

Secure Network Connections For Remotely Hosted PBX Management Services Provided by Consistacom

Consistacom offers a variety of hosted management services to their Communication Manager switch customers. Secure data exchange between Consistacom and the End User PBX or ACD is used for rapid provisioning and results. Connections are always initiated from the Consistacom hosts, and data always flows in a read-only fashion from the PBX to Consistacom.

The data visible to Consistacom is limited to PBX administration details, via standard Avaya PBX administration interfaces. This lets Consistacom and Avaya see telephone numbers and names belonging to the End User (and perhaps their outsourced ACD Agents). It does not expose any customer data such as name, Social Security Number, customer account number, or digits dialed by a customer when interacting with the PBX, nor does it provide access to End User hosts beyond the PBX. Once collected, the PBX data is processed by Consistacom, retained for a short time consistent with the service provided, and then destroyed.

There are two Internet Standard ways of establishing secure connections between Consistacom and the End User: Secure Shell (SSH) and site-to-site Virtual Private Network (VPN).

The SSH Option:

- Has few “moving parts” to configure and maintain in the customer’s data network
- Provides encryption end to end, including login IDs and passwords
- Provides one level of authentication, at the Avaya Communication Manager switch
- Is available for Avaya Communication Manager 3.0 and above

The Site-To-Site VPN Option:

- Implements site-to-site private networks across the public Internet
- Provides full compatibility and flexibility within the IPSec VPN standard
- Requires negotiation of the VPN configuration between Consistacom and End User
- Requires more Data Network team involvement than SSH
- Only encrypts data between VPN Peers, not end to end
- Provides two levels of authentication: 1) between VPN peer devices, 2) at the Avaya Communication Manager switch
- Is available for Definity 9.5 and above, including all MultiVantage and Communication Manager versions.

Consistacom favors the SSH approach. It puts more of the process in the hands of the voice telecommunications team ordering the service, requires less firewall configuration, consumes fewer firewall resources, and should result in a faster service start-up time than a VPN. It does not eliminate the need for corporate data networking involvement, but reduces the resources needed from that group. It also eliminates the brief VPN setup delay for change control on the Consistacom end.

A SSH vs VPN comparison chart is on the reverse side

Comparison of Secure Network Connection Options Remotely Hosted PBX Management Services Provided by Consistacom

Setup Requirements	SSH		VPN	
	Voice	Data	Voice	Data
Assign a public IP address for PBX		D		D
Open SSH port 5022 on CM	V			
Open SSH port 5022 on firewall, limited to connections from Consistacom to PBX's public IP		D		
Negotiate site to site VPN configuration			V	D
Configure and test VPN connectivity				D
Data Network Change Management review and delay		?		D
Assign unique CM login ID and password	V		V	
Benefits	SSH		VPN	
Can connect to CLAN Media Server	✓		✓	
Encryption	End To End		Between Firewalls	