

# Safe-T SDA Cloud to Ground

## High Level Use Case

This use case that describes the use of Safe-T SDA at a process automation SaaS provider. It allows the organization to enable connectivity between the cloud platform the on-premise resources without requiring inbound open ports

## Target Market/Customers

- ✚ SaaS providers
- ✚ Cloud service providers

## The Challenge

In today's atmosphere, software vendors are gradually but rapidly shifting to Cloud offerings and aim to provide their platforms as a service (SaaS). Many solutions require access to an on-premise resource to accommodate a customer use case. It is therefore challenging to migrate customers to the SaaS offering due to security concerns and the means to provide access to the on-premise environment. Consequentially, network security and operation teams must get involved in the sales and onboarding processes and complexity is introduced that detracts from the solution's appeal.. Therefore, the challenges providers face include:

- ✚ Costly and complicated changes are necessary to existing applications when migrating to a cloud offering for the accommodation of security and connectivity
- ✚ The on boarding of new customers and deploying is complicated and lengthy, requiring the involvement of security teams and making changes to customer infrastructure
- ✚ Existing solutions are expensive, limited in support, and do not integrate seamlessly

## The Need

In order to enable customers to migrate from an on-premise solution to a cloud offering, or onboard new customers to the SaaS offering, software and service providers must eliminate the adoption barriers. This includes providing a secure way of connecting the cloud platform to the customer's environment without introducing complexity, security concerns or the involvement of infrastructure teams that would otherwise not be included in the process.

Existing solutions to this are lacking, and include the following:

- ✚ VPN access – creates operational overhead, requires involvement of many entities, non-secure
- ✚ Public Cloud Solutions (such as Azure ExpressRoute) – expensive, complicated
- ✚ Open inbound firewall ports – insecure, requires inbound open ports, re-quires the use of Reverse Proxies or third party access solutions

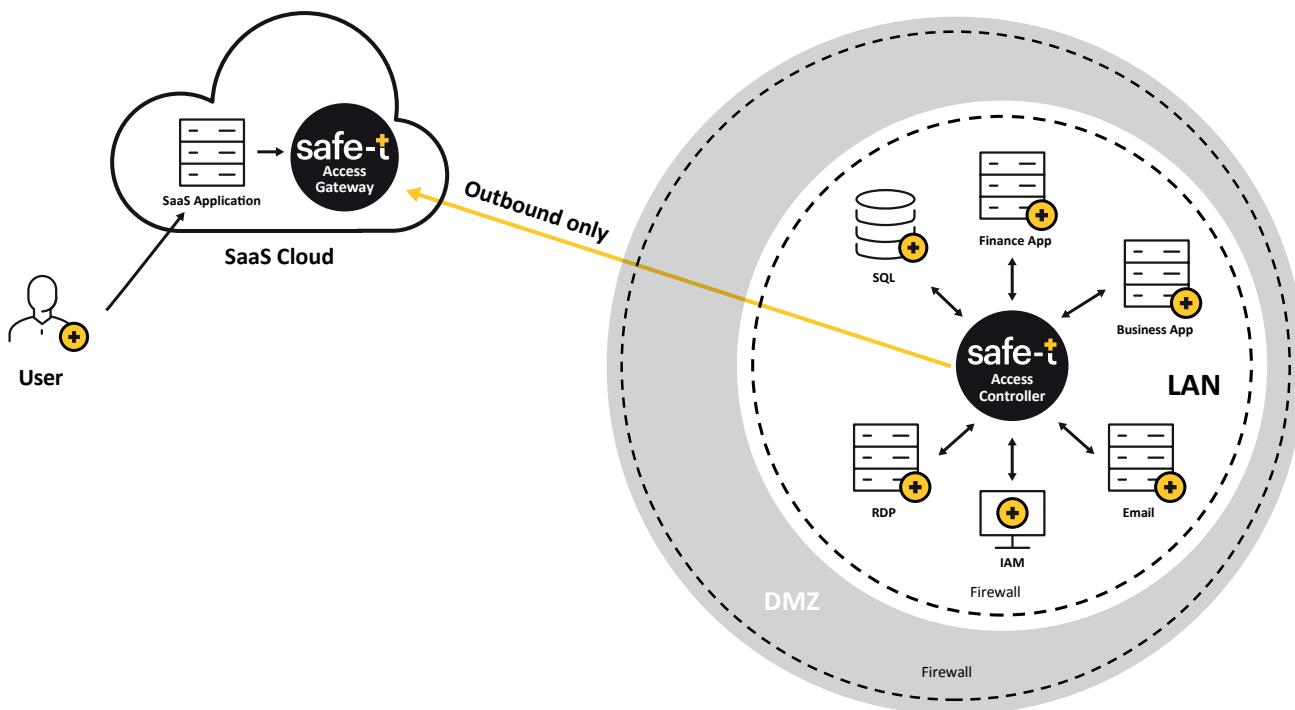
## Safe-T SDA Cloud to Ground Solution

The Safe-T SDA Cloud to Ground solution provides a patented, secure and easy way of connecting a cloud environment to any on-premise resource seamlessly and transparently with no network infrastructure requirements (open inbound firewall ports) or the use of VPN/tunnels. The solution is application agnostic, and can be connected to any cloud software to provide access to any on-premise resource (such as SQL, web services, SMB file shares, etc.)

## The Safe-T SDA Flow

The following describes the process flow of an access request with Safe-T SDA:

1. The cloud solution requires access to a customer premise resource
2. The cloud application connects to the Safe-T SDA Access Gateway that resides on the same cloud platform natively (as if it's the target application itself, such as SQL or SMB)
3. The Safe-T Access Controller generates an outbound connection to the cloud Safe-T Access Gateway and picks up the network packets, pulling them to the back end of the network
4. Safe-T Access Controller relays the traffic on a separate session to the target application
5. The application response is pushed back to Access Gateway, which in turn relays it back the cloud application
6. Both the cloud application and the on-premise resource are completely unaware of the process. From their standpoint, they are engaging in a logical TCP session directly



## Features & Benefits Include:

- ✚ Access enterprise assets with no Internet exposure
- ✚ Transparent access from the Cloud platform, No VPN required
- ✚ Cost effective compared to VPN and Azure alternatives
- ✚ Transparent user experience
- ✚ Enable the SaaS platform and avoid complexities in the sales process and various functional team involvement
- ✚ Rapid deployment in any environment, no changes to existing code or infrastructure
- ✚ Scalable – fits any type & numbers of users, grows with the growing data demands
- ✚ Supports any TCP based application, protocol, or service
- ✚ Agentless and clientless
- ✚ Unique Architecture based on Reverse Access Patented Technology to mitigate zero-days vulnerabilities in VPN's infrastructure

## Frequently Asked Questions (FAQ)

- ✚ **How Safe-T SDA provide access with no inbound open ports?**  
Safe-T's SDA utilizes Safe-T's patented technology called Reverse Access, which reverses the direction of the network traffic
- ✚ **What types of applications are supported?**  
Safe-T SDA operates on the network layers (layers 3/4 of the OSI model) and can therefore seamlessly support any TCP-based application
- ✚ **What are the deployment time and pre-requisites?**  
No changes are required on either ends of the network – the cloud application and the target on-premise resource
- ✚ **What is the difference between it and reverse proxy?**  
For a reverse proxy to operate, the IT administrator must allow certain protocols to pass through ports in the internal firewall and connect to specific hosts located in the internal network. With this configuration, the reverse proxy can directly access the internal network. The Safe-T SDA Access Gateway does not open any incoming ports in the internal firewall. This ensures the DMZ and LAN are totally separate environments