



Develop a backend middleware application to power bi-directional integration between two separate systems supporting REST, SOAP, or GraphQL communication with compatibility between them. compatibility can be throttles, data transformation, security or protocols.

Examples:

1. It is required to sync orders between storefront and fulfilment centres where the storefront has REST API and the fulfilment centre has SOAP.

Transformation:

From:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  <soapenv:Header/>
  <soapenv:Body>
    <web:NumberToDollars>
      <web:dNum>35</web:dNum>
    </web:NumberToDollars>
  </soapenv:Body>
</soapenv:Envelope>
```

To:

```
{
  "numberToConvert": 35
}
```

2. A support chat system posts chat transcripts to the middleware system in real-time through GraphQL and Warehouse accepts data every 4 hours. Middleware should provide compatibility between the support chat system and the warehouse.
3. A Supermall chain uses services from multiple vendors, ParkIQ, Designa and iLogs. ParkIQ exposes REST API with a validated registration plate and payment service of a supermall. Designa uses long polling for the same reason. Middleware application will help Supermall company to onboard new vendors for internal APIs.