

xserve



**SwitchStream High Level
Approach**

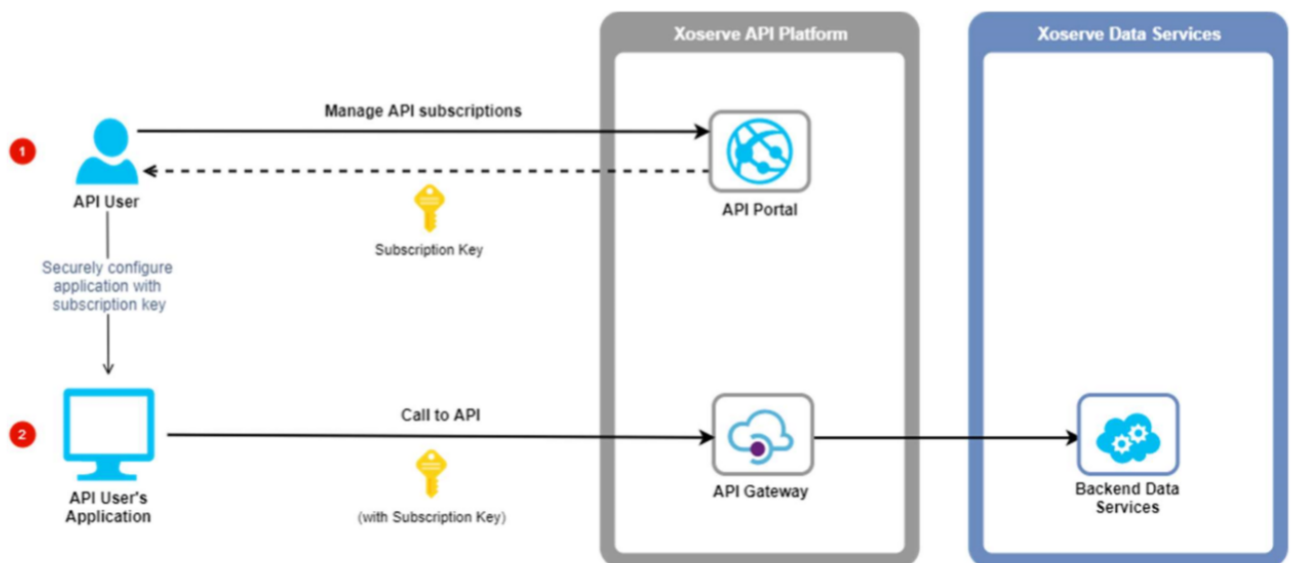
Xoserve SwitchStream High Level Approach

SwitchStream has been designed to give suppliers and shippers a simple way to connect with CSS when the future changes come into effect.

This paper describes the approach to securely using SwitchStream Adapter Service.

Our adapter service consists of 2 principal elements:

- API User Portal
- API User Gateway



The API Portal will be used by API users to view all Xoserve APIs that are available and to read associated technical documentation. The portal will be secured with user credentials. These will be provided to API users following the completion of the onboarding process.

The API Gateway will be used by API users' systems to connect to backend Xoserve data services that are exposed by APIs.

Requests to the gateway require a subscription key. Keys will be available from within the API user portal. Keys are supplied in pairs so that key rotation can be implemented on the user's side.

It is envisaged that API users will securely store each of their subscription keys within their own system's configuration in order to be passed to Xoserve's gateway in a security header.

SwitchStream Security Features

1. Xoserve's SwitchStream platform will be fully compliant at all times with ongoing security risk assessment, which is carried out as per established assurance models and our own compliance processes. Xoserve is ISO 27001 certified and will continue to be compliant and assured in order to retain certification.
2. All transmissions of data using our services will be internally and externally protected by TLS, including intermediate transmissions of data between components of the architecture. We are using TLS 1.2+ secured transmission throughout. TLS secures and assures that messages are delivered securely (unaltered) throughout the lifecycle of the message. Data at rest is transparently encrypted as part of the Azure platform.
3. Connectivity to our adapter service will incorporate a robust registration process and will use multi layered security in securing the access and transmission of all data. The API platform uses industry standard API authentication mechanisms, API users are identified from their API subscription key. Xoserve as an adapter service will be completely compliant with all aspects of the Switching Programme requirements including those set out in DCC's Code of Connection document. Full details of the Xoserve SwitchStream registration/onboarding process will be published as part of our Code of Connection document which will be published early 2020.
4. Xoserve will be registered with the CSS Provider in line with the governance processes for Service User assurance. Individual market participants will need to register separately in their own right. An out of band process (yet to be defined by DCC/CSSP and Xoserve) will be utilised to transfer certificates/keys between the market participants with Xoserve as the adapter service acting on their behalf. Xoserve will continue to liaise with DCC and Switchstream customers to agree the process and we will share this as soon as possible.