** when the device is not in use by other users!

SNMP: Enable Simple Network Management Protocol

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
IP CONFIGURATION	STATIC ROUTES	SNMP				

The Secure Remote Access Appliance supports Simple Network Management Protocol (SNMP)¹ monitoring for network, hard drive (s), memory, and CPU statistics. This allows tools that collect availability and other statistics via the SNMP protocol to query the Secure Remote Access Appliance for monitoring purposes.

To enable SNMP for this appliance, check **Enable SNMPv2**. This enables a SNMPv2 server to respond to SNMP queries. Enter a value for the **System Location**, the **Read-Only Community Name**, and the **IP Restrictions**, or IP addresses that are allowed to query this appliance using SNMP. Note that if no IP addresses are entered, all hosts are granted access.

Networking :: SNMP Configuration

Enable SNMPv2
☒

Enable the SNMPv2 server on this appliance. You will be able to configure server options below.

Read-Only Community Name

Enter the community name that the SNMPv2 server should respond to.

System Location

Enter the location of this BeyondTrust appliance. This value will be returned in the SNMPv2-MIB::sysLocation OID.

IP Restrictions

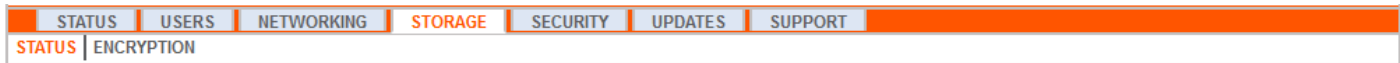
Enter IP addresses that should be allowed to access SNMP on this appliance. Enter the IP Addresses, one entry per line, in the form "IP_Address/Prefix_Length". The Prefix Length should be an integer. If no entries are provided, all hosts will be granted access.

Required

¹Simple Network Management Protocol (SNMP) is an Internet-standard protocol used for monitoring and managing networked devices (see [Simple Network Management Protocol](#)).

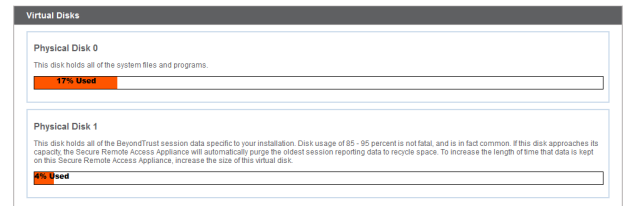
Storage

Status: Disk Space and Hard Drive Status



The **Status** page displays the percentage of your Secure Remote Access Appliance's hard drive space that is in use.

If you enable all recording features on your access sites (session and remote shell recordings) or if your overall session count is high, it is common to see a higher amount of disk usage. Note that disk usage of 85-95% is NOT a cause for alarm. If the hard drive should become low on disk space, the appliance is configured to automatically purge the oldest session data and recycle that disk space for new session data.



Specific to the BeyondTrust B300 Appliance

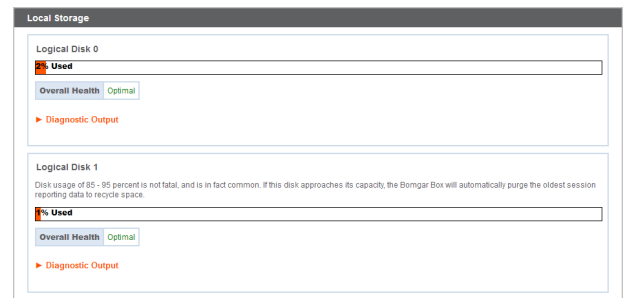
The B300 uses a Redundant Array of Independent Disks to back up your data. RAID 6 is used to allow the appliance to lose up to 2 of its 4 drives without any data loss. In the event of a failure, remove the corrupted drive and contact BeyondTrust for a return maintenance authorization and repair or replacement drive. When you replace the damaged drive, the appliance automatically rebuilds the RAID using the new drive. You do not need to power off the appliance when replacing drives.



Specific to the BeyondTrust B400 Appliance

The B400 has two sets of logical Redundant Array of Independent Disks (RAID) disks. This RAID configuration includes eight physical disk drives configured into two logical RAID drives: A RAID 1 configuration that is logical disk 0, and a RAID 6 configuration that is logical disk 1.

If one of the RAID 1 or RAID 6 physical drives fails, no performance impact or data loss occurs. However, second drive failure in the RAID 6 configuration degrades performance, although it does not cause data loss.



Hardware Failure Notification (B300 and B400 Only)

The LEDs on your appliance also indicate your hard drives' status. Normally, the LEDs will blink to indicate disk activity. Should a hard drive fail, the LED will turn red, and an audible alarm will warn you of the failure. To turn off the alarm before the system is restored, click the **Silence Alarm** button on this web interface.





Note: The **Silence Alarm** button will be available regardless of whether or not an alarm is sounding at the time. The button cannot be used as an indicator of whether or not an alarm is active at any particular moment.



Note: To verify whether an alarm is sounding, check the **Health Status** located immediately above the **Silence Alarm** button. If there is an alarm sounding in the same room as the Secure Remote Access Appliance and you want to eliminate the appliance as the source, click the **Silence Alarm** button a few times to cancel any and all possible alarms which might be active.

Encryption: Encrypt Session Data

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
STATUS	ENCRYPTION					

The **Encryption** section allows you to encrypt session data stored on your Secure Remote Access Appliance. When first encrypting your data, you are limited to 4GB or less of data; however, after the initial encryption, this 4GB limit no longer applies.

If you have not already created a secret store, go to **Security > Secret Store** to add one.



For more information, please see [Secret Store](#).



Note: If you have more than 4GB of data to initially encrypt, please contact BeyondTrust Technical Support at www.beyondtrust.com/support.

Storage :: Encryption

Storage Encryption Status: **Not Encrypted**

Encrypt

The storage encryption key will be stored locally. Click here to add a secret store.

Security

Certificates: Create and Manage SSL Certificates

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
CERTIFICATES	TLS CONFIGURATION	APPLIANCE ADMINISTRATION	EMAIL CONFIGURATION	SECRET STORE		

Manage SSL certificates, creating self-signed certificates and certificate requests, and importing certificates signed by a certificate authority.

Certificate Installation

The Secure Remote Access Appliance comes with a self-signed certificate pre-installed. However, to effectively use your Secure Remote Access Appliance, you also need to create a self-signed certificate at minimum, preferably requesting and uploading a certificate signed by a certificate authority. In addition to the CA certificate request feature, BeyondTrust includes functionality for obtaining and automatically renewing its own TLS certificates from the open Certificate Authority Let's Encrypt.

Let's Encrypt

Let's Encrypt issues signed certificates which are valid for 90 days, yet have the capability of automatically renewing themselves indefinitely. In order to request a Let's Encrypt certificate, or to renew one in the future, you must meet the following requirements:

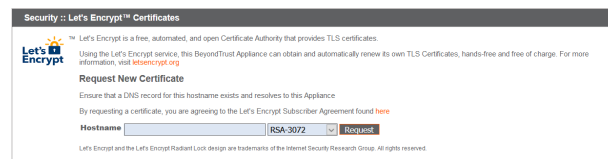
- The DNS for the hostname you are requesting must resolve to the appliance.
- The appliance must be able to reach Let's Encrypt on TCP 443.
- Let's Encrypt must be able to reach the appliance on TCP 80.



For more information, please see letsencrypt.org.

To implement a Let's Encrypt certificate, in the **Security :: Let's Encrypt™ Certificates** section:

- Enter the fully qualified domain name (FQDN) of the appliance in the **Hostname** field.
- Use the dropdown to choose the certificate key type.
- Click **Request**.



As long as the above requirements are met, this results in a certificate that will automatically renew every 90 days once the validity check with Let's Encrypt has completed.



Note: The appliance starts the certificate renewal process 30 days before the certificate is due to expire and requires the same process as the original request process does. If it has been unsuccessful 25 days prior to expiry, the appliance sends daily admin email alerts (if email notifications are enabled). The status will show the certificate in an error state.

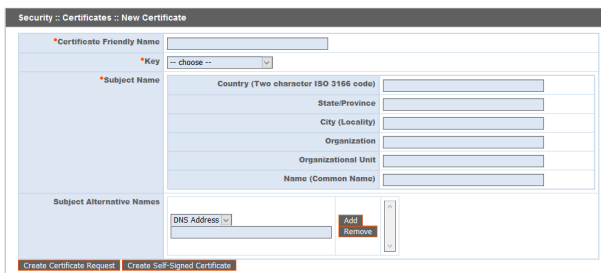


IMPORTANT!

Because DNS can apply only to one appliance at a time, and because an appliance must be assigned the DNS hostname for which it makes a certificate request or renewal request, we recommend that you avoid use of Let's Encrypt certificates for failover appliance pairs.

Other CA-Issued Certificates

To create a self-signed certificate or a certificate request from another issuer, locate the **Security :: Other**




Certificates section and click **Create**. In **Certificate Friendly Name**, enter a name used to identify this certificate. From the **Key** dropdown, choose to create a new key or select an existing key. Enter the remaining information pertaining to your organization.



Note:

If the certificate being requested is a replacement, you should select the existing key of the certificate being replaced.

If the certificate being requested is a re-key, you should select **New Key** for the certificate.

For a re-key, all information on the **Security :: Certificates :: New Certificate** section should be the same as the certificate for which re-key is being requested. A new certificate friendly name should be used so that it is easy to identify the certificate in the **Security :: Certificates** section.

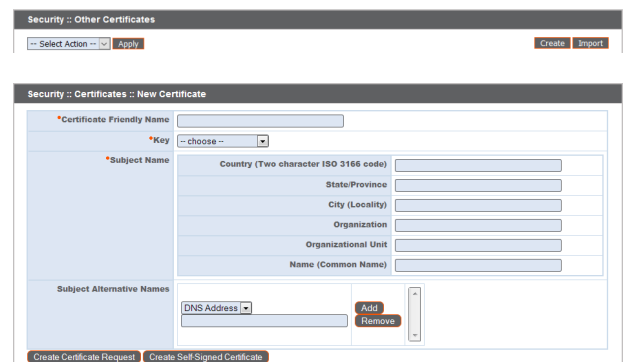
Required information for the re-key can be obtained by clicking on the earlier certificate from the list displayed in the **Security :: Certificates** section.

For a new key or re-key certificate, the steps to import are the same.

Other CA-Issued Certificates

To create a certificate request:

- Locate the **Security :: Other Certificates** section and click **Create**.
- In **Certificate Friendly Name**, enter a name you will use to identify this certificate.
- From the **Key** dropdown, choose the **Existing Key** of your *.beyondtrustcloud.com certificate.
- Enter the remaining information pertaining to your organization.
- In the **Name (Common Name)** field, enter a descriptive title for your BeyondTrust site.



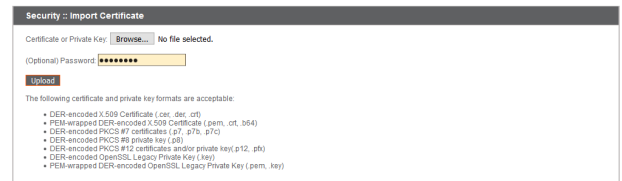
- In the **Subject Alternative Names** section, enter your BeyondTrust site hostname and click **Add**. Add a SAN for each DNS name or IP address to be protected by this SSL certificate.



Note: DNS addresses can be entered as fully qualified domain names, such as `access.example.com`, or as wildcard domain names, such as `*.example.com`. A wildcard domain name covers multiple subdomains, such as `access.example.com`, and so forth.

If you intend to obtain a signed certificate from a certificate authority, click **Create Certificate Request** to create a certificate signing request (CSR). Otherwise, click **Create Self-Signed Certificate**.

To use a CA-signed certificate, contact a certificate authority of your choice and purchase a new certificate from them using the CSR you created in BeyondTrust. Once the purchase is complete, the CA will send you one or more new certificate files, each of which you must install on the Secure Remote Access Appliance.



To upload certificates or private keys, click **Import**. Browse to the first file and upload it. Repeat this for each certificate sent by your CA. Often, a CA will not send their root certificate, which must be installed on your Secure Remote Access Appliance. If the root is missing, a warning appears beneath your new certificate: "The certificate chain appears to be missing one or more certificate authorities and does not appear to terminate in a self-signed certificate".

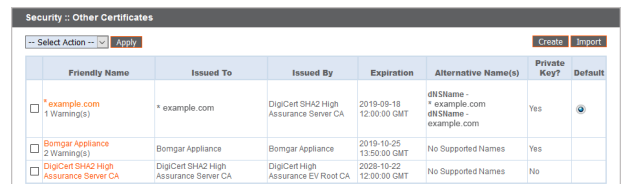
To download the root certificate for your appliance certificate, check the information sent from your CA for a link to the appropriate root. If there is none, contact the CA to obtain it. If this is impractical, search their website for their root certificate store. This contains all the root certificates of the CA, and all major CAs publish their root store online.


Usually, the easiest way to find the correct root for your certificate is to open the certificate file on your local machine and inspect its "Certification Path" or "Certificate Hierarchy". The root of this hierarchy or path is typically shown at the top of the tree. Locate this root certificate on the root store of your CA's online root store. Once done, download it from the CA's root store and import it to your Secure Remote Access Appliance as described above.

If the intermediate and/or root certificates are different from those currently in-use (or if a self-signed certificate was in-use), please request an update from BeyondTrust Technical Support. BeyondTrust Technical Support will need a copy of the new certificate and its intermediate and root certificates.

Certificates

View a table of SSL certificates available on your appliance.



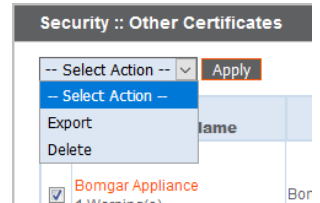
	Friendly Name	Issued To	Issued By	Expiration	Alternative Name(s)	Private Key?	Default
<input type="checkbox"/>	* example.com (1 Warning(s))	* example.com	DigiCert SHA2 High Assurance Server CA	2019-09-18 12:00:00 GMT	dNSName - * example.com dNSName - example.com	Yes	
<input type="checkbox"/>	Bomgar Appliance (1 Warning(s))	Bomgar Appliance	Bomgar Appliance	2019-10-25 13:50:00 GMT	No Supported Names	Yes	
<input type="checkbox"/>	DigiCert SHA2 High Assurance Server CA	DigiCert SHA2 High Assurance Server CA	DigiCert High Assurance EV Root CA	2026-10-22 12:00:00 GMT	No Supported Names	No	

For connections that do not supply a Server Name Indication (SNI) or supply an incorrect SNI, select a default SSL certificate from the list to provide for these connections by clicking the button under the **Default** column. The default SSL certificate cannot be a self-signed certificate nor the default Secure Remote Access Appliance certificate provided for initial installation.

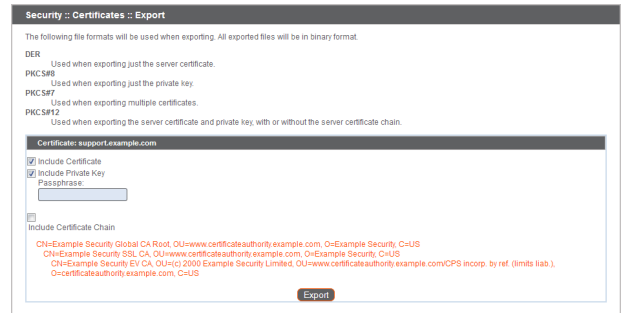


Note: To learn more about SNI, please see [Server Name Indication](https://cio.gov/sni/) at <https://cio.gov/sni/>.

To export one or more certificates, check the box for each desired certificate, select **Export** from the dropdown at the top of the table, and then click **Apply**.

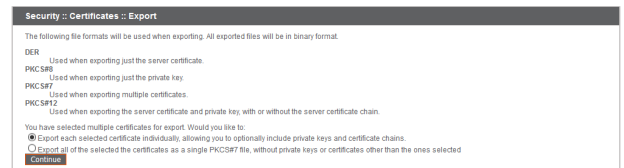


If you are exporting only one certificate, you immediately can choose to include the certificate, the private key (optionally secured by a passphrase), and/or the certificate chain, depending upon each item's availability. Click **Export** to start the download.

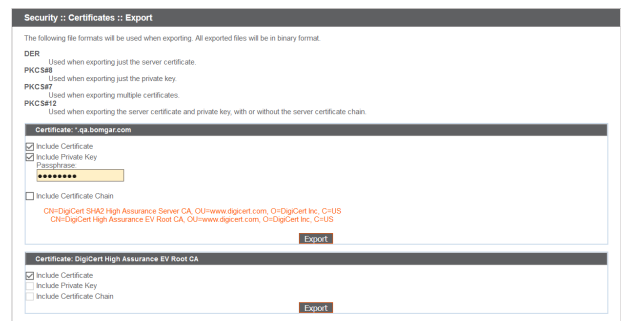


If you are exporting multiple certificates, you will have the option to export each certificate individually or in a single PKCS#7 file.

When selecting to export multiple certificates as one file, click **Continue** to start the download. With this option, only the actual certificate files will be exported, without any private keys or certificate chains.

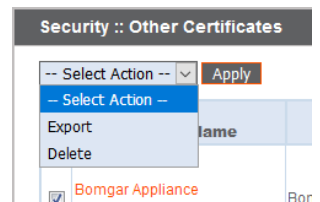


To include private keys and/or certificate chains in the export, select individual export and click **Continue** to view all selected certificates. For each listing, choose to include the certificate, the private key (optionally secured by a passphrase), and/or the certificate chain, depending upon each item's availability. Click **Export** to start the download.




Note: The private key should never, or rarely, be exported from an appliance. If it is stolen, an attacker could easily compromise the BeyondTrust site which generated the key. If it does need to be exported, be sure to assign a strong password to the private key.

To delete one or more certificates, check the box for each desired certificate, select **Delete** from the dropdown at the top of the table, and then click **Apply**.





Note: Under normal circumstances, a certificate should never be deleted unless it has already been successfully replaced by a working substitute.

To confirm accuracy, review the certificates you wish to delete, and then click **Delete**.



View a table of pending requests for third-party-signed certificates. Click a certificate request name to view details.

 **Note:** If you are renewing a certificate, use the same certificate Request Data that was used for the original certificate.

Certificate Requests			
<input type="button" value="Select Action"/> <input type="button" value="Apply"/>			
Subject	Alternative Name(s)	Fingerprint	
CN=support.example.com, OU=Potato Peeling Division, O=The Example Company, L=Redmond, ST=WA, C=US	<ul style="list-style-type: none"> • dn:StName = *example.org 	82c3c5f1a97a63314d4819a8a07b475980ac	
CN=support.example.net, OU=Potato Peeling Division, O=The Example Company, L=Redmond, ST=WA, C=US	<ul style="list-style-type: none"> • dn:StName = *example.net 	a5c2c78523647e105a523762a2c6e46540f51	

[illegible]

Security > Requests > Delete

Are you sure you wish to delete the following requests?

Subject	Alternative Name(s)	Fingerprint
01a-support.example.net, 01a-Support, 0=Business Company, LeRigland, 01a08, 01aU8, CHU8	<ul style="list-style-type: none">• dthName - support.example.net• dthName - remote.support.example.net	c29d393db34db209141a2e55bd10a85f0e8e10c4

Delete Cancel

Appliance Administration: Restrict Accounts, Networks, and Ports, Set Up Syslog, Enable Login Agreement, Reset Admin Account

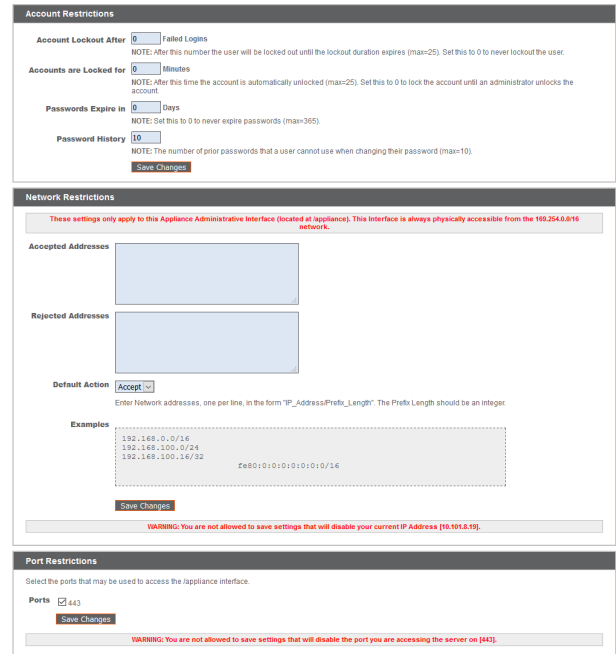
[STATUS](#) | [USERS](#) | [NETWORKING](#) | [STORAGE](#) | [SECURITY](#) | [UPDATES](#) | [SUPPORT](#)
[CERTIFICATES](#) | [TLS CONFIGURATION](#) | **[APPLIANCE ADMINISTRATION](#)** | [EMAIL CONFIGURATION](#) | [SECRET STORE](#)

Manage access to /appliance administrative interface accounts by setting how many failed logins are allowed. Set how long an account is locked out after passing the failed login limit. Also, set the number of days a password may be used before expiration and restrict reuse of previously used passwords.

You can restrict access to your appliance's administrative interface by setting network addresses that are or are not allowed and by selecting the ports through which this interface will be accessible.

In the **Accepted Addresses** field, define IP addresses or networks that will always be granted access to /appliance. In **Rejected Addresses**, define IP addresses or networks that will always be denied access to /appliance. Use the **Default Action** dropdown to determine whether to accept or to reject IP addresses and networks not listed in either of the above fields. In the case of overlap, the most specific match takes precedence.

If, for example, you want to allow access to 10.10.0.0/16 but reject access to 10.10.16.0/24 and reject access from anywhere else, you would enter 10.10.0.0/16 in the **Accepted Addresses** field, enter 10.10.16.0/24 in the **Rejected Addresses** field, and set the **Default Action** to **Reject**.



Account Restrictions

Account Lockout After: Failed Logins
NOTE: After this number the user will be locked out until the lockout duration expires (max=25). Set this to 0 to never lockout the user.

Accounts are Locked for: Minutes
NOTE: After this time the account is automatically unlocked (max=25). Set this to 0 to lock the account until an administrator unlocks the account.

Passwords Expire in: Days
NOTE: Set this to 0 to never expire passwords (max=365).

Password History:
NOTE: The number of prior passwords that a user cannot use when changing their password (max=10).

[Save Changes](#)

Network Restrictions

These settings only apply to this Appliance Administrative Interface (located at /appliance). This interface is always physically accessible from the 10.254.0.916 network.

Accepted Addresses:

Rejected Addresses:

Default Action: **Accept** Enter network addresses, one per line, in the form "IP_Address/Prefix_Length". The Prefix Length should be an integer.

Examples:

[Save Changes](#)

WARNING: You are not allowed to save settings that will disable your current IP Address [10.254.0.916].

Port Restrictions

Select the ports that may be used to access the appliance interface.

Ports: ☒ 443

[Save Changes](#)

WARNING: You are not allowed to save settings that will disable the port you are accessing the server on [443].

The Secure Remote Access Appliance can be configured to run a STUN service on UDP port 3478 to help facilitate peer-to-peer connections between BeyondTrust clients. Check the **Enable local STUN Service** box to use this functionality.



STUN Service

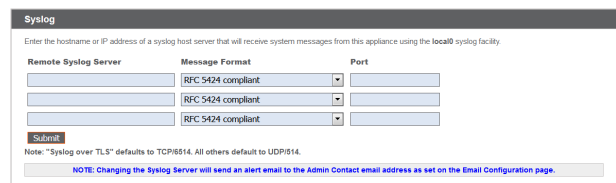
This appliance can be configured to run a STUN service on UDP port 3478 to help facilitate peer-to-peer connections between BeyondTrust Secure Remote Access clients.

Enable local STUN service: ☒

[Save Changes](#)

You can configure your appliance to send log messages to up to three syslog servers. Enter the hostname or IP address of the syslog host server receiving system messages from this appliance in the **Remote Syslog Server** field. Select the message format for the event notification messages. Choose from the standards specification **RFC 5424**, one of the legacy **BSD formats**, or **Syslog over TLS**. Syslog over TLS defaults to using TCP port 6514. All other formats default to using UDP 514.

However, the defaults can be changed. Secure Remote Access Appliance logs are sent using the **local0** facility.



Syslog

Enter the hostname or IP address of a syslog host server that will receive system messages from this appliance using the local0 syslog facility.

Remote Syslog Server	Message Format	Port
<input type="text"/>	RFC 5424 compliant	<input type="text"/>
<input type="text"/>	RFC 5424 compliant	<input type="text"/>
<input type="text"/>	RFC 5424 compliant	<input type="text"/>

[Save Changes](#)

Note: "Syslog over TLS" defaults to TCP/6514. All others default to UDP/514.

NOTE: Changing the Syslog Server will send an alert email to the Admin Contact email address as set on the Email Configuration page.



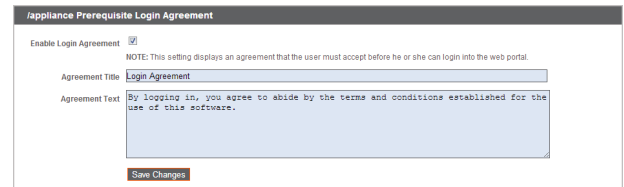
For Cloud-specific settings, please see [Appliance Administration: Set Syslog over TLS](https://www.beyondtrust.com/docs/remote-support/getting-started/deployment/cloud/syslog-over-tls.htm) at <https://www.beyondtrust.com/docs/remote-support/getting-started/deployment/cloud/syslog-over-tls.htm>.



Note: When changing or adding a syslog server, an alert is emailed to the administrator's email address. The administrator's information is configured at **Security > Email Configuration > Security :: Admin Contact**.

For a detailed syslog message reference, see the Syslog Message Reference Guide at [Syslog Message Reference Guide](http://www.beyondtrust.com/docs/remote-support/how-to/integrations/syslog/index) at www.beyondtrust.com/docs/remote-support/how-to/integrations/syslog/index.

You can enable a login agreement that users must accept before accessing the /appliance administrative interface. The configurable agreement allows you to specify restrictions and internal policy rules before users are allowed to log in.



The screenshot shows the configuration page for the /appliance Prerequisite Login Agreement. It includes a checkbox for 'Enable Login Agreement' which is checked. A note states: 'NOTE: This setting displays an agreement that the user must accept before he or she can login into the web portal.' Below this, there is a text input field for 'Agreement Title' containing 'Login Agreement' and a larger text area for 'Agreement Text' containing 'By logging in, you agree to abide by the terms and conditions established for the use of this software.' A 'Save Changes' button is at the bottom right.

You can choose to select **Reset Admin Account**, which will restore a site's administrative username and password to the default should the login be forgotten or need to be replaced.



The screenshot shows the configuration page for the Reset Admin Account feature. It has a dropdown menu labeled 'Reset Admin Account for Site:' with the option '-- Select One --' selected. A 'Reset Admin Account' button is located below the dropdown.

Email Configuration: Configure Appliance to Send Email Alerts

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
CERTIFICATES	TLS CONFIGURATION	APPLIANCE ADMINISTRATION	EMAIL CONFIGURATION	SECRET STORE		

Configure your SMTP relay server and set one or more administrative contacts so that your Secure Remote Access Appliance can send you automatic email notifications.

Security :: SMTP Relay Server

Send From Email Address

Enter a single email address. Email alerts from this Secure Remote Access Appliance will be sent with this as the "From" address.

SMTP Relay Server

Host

Enter an open relay SMTP server, or an SMTP server that will accept email to the Admin Contact addresses below

Port

The SMTP port is typically 25 or 587 for Encryption types: "None", "STARTTLS"; and 465 for Encryption type: "TLS".

Encryption If your SMTP Server supports TLS Encryption, select the desired type

☒ None
☐ TLS
☐ STARTTLS

Trusted Certificate

Upload a new Trusted Certificate

No file selected.

If necessary, upload the trusted root certificate (in PEM format) presented by your SMTP server.

☐ **Ignore TLS certificate errors.**

Only select this if you cannot provide the Trusted Certificate above. This could potentially make you vulnerable to TLS man-in-the-middle attacks.

SMTP Authentication If your SMTP Server requires authentication, enter a username and password

Username

Password

NOTE: Leave blank to keep the current password.

After entering the email addresses for the administrator contacts, save your settings and send a test email to ensure everything works correctly.

Security :: Admin Contact

Admin Contact Email
Enter email addresses, one per line, to be notified of important System events

☐ Send a test email when the settings are saved.

Save Changes

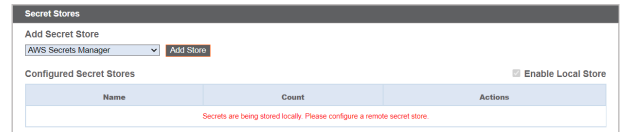
Emails are sent for the following events:

- **Syslog Server has been Changed:** A user on /appliance has changed the syslog server parameter.
- **RAID Event:** One or more RAID logical drives is not in Optimum state (Degraded or Partially Degraded).
- **SSL Certificate Expiration Notice:** An in-use SSL certificate (include either end-entity certificates or any CA certificate in the chain) will expire in 90 days or less.

Secret Store: Store and Access Secrets

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
CERTIFICATES	TLS CONFIGURATION	APPLIANCE ADMINISTRATION	EMAIL CONFIGURATION	SECRET STORE		

Create and manage AWS secret keys to securely store encryption keys and site data.

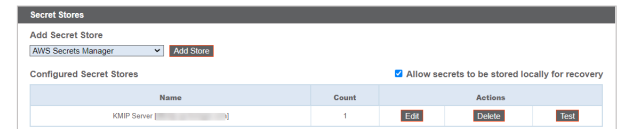


Secret Stores

Add Secret Store
 AWS Secrets Manager Add Store

Configured Secret Stores Enable Local Store

Name	Count	Actions
Secrets are being stored locally. Please configure a remote secret store.		

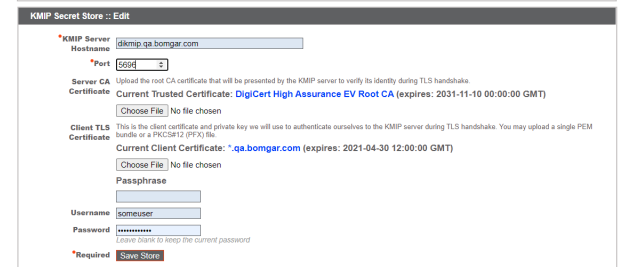


Secret Stores

Add Secret Store
 AWS Secrets Manager Add Store

Configured Secret Stores Allow secrets to be stored locally for recovery

Name	Count	Actions
KMIP Server [redacted]	1	Edit Delete Test



KMIP Secret Store :: Edit

*KMIP Server
 Hostname: [redacted]
 Port: [redacted]

Server CA Certificate
 Upload the root CA certificate that will be presented by the KMIP server to verify its identity during TLS handshake.
 Current Trusted Certificate: **DigiCert High Assurance EV Root CA** (expires: 2031-11-10 00:00:00 GMT)
 [Choose File] No file chosen

Client TLS Certificate
 This is the client certificate and private key we will use to authenticate ourselves to the KMIP server during TLS handshake. You may upload a single PEM bundle or a PKCS#12 (PFX) file.
 Current Client Certificate: ***.qa.bomgar.com** (expires: 2021-04-30 12:00:00 GMT)
 [Choose File] No file chosen

Passphrase: [redacted]

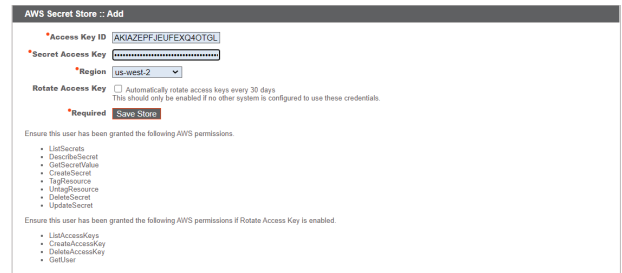
Username: [redacted]

Password: [redacted]
 Leave blank to keep the current password

*Required Save Store

To add a store, click **Add Store**, fill out the AWS secret store information, and then click **Save Store**.

Check the **Rotate Access Key** box only if you are not using the credential in any other system.



AWS Secret Store :: Add

*Access Key ID: [redacted]

*Secret Access Key: [redacted]

*Region: [redacted]

Rotate Access Key ☐ Automatically rotate access keys every 30 days
 This should only be enabled if no other system is configured to use these credentials.

*Required Save Store

Ensure this user has been granted the following AWS permissions:

- ListSecrets
- DescribeSecret
- GetSecretValue
- CreateSecret
- TagResource
- UntagResource
- DeleteSecret
- UpdateSecret

Ensure this user has been granted the following AWS permissions if Rotate Access Key is enabled:

- ListAccessKeys
- CreateAccessKey
- DeleteAccessKey
- GetUser

After a secret store is added, click **Test** to verify connectivity to the AWS server, ensure correct permissions are in place for the user account, and the credentials can access the AWS server.



Secret Stores

Add Secret Store
 AWS Secrets Manager Add Store

Configured Secret Stores

Name	Count	Actions
AWS Secrets Manager [redacted]	2	Edit Delete Test

**Note:**

For added security, configure your AWS Identity and Access Management (IAM) Policy to limit access to resources matching **BeyondTrust-*** on the following permissions:

- *DescribeSecret*
- *GetSecretValue*
- *TagResource*
- *UntagResource*
- *CreateSecret*
- *DeleteSecret*
- *UpdateSecret*

For more information on managing AWS IAM Policies, see [Managing IAM Policies](https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_manage.html) at https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies_manage.html.

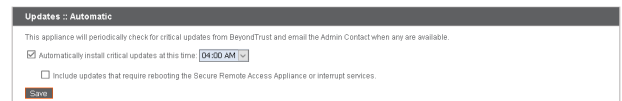


Note: If you delete the last remote store, a message displays indicating secrets will be moved locally.

Updates: Check for Update Availability and Install Software

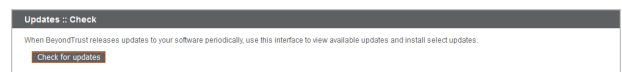


The appliance periodically checks for critical updates and emails the admin contact person when updates are available. You can select if you want the updates to install automatically and use the dropdown menu to select a time for the installation.

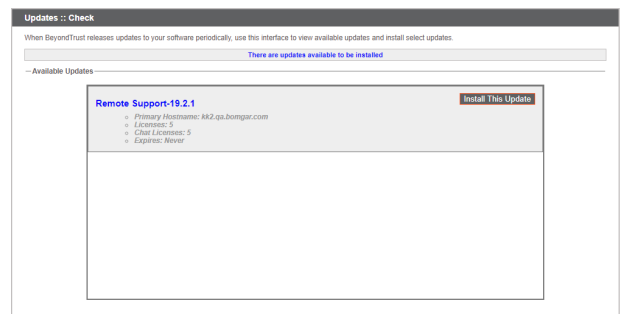


Updates requiring an appliance reboot or the interruption of services are excluded from the automatic update process unless you check the box to include them.

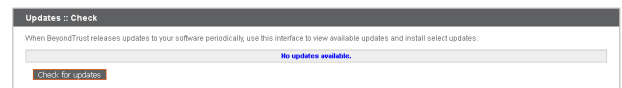
BeyondTrust will continue to notify you of the latest builds as they become available. Whenever you receive notification that new update packages have been built for your appliance, clicking the **Check for Updates** button will locate the packages and make them available for you to install.



If multiple software packages have been built for your appliance, each one will be listed separately in the list of available updates. Your new software is automatically downloaded and installed when you click the appropriate **Install This Update** button.



If no update packages or patches are available for your Secure Remote Access Appliance, a message stating "No updates available" is displayed. If an update is available but an error occurred when distributing the update to your appliance, an additional message is displayed, such as "An error occurred building your update. Please visit www.beyondtrust.com/docs/index.htm#support for more information."



It is not mandatory to use this **Check for Updates** feature. If your appliance is not internet-facing or if your organization's security policy does not allow for automatic update functionality, you can manually check for updates. Click the **Appliance Download Key** link to generate a unique appliance key, and then, from a non-restricted system, submit that key to BeyondTrust's update server at <https://btupdate.com>. Download any available updates to a removable storage device and then transfer those updates to a system from which you can manage your appliance.

After downloading a software package, browse to the file from the **Manual Installation** section, and then click the **Update Software** button to complete the installation.



Note: Please be prepared to install software updates directly after download. Once an update has been downloaded, it will no longer appear in your list of available updates. Should you need to redownload a software update, contact BeyondTrust Technical Support.

Updates :: Manual Installation

Update File:

WARNING: Updating the software may disconnect users currently connected to the Appliance.

NOTE: To obtain your software update file, copy the [Appliance Download Key](#) below and enter it at <http://update.beyondtrust.com>.

Updates :: Manual Installation

Update File:

WARNING: Updating the software may disconnect users currently connected to the Appliance.

NOTE: To obtain your software update file, copy the [Appliance Download Key](#) below and enter it at <http://update.beyondtrust.com>.

Appliance Download Key
(Expires in: 2400 minutes)

```

-----BEGIN KEY-----
2PoDeMgBp7fW0toL306b4f0997351717523345e344/f2a995c01461a55a03c8d
f144a6f799e169ab4222baae4f28fc7fE322fcd7a8+8b7d2f98748aa3bf1388
q7baa1/82af2238b604b7417134c175a0d7ad4833c9f9f1659e90e7a0c4086b4
200b63bd1010/41ce8df50ccc3ae90b36b3e7b22f4f03d0fc6d2dee92c8e4b
1885fc8babd1+72b937111f494b79dfae35abb4f+4d3c4c78fbb10696d52ca1b
1pc+57db1d56b6a6+db0197c0906cc19da6d039e00549b6e+548b339889
2a8668459fecbf4c66fd19a5485c9c45f410/3130b20935dd2a6e631cd2e5
568ae845+f435dc05f6f5134d4b2e2f78/9ad3de860534cd7926af9f30f2eeb0
56e2884f2dd03+3ab9679e212ea781c75e2d2f9e0adc33fbaflaabdf70d00c4
e731168b9a4113602c888802cru2+86cfr+8fcd1715d9/f4fa8f47e0a69b67d
+855eae+X+e928d0cf9/7e755035f3+gWt+d59b7f3d54aa09d8/dc60a17b3c0
81bdf842752194d16e133110b4eada7ec12efce646ae258bf7d8372370048f
4131e1cfeee660237868deb=
-----END KEY-----

```

When the BeyondTrust End User License Agreement (EULA) screen appears, fill out the required contact information and click the **Agree-Begin Download** button to accept the EULA and continue the installation. If you have multiple appliances with the same site configuration (either for failover or for ATLAS) you will only need to accept the EULA once.

Note that if you chose to decline the EULA, an error message displays and you will not be able to update your BeyondTrust software.

If you have any issues updating after accepting the EULA, please contact BeyondTrust Technical Support at www.beyondtrust.com/support.

During the installation process, the **Updates** page will display a progress bar to notify you of the overall update progress. Updates made here will automatically update all sites and licenses on your Secure Remote Access Appliance.

If you are installing a software update, logged-in representatives will temporarily lose connections to any support sessions and the representative console; therefore, schedule software updates for non-peak hours. However, if your update package contains only additional licenses, you can install the update without interrupting representative connections.

Find current information about the latest BeyondTrust updates at <https://www.beyondtrust.com/support/changelog>.

Please wait while the software is updating.

Note that installation progress may stop for long periods of time while data is being backed up.

You will be automatically redirected when the update is finished.

Do not refresh this page.

Do not reboot the appliance.

If an error occurs, please contact [BeyondTrust Support](#)

1% - Initializing...

Support

Utilities: Debug Network Problems

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
UTILITIES	ADVANCED SUPPORT					

The **Utilities** section can be used for debugging network problems. If you are unable to establish a connection, these utilities may help to determine the reason:

- Test your appliance's **DNS** resolution by performing a lookup of a hostname, or a reverse lookup of an IP address.
- **Ping** a hostname or IP address to test your appliance's network connectivity.
- Use the **Traceroute** to view the path that packets take on their journey from the appliance to any external system.
- Use the **TCP Connection Test** to check connectivity of a specific port on a target IP address or hostname.
- Use the **SSL/TLS Connection Test** to check connectivity to HTTPS or other TLS remote servers.

BeyondTrust
Secure Remote Access
Powered by Bomgar

Virtual Appliance ADMINISTRATION



English (US) ▼

| admin | LOGOUT

STATUS | **USERS** | **NETWORKING** | **STORAGE** | **SECURITY** | **UPDATES** | **SUPPORT**
UTILITIES | **ADVANCED SUPPORT****Util :: DNS**

Use this DNS utility to test the DNS resolution on this appliance. If you get "Unable to Resolve" errors, check your DNS Server settings on the Networking tab.

Hostname or IP Address**Resolve****Util :: Ping**

Use this Ping utility to test the Network connectivity of this appliance. If you get "unknown host" errors, check your DNS Server settings on the Networking tab. If you get 100% packet loss, check that the destination server is configured to respond to Pings, and check your IP settings on the Networking tab.

Hostname or IP Address☒ IPv4 ☐ IPv6**Ping****Util :: Traceroute**

Use this Traceroute utility to test the outbound Network routes from this appliance. You can manually configure static routes in the Networking tab.
This utility will only try a maximum of 20 hops

Hostname or IP Address☒ IPv4 ☐ IPv6**Trace****Util :: TCP Connection Test**

Use this TCP Connection Test utility to troubleshoot network connections to remote hosts and ports.

Hostname or IP Address**Port Number****Test****Util :: SSL/TLS Connection Test**

Use this to troubleshoot connections to remote HTTPS or any other TLS server.

Hostname**or IP
Address**

Use of hostname here is encouraged instead of IP. Hostnames will be sent in the handshake in the Server Name Indication (SNI) field. Many TLS servers implement name-based virtual hosting and will send different certificates based on this SNI information, and are more likely to result in a successful connection.

**Port
Number****Test**

Advanced Support: Contact BeyondTrust Technical Support

STATUS	USERS	NETWORKING	STORAGE	SECURITY	UPDATES	SUPPORT
UTILITIES	ADVANCED SUPPORT					

The **Advanced Support** section gives you contact information for your BeyondTrust Technical Support team and also allows an appliance-initiated support tunnel back to BeyondTrust Technical Support, enabling quick resolution of complex issues.

BeyondTrust™ Support Contact Information

Support Portal
<https://help.beyondtrust.com/>

Advanced Technical Support From BeyondTrust™

Support Code
Access Code
Override Code

NOTE: A BeyondTrust™ Technical Support representative may ask you to use this section when advanced technical assistance is required. These codes will be provided at that time.

If the **A Support Session with BeyondTrust Corporation in progress** section is visible, BeyondTrust Technical Support has an active session taking place with your Secure Remote Access Appliance. The **Duration** column indicates how long BeyondTrust Technical Support has been in session with your appliance. To stop the session, click **Terminate**, and the tunnel between your appliance and BeyondTrust Technical Support closes.

Advanced Technical Support From BeyondTrust™

Support Session Initiated to BeyondTrust

Support Code
Access Code
Override Code

NOTE: A BeyondTrust™ Technical Support representative may ask you to use this section when advanced technical assistance is required. These codes will be provided at that time.

Current Support Session

	Start Time	Duration	Terminate Connection
A Support Session with BeyondTrust Corporation is in progress.	06/13/2019 03:45 PM UTC		<input type="button" value="Terminate"/>

Secure Remote Access Appliance Comparison

	B400	B300	B200
Support Rep Capacity	Up to 1200 concurrent technicians	Up to 300 concurrent technicians	Up to 20 concurrent technicians running a maximum of three sessions each
Jump Technology	Up to 25,000 Active Jump Clients	Up to 10,000 Active Jump Clients	Up to 1,000 Active Jump Clients
Deployment	1U rack-mountable server Compatible with Atlas Deployments	1U rack-mountable server Compatible with Atlas Deployments	1U rack-mountable server