Conversant
Connecting Digital World

SwiftFederation Portal User Guide

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Contents

1 Introduction 4
2 SwiftFederation Infrastructure 6
2.1 Privately-owned equipment 7
2.1.1 File Appliance 7
2.1.2 Delivery Appliance 7
2.1.3 Delivery Appliance (RTMP) 7
2.1.4 Transcoding Appliance 8
2.2 Shared Infrastructure (command-and-control) 9
2.2.1 Orchestration 9
2.2.2 Log collection and processing 9
2.2.3 Provisioning 9
2.2.4 Traffic Management 10
2.2.5 Monitoring and notification 10
2.2.6 User Portal 10
3 SwiftFederation Portal 11
3.1 Logging In 11
3.2 Service Types 12
3.3 Viewing Information 12
3.4 User Administration 13
3.4.1 User Permissions 13
3.4.2 Add and Deleting Users 14
3.5 Partner Administration 15
3.5.1 Creating a Partner 15
3.5.2 Deleting a Partner 16
3.6 Customer Administration 16
3.6.1 Creating a Customer 16
3.6.2 Deleting a Customer 17
3.7 Service Administration 17
3.7.1 Provision a new solution 17
3.8 SwiftFederation API 19
4 Monitoring and Support 20
5 Copyright and Confidentiality 21

5.1 Copyright Statement 21
5.2 Confidentiality Statement 21

1 Introduction

SwiftFederation portal is constructed by Conversant's team to assist our partners and customers in the following ways:

- Provides a unified portal to manage various services and viewing of real-time reports
- Stay updated on new services and features
- Stay connected which includes getting informed of upgrades and maintenances
- Rebranding of portal for partner or reseller
- Online documentation

The products that you can find in this portal include the following:

- Content Delivery Network (CDN)

  CDN is global, high-performance network of servers which brings content closer to audiences. It enables publishers to provide content fast, securely and reliably to target audience wherever they are, to any devices in the right format. At the same time, they can get valuable insights on the usage and consumption of the contents sent through the CDN.

    - Basic Services
        - Website Acceleration
        - Large File Download (LFD) for Storage purposes
    - Value-Added Services (VASes)
        - SSL:
            - Conversant Shared Certificate: SAN, Wildcard
            - Customer Certificate: SNI
        - Cloud Security: WAF + Anti-DDoS

- Live-Streaming Delivery Network (LSDN)

Live Streaming Delivery Network (LSDN) supports Real Time Messaging Protocol (RTMP) - a low-latency streaming protocol that is robust, universally supported and commonly used for ingesting live streams. It enables publishers to deliver their live content with near-zero latency for Live Forum/ Sports, E-Sports, Online Education, Breaking Live News, Interactive Live-streaming & more.

- Live Media Services (LMS)
  LMS is a broadcast-grade, cloud-based platform that supports multiple ingestion modes for Live Transcoding/Transmuxing Services. It allows providers the capability and flexibility to prepare, secure and deliver live content to any devices, anywhere. Providers can also leverage on VASes- Live-Stream recording to further increase users' engagement.

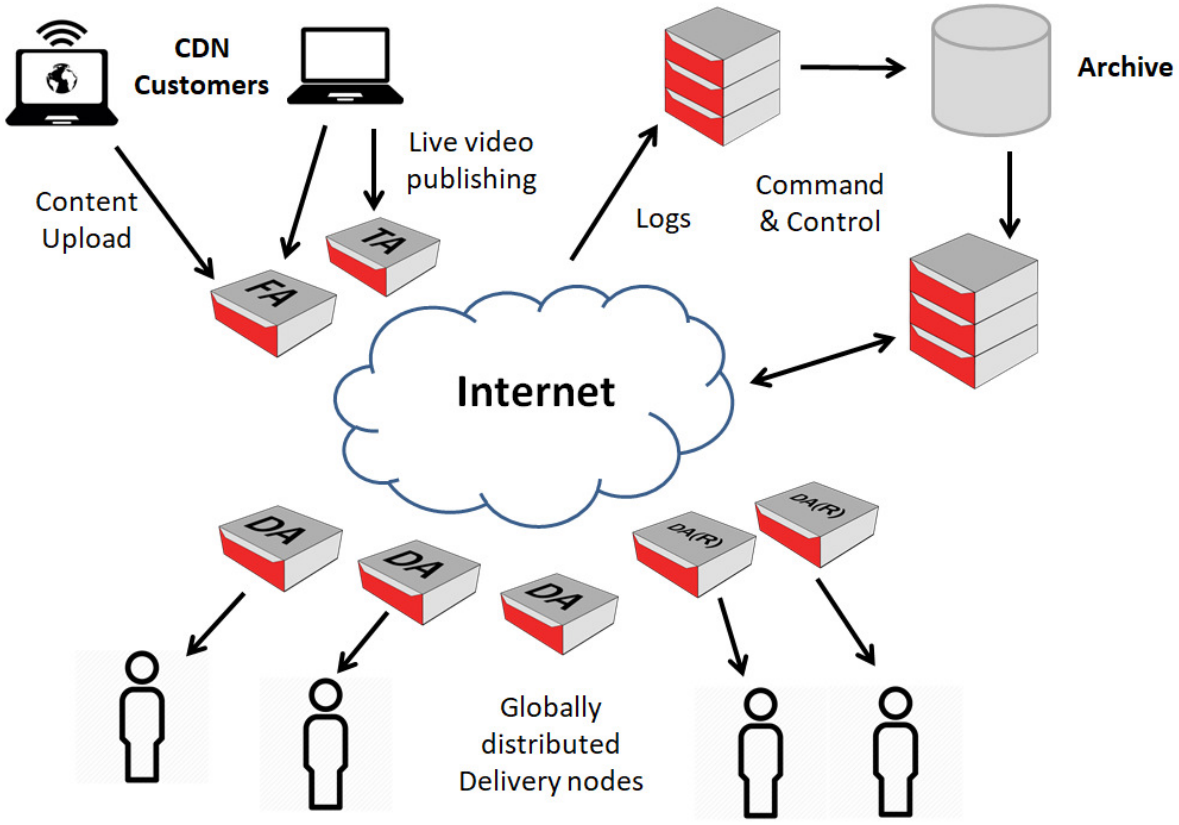
    - Basic Products
      - Live Transcoding
      - Live Transmuxing
    - VASes
      - Live Stream Recording
      - Studio Approved DRM

- VOD Media Services (VMS)
  VMS is a broadcast-grade, cloud-based platform that supports multiple ingestion modes for Video Files Transcoding/Transmuxing Services. The Video files provides improved viewers' experience and engagement through seamless instant replays and with VAS-Studio Approved DRM, providers can protect their VOD content to meet the licensing requirements.

    - Basic Products
      - Video on Demand (VOD) Transcoding
      - Video on Demand Transmuxing
    - VASes
      - Black Frames Removal
      - Studio Approved DRM

2 SwiftFederation Infrastructure

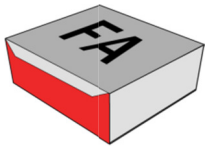
This chapter presents the various physical components of the SwiftFederation infrastructure, and can be used as a guide when determining where to deploy certain components. This chapter explains the roles of both the privately-owned and shared components. It highlights the demarcation between these components, and explains the responsibilities of each stakeholder.



2.1 Privately-owned equipment

Partners and customers of the CDN are typically furnished with at least one pair each, of two types of utility appliance: File Appliance and Delivery Appliance. For customer who is keen on delivering live RTMP streams, they are likely to deploy a pair of Delivery Appliance (RTMP).

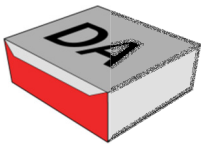
2.1.1 File Appliance



File Appliance

File Appliances (FAs) provides secure, efficient and high redundancy for content storage and management. It works in conjunction with our Delivery Appliances (DAs).

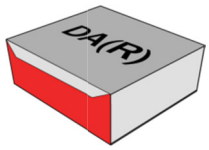
2.1.2 Delivery Appliance



Delivery Appliance

Delivery Appliances (DAs) are high-performance delivery servers that enable Network Service Providers to serve a variety of digital content fast, efficiently and securely to audiences using a wide range of devices. DAs are designed to be deployed at the edge of the Network Service Provider's core or metro network. DAs can be the delivery component of a Network Service Provider's Private CDN (combined with File Appliances).

2.1.3 Delivery Appliance (RTMP)

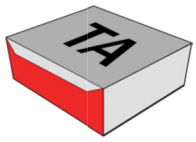


Delivery Appliance (RTMP)

Delivery Appliances (RTMP) – DA(R) are high-performance delivery servers that enable Network Service Providers to deliver low-latency live-streams using RTMP protocol.

2.1.4 Transcoding Appliance

For partners and customers who are interested to have transcoding capabilities integrated to its CDN services, they will purchase the Transcoding Appliances.



Transcoding Appliance	***Transcoding Appliances (TAs)*** are high performance transcoding servers that integrate seamlessly with Digital Rights Management and origin storage.

2.2 Shared Infrastructure (command-and-control)

The Command & Control of the shared infrastructure allows our Cloud customers and Federation Partners to:

- Retain **Control and Privacy** for the data that matters
  - Own Monitoring
  - Own Billing
  - Own Traffic Routing
  - Own Reporting
  - Own Portal
  - Own Provisioning

- While utilising the SwiftFederation resources to
  - Offload Origin
  - Provide better Quality of Experience (QoE) to end-users for off-net delivery

2.2.1 Orchestration	To minimise the overhead of manual maintenance, and to enforce configuration conformity, SwiftFederation infrastructure depends heavily on automation. Specifically, all nodes that participate in the cloud-based service platform are managed with configuration management software.
2.2.2 Log collection and processing	Access logs from service nodes are gathered for processing in a high availability facility. The data is analysed to produce the usage figures for both partners and customers. These systems are managed and accessed solely by our Network Operations team.
2.2.3 Provisioning	When new infrastructure is deployed, the logical information that associates the equipment with its owner is stored in the provisioning system. It also determines the functional role of an equipment/node within the service platform.

2.2.4 Traffic Management	The traffic management system (TMS) is essentially a DNS-based global service load balancing (GSLB) system. The TMS determines the best DA/DA(R) from which to deliver content based on the IP address of the end-user's name server. The node selection algorithm used by the TMS takes into account several key factors: • The geographic location of the client's name server • The health and load of the geographically closest points-of-presence (PoPs) • Any special business logic that has been specified e.g. a content publisher may have a preferred delivery partner in a specific region Note: Any special business logic will need to be discussed on a case-by-case basis with the Technical Sales Team.
2.2.5 Monitoring and notification	The condition of every machine in the service platform and its supporting infrastructure is monitored closely by a variety of different tools. The Conversant operations team will be automatically notified, should an outage or degradation in performance occur that requires manual intervention. Special arrangements can be made to provide partners with limited access to the monitoring and notification system.
2.2.6 User Portal	The SwiftFederation Portal, located at https://portal.swiftfederation.com/, is used both by the Conversant, partners and end customers to manage services, monitor performance and to access service usage figures. Strict access controls have been implemented to ensure that there is no cross contamination between different customers' configurations.

3 SwiftFederation Portal

This chapter provides an overview of the web interface used to manage SwiftFederation services and partner/customer entity.

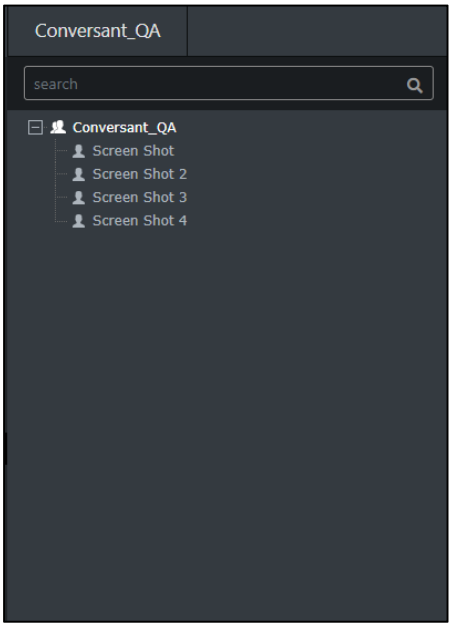
This includes:

- creating partners and customers arranged in a tree hierarchy;
- setting up additional administrator accounts;
- configuring new services; and
- viewing data representing content delivery in variety of formats.

3.1 Logging In

Login to the portal is via an email address and password combination that will be assigned to you by your vendor. Sessions will time-out after 60 minutes of inactivity, following which you will be required to log in again.

After you login to the Portal you will see a screen similar to this:



On the left-hand side the Portal shows a tree hierarchy of partners/customers and services that have been provisioned. Above this is a search box that enables the discovery of named customers, which may be hidden several levels down in the tree.

It is possible to create new partners/customers entity and delete or edit existing ones depending on the access permissions assigned to your portal login (see below). Provision and use of products and services is always within a customer entity.

3.2 Service Types

The following delivery service types are available:

Product	Service	Description
CDN	**Website Acceleration**	CDN provides a globally-distributed footprint for website acceleration, which can scale to cope with surges in demand. Customer still maintains and updates their web server normally, which serve as a source of content for the CDN.
CDN	**Large File Download**	CDN enables fast and reliable HTTP delivery of files to users worldwide. The content is uploaded to our CDN storage in advance using standard file transfer protocols.
Live-Streaming Delivery Network (LSDN)	**LSDN**	SwiftServe LSDN delivers RTMP stream by pulling content directly from your transcoder or works with our public cloud transcoding service: SwiftCoder or private cloud transcoder: Swift Transcoding Appliance (SwiftTA).
Live Media Services (LMS)	Live Media Services (LMS)	LMS is a broadcast-grade, cloud-based platform that supports multiple ingestion modes for Live Transcoding/Transmuxing Services.
VOD Media Services (VMS)	VOD Media Services (VMS)	VMS is a broadcast-grade, cloud-based platform that supports multiple ingestion modes for Video Files Transcoding/Transmuxing Services.

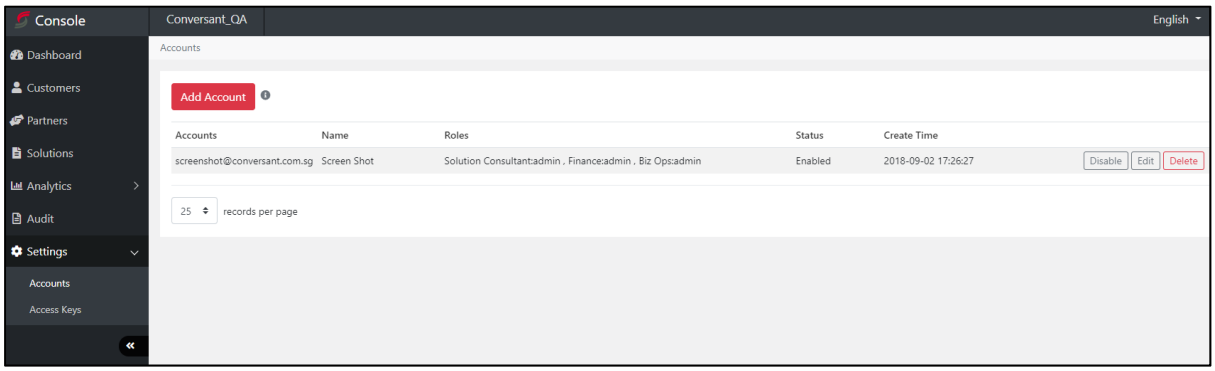
3.3 Viewing Information

The following tabs display information about the currently selected partner/customer or service.

Files	Shown for Large File Download services; provides a file browser view of the existing content with functions to move, rename and delete files/directories as well as upload new files and create new directories.
Analytics	Shown for partners/customers and all services; displays traffic reports by time and location, as well as detailed end user statistics.
Usage	Shown for partners/customers and all services; displays accurate monthly

	statistics for delivery.
Audit	Shown for all services; Provides an audit trail of actions taken by accounts on a partner or customer entity.
Accounts	Shown for partners/customers; provides an interface to configure portal user login and access permissions.
Appliances	Shown only for partner who owns appliance; displays monthly statistics of the data transferred by each appliance.

3.4 User Administration



To add, edit and delete users you need to view the Account tab at the left of the dropdown list under Settings. Users with a login to one partner account will implicitly have the same permissions on any customers created underneath. It is therefore not necessary to create users at each level unless it is appropriate for them to have access just to that customer account and the services configured under there.

3.4.1 User Permissions

The following permissions are available:

Read Only

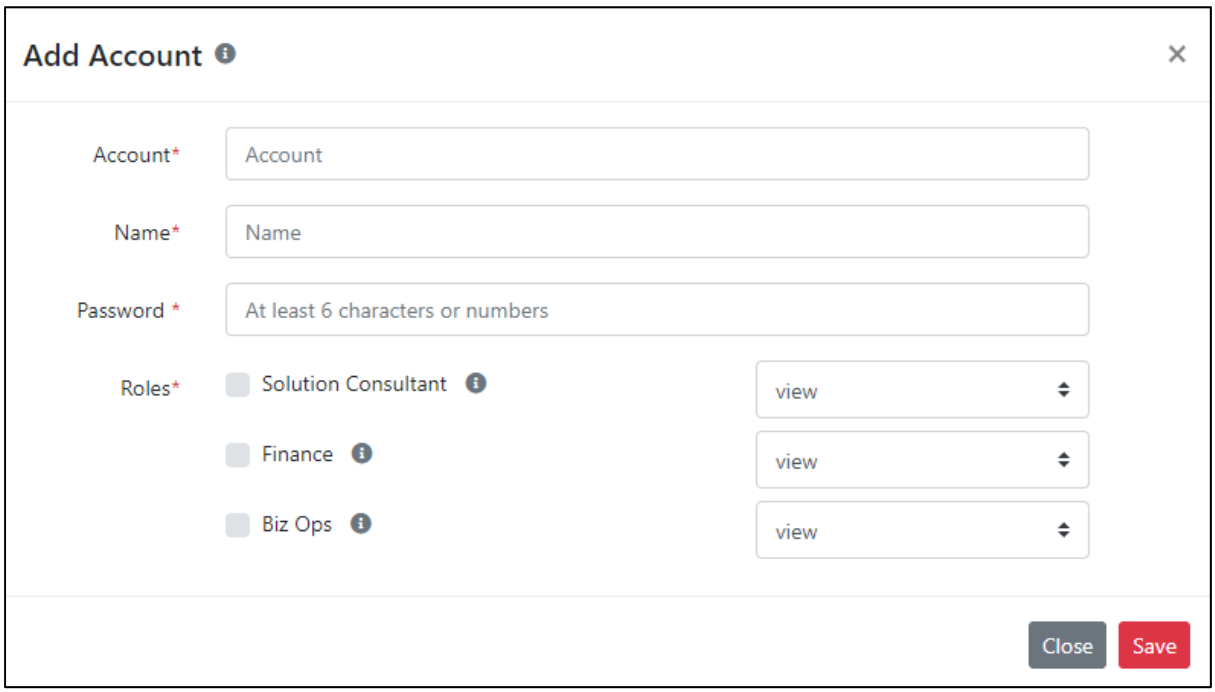
- May view currently configured partners/customers and services
- May view usage and report data

Admin

- May view, add, approve, edit and delete partners/customers and services
- May view usage and report data
- May add, edit and delete user accounts and permissions

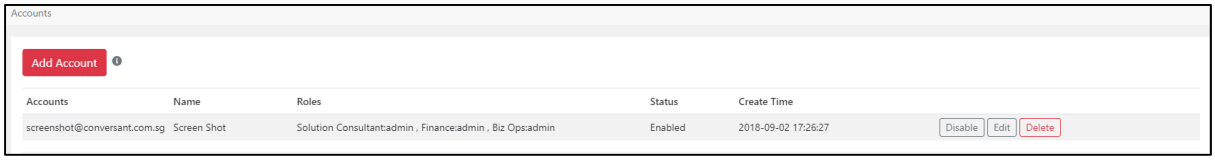
3.4.2 Add and Deleting Users

To add extra users to a partner/customer account, first select the partner/customer on the left-hand side of the main portal screen. Then click on the Accounts tab under Settings on the left. You will see existing users, if any.



An Admin user has a button to Add Account where they can enter name, email and password details for a new user. Once created, these details can be modified by clicking on them in the same view.

In order to delete a user, click on Delete to the right of the corresponding row of that stated account.



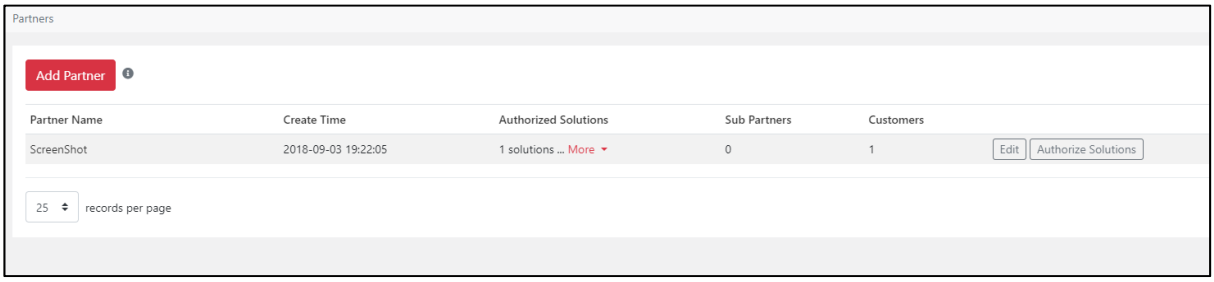
If a user loses or forgets their password they can request to reset it by email on the main login screen.

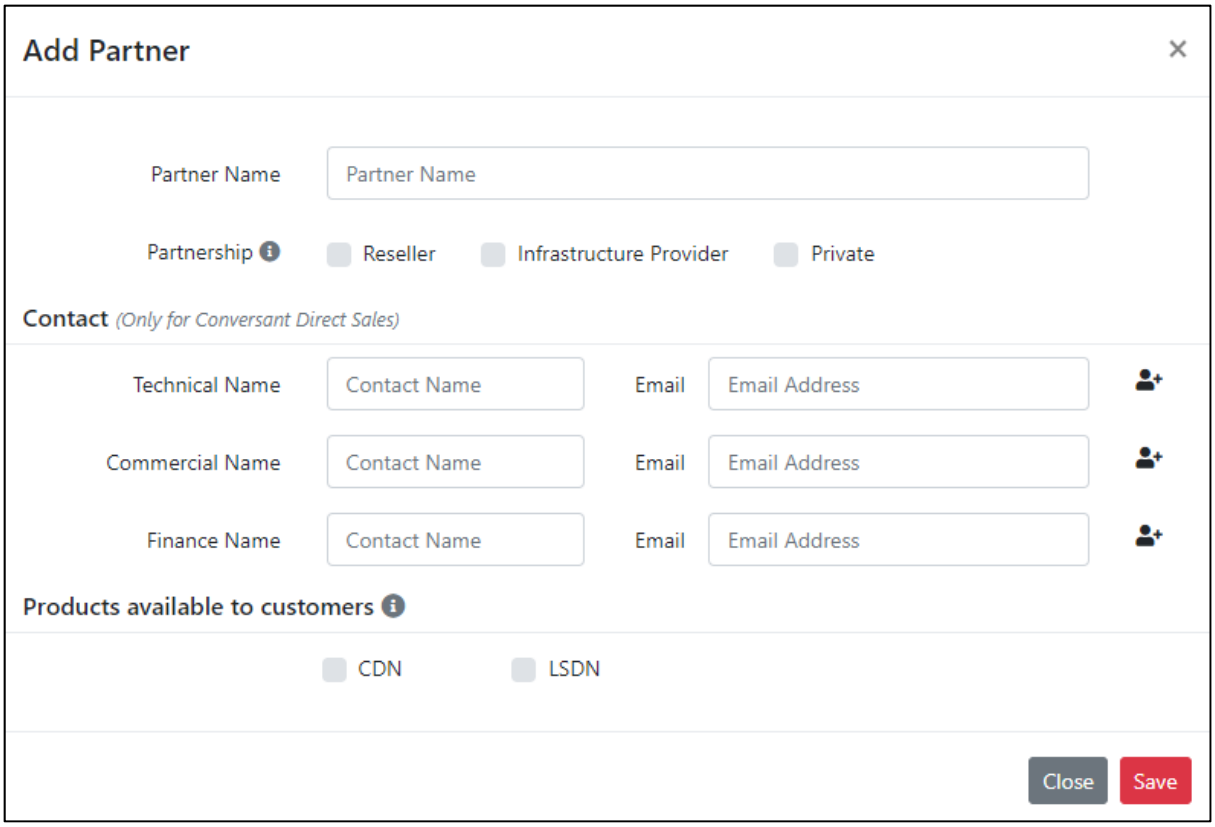
3.5 Partner Administration

3.5.1 Creating a Partner

To create a new partner, first select the parent Partner entity in the tree on the left hand side of the main portal screen. Thereafter select Partners tab.

Select Add Partners tab.



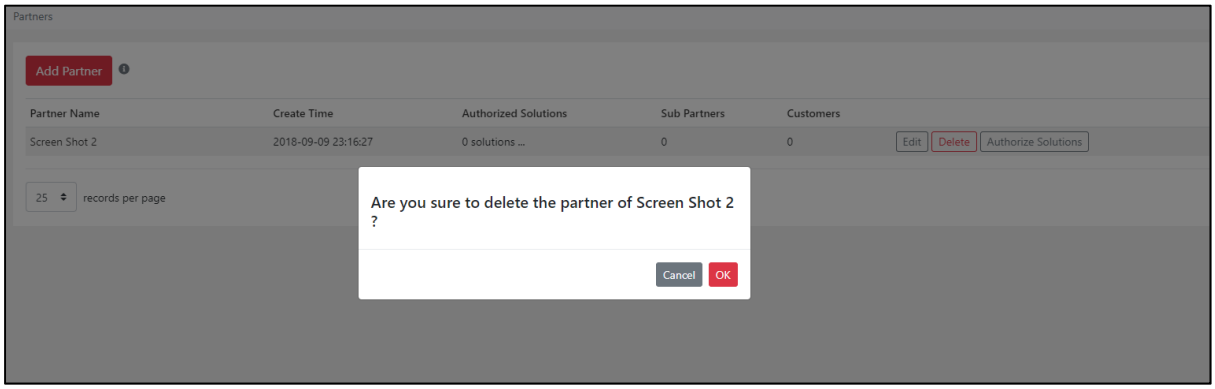


Give the new partner a name. The name is shown in the portal. The name can be changed later and multiple partners can be given the same name if desired. Select the products available to the Partner accordingly. Select save and the new Partner will be created.

3.5.2 Deleting a Partner

To delete a Partner, first select it in the tree on the left-hand side of the main portal screen.

Select the Partners tab and select the delete button of the respective partner, verify the intended partner to removed and then confirm the pop-up dialog.



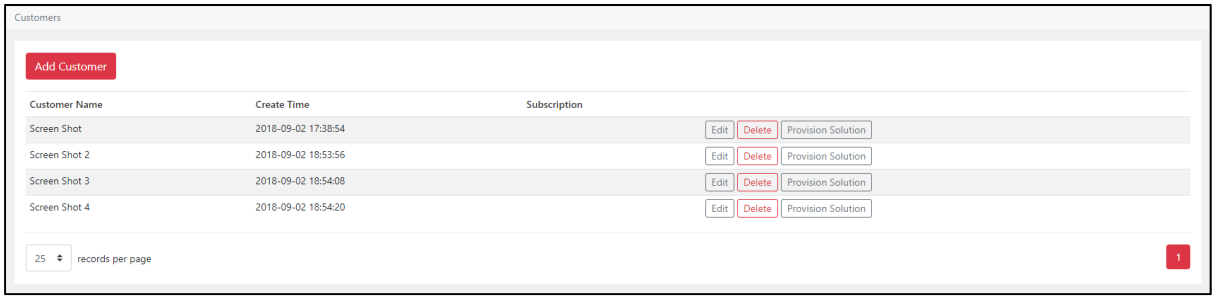
Deleting a partner will delete all its customers and services including all configuration data, files, and historical traffic and storage log information. Great care must therefore be taken when performing this task; ensure any details required for audit and billing purposes have been retrieved before deleting a partner.

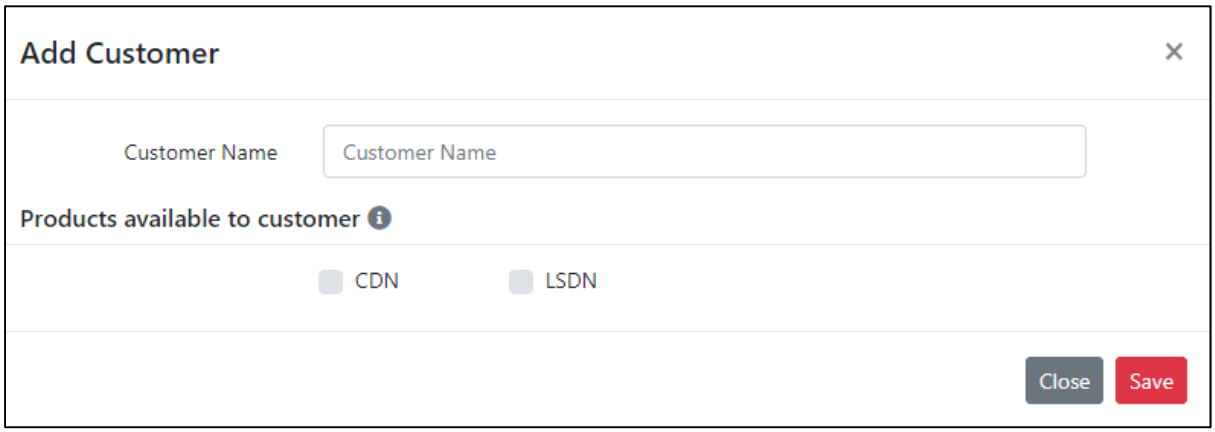
3.6 Customer Administration

3.6.1 Creating a Customer

To create a new customer, first select the Partner in the tree on the left hand side of the main portal screen. Thereafter select Customers tab.

Select Add Customers tab.



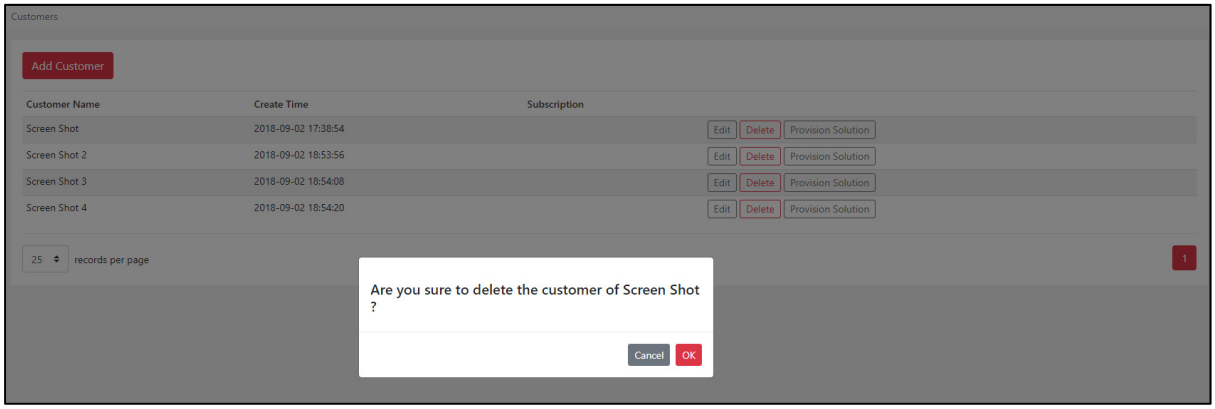


Give the new customer a name, which can be changed later. Select the products to be available to the customer accordingly. Select save and the new customer will be created.

3.6.2 Deleting a Customer

To delete a customer, first select it in the tree on the left-hand side of the main portal screen.

Select the Customers tab and select the delete button of the corresponding customer, verify the intended customer to remove and then confirm the pop-up dialog.



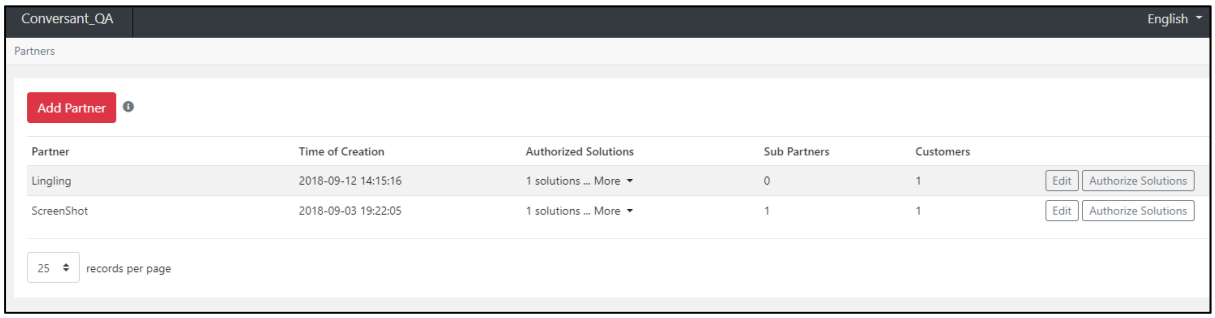
Deleting a customer will delete all services including all configuration data, files, and historical traffic and storage log information. Great care must therefore be taken when performing this task; ensure any details required for audit and billing purposes have been retrieved before deleting a customer.

3.7 Service Administration

3.7.1 Provision a new solution

To provision a new solution, it must be authorised to a Partner and thereafter Partner can provision the solution to its customers.

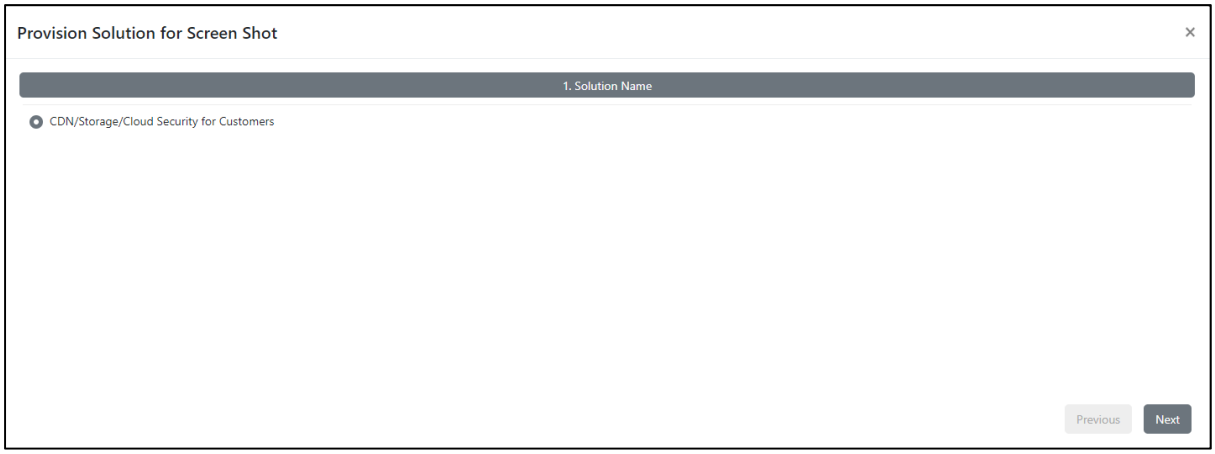
First select the Partner under the Partners tab and Authorise Solution.



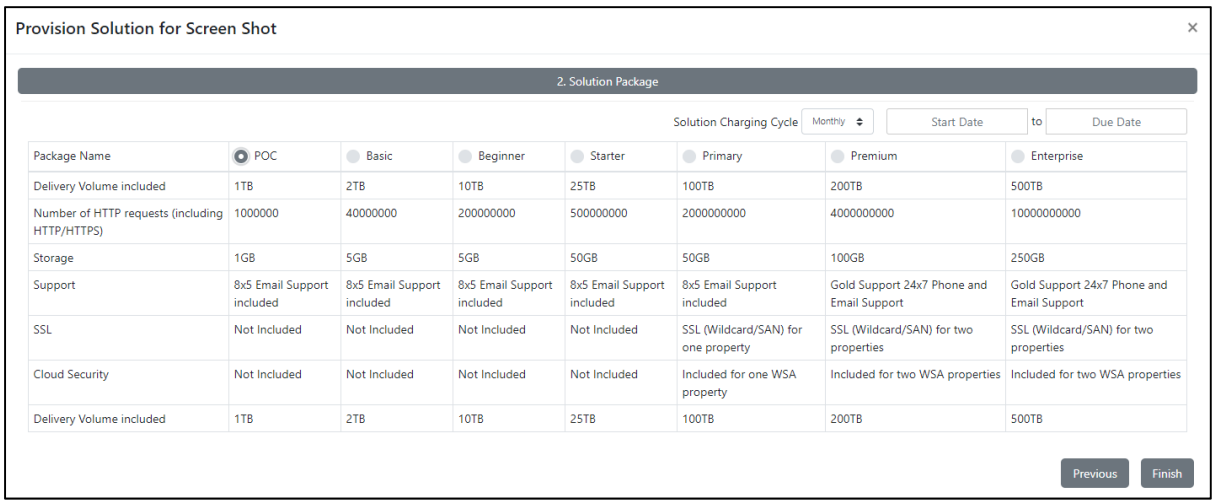
Select the Customer under the partner that will own the service in the Customers tab.

Click on Provision Solution button. Configure the service as described below.

Provision the solution for the respective customer.



Select the respective Solution Charging Cycle, Start Date and Due Date and the respective package.



Package Name	POC	Basic	Beginner	Starter	Primary	Premium	Enterprise
Delivery Volume included	1TB	2TB	10TB	25TB	100TB	200TB	500TB
Number of HTTP requests (including HTTP/HTTPS)	1000000	40000000	200000000	500000000	2000000000	4000000000	10000000000
Storage	1GB	5GB	5GB	50GB	50GB	100GB	250GB
Support	8x5 Email Support included	8x5 Email Support included	8x5 Email Support included	8x5 Email Support included	8x5 Email Support included	Gold Support 24x7 Phone and Email Support	Gold Support 24x7 Phone and Email Support
SSL	Not Included	Not Included	Not Included	Not Included	SSL (Wildcard/SAN) for one property	SSL (Wildcard/SAN) for two properties	SSL (Wildcard/SAN) for two properties
Cloud Security	Not Included	Not Included	Not Included	Not Included	Included for one WSA property	Included for two WSA properties	Included for two WSA properties
Delivery Volume included	1TB	2TB	10TB	25TB	100TB	200TB	500TB

3.8 SwiftFederation API

For information about the types of APIs available, please contact your Account Manager.

4 Monitoring and Support

The Conversant operations team monitor the service twenty four hours a day and will respond quickly to any issues with the platform.

In case you experience any problems with the service, please contact: support@conversant.tv.

5 Copyright and Confidentiality

5.1 Copyright Statement

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