

Elcome Micro Services (EMS) API

Providing modern data delivery of catalogue (Xchecker) data.

Key Benefits

- Automation of work-flows to make them quicker and more productive.
- Opens up collaboration across both systems and people.
- Delivery of services and information is more flexible.
- Efficient distribution and automatic publishing of content.
- Ability to improve customer/end user experience.
- Helps drive innovation and disruption.
- Increase business impact through connectivity.

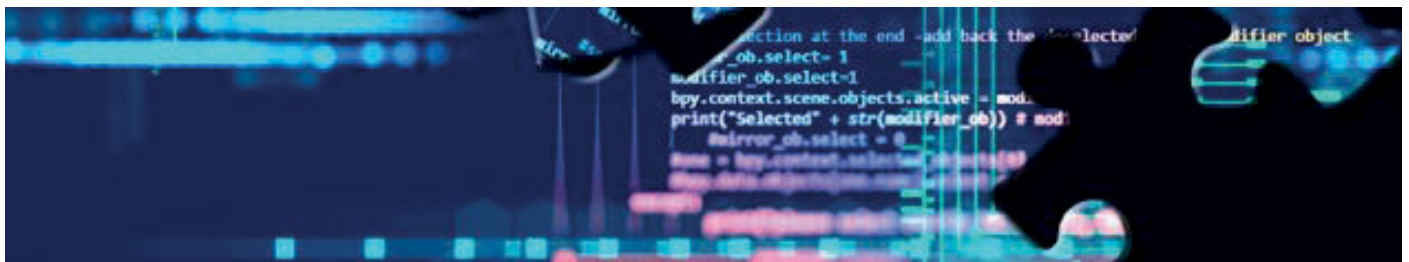
We provide modern data delivery of catalogue (Xchecker) data for our clients, using a **RESTful API** layer which we have developed called **Elcome Micro Services (EMS)**. It builds upon an existing base **API layer (IDL Micro Services)** and utilises the latest industry standard technologies and principles.

Its main purpose is to allow access to Xchecker data (via the IDL) in a manner suitable for real-time eCats or Product Finder type applications.

This open access philosophy is a key part of the **Elcome** strategy to allow you, our clients, secure access to your data in a form suitable to you and your customers.

Data Source

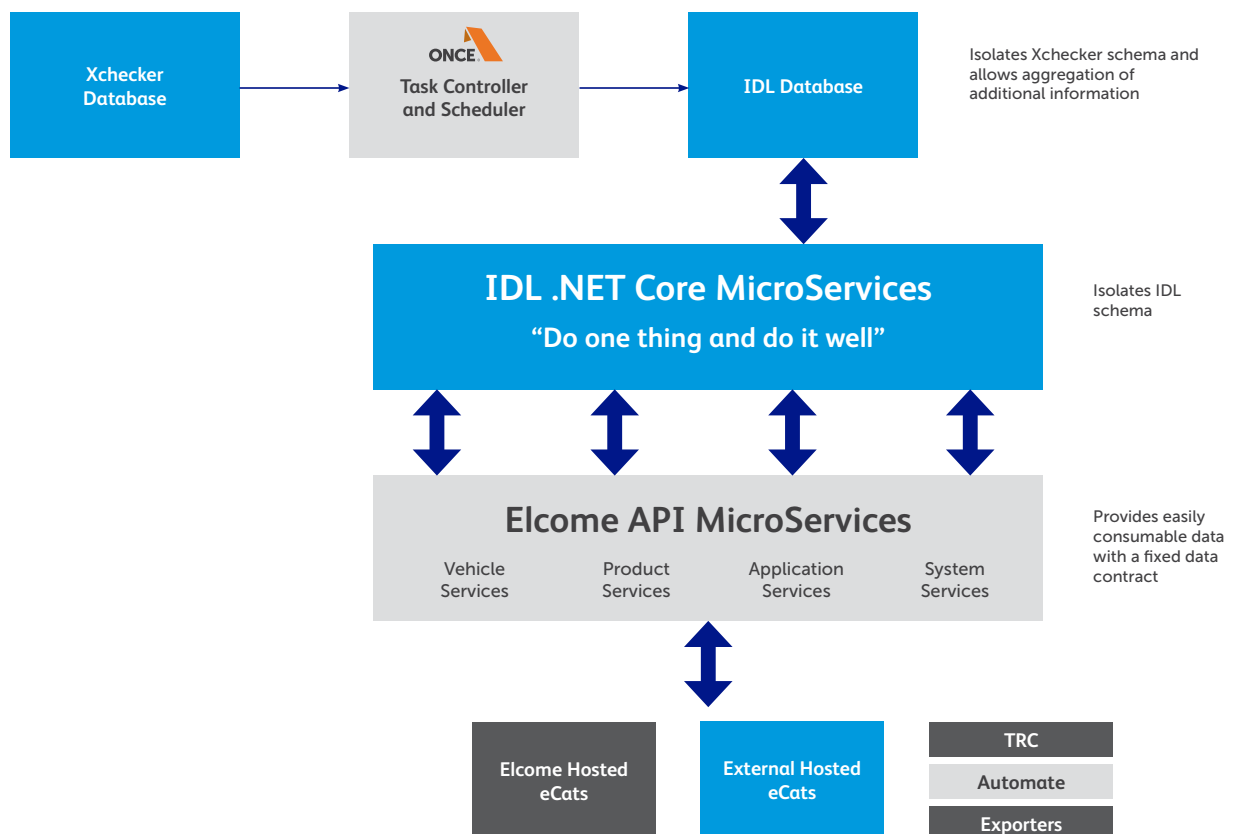
On a nightly schedule, Xchecker data is loaded into the corresponding **Intermediate Data Layer (IDL)** which is where it then becomes available to this **API**. Within Xchecker, there is control over which products can get to the **IDL** and which can be displayed by various consumers (eCat etc).





Services Architecture

The **EMS API layer** is divided into sections according to logical use and to allow for future smart deployment strategies (e.g. Docker).



The **IDL database** is a Microsoft SQL database that is a read-only, fast, more easily readable transform of the Xchecker data. Access to the IDL data is only via the **Elcome IDL Microservices (EIMS)** that optimises data retrieval and performance and removes any complexity of the underlying database structure.

The **Elcome Micro Services (EMS)** is a further API layer (RESTful) optimised for simplified data retrieval by consumer systems. It is this layer that understands how to transform the Xchecker data specifically for use by electronic catalogues and product information systems.

The **IDL database, Elcome IDL Micro Services and Elcome Micro Services Intellectual Property Rights** are the property of **Elcome Limited**.



Contact your Elcome BDM to discuss API's today
sales@elcome.ltd.uk or call +44(0)1793 845144

Product data sheet

Technology

API's are designed to the latest standards using **Swagger 2.0** and **OpenAPI 3.0**. The Swagger UI is built into the API and can be viewed on a unique URL assigned to you.

The **Swagger** interface allows you to explore the methods, their input and output models and test the calls. This can be used to understand and test the methods intended for your application and to report any issues found.

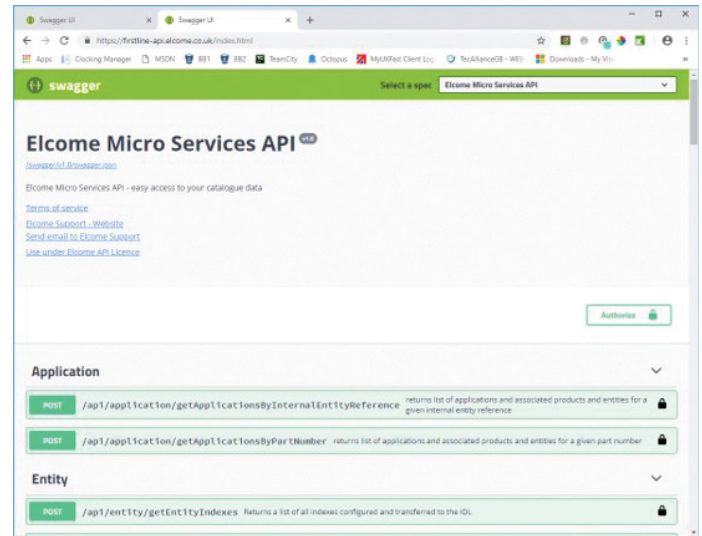
The swagger.json file from this site can be used in the Swagger editor to produce client code (stubs) in a variety of languages.

Hosting

Services are currently hosted by Elcome using our current **ISP (UK Fast)** where we have private dedicated servers.

All services are **RESTful** using https protocol to ensure data transfer security and require service level specific authentication. We use **IdentityServer4** for API authentication which is explained in the Security section.

For more advanced hosting requirements please contact your Elcome representative who will be happy to discuss your requirements.



Security

We take the security of your data seriously, so we use **IdentityServer4 (IDS4)** for secure token generation and **API** access authorisation. The generated token is then passed in the request authentication header for each call to the **API** you make. You will be given a client id, a shared secret, unique to you, and a scope identifier to use when requesting a token from our **IdentityServer**.

IdentityServer is a mature open source application which is part of the **.NET Foundation** which provides governance and legal backing. It is an officially certified implementation of **OpenID Connect**.

Licensing

Access to the **API** is via Elcome supplied details that is specified at a client url level. In other words, each application that requires access to the **API** will require new credentials and is classified as a new license.