# Advantage Online Shopping (AOS) User Guide:

# 3. Back End Details and APIs

## Table of Contents

MICRO FOCUS®

## Micro Focus Trademark Information

MICRO FOCUS and the Micro Focus logo, among others, are trademarks or registered trademarks of Micro Focus (IP) Limited or its subsidiaries in the United Kingdom, United States and other countries. All other marks are the property of their respective owners.

## Company Details

**Company name:** Micro Focus International plc
Place of registration: England and Wales
Registered number: 5134647
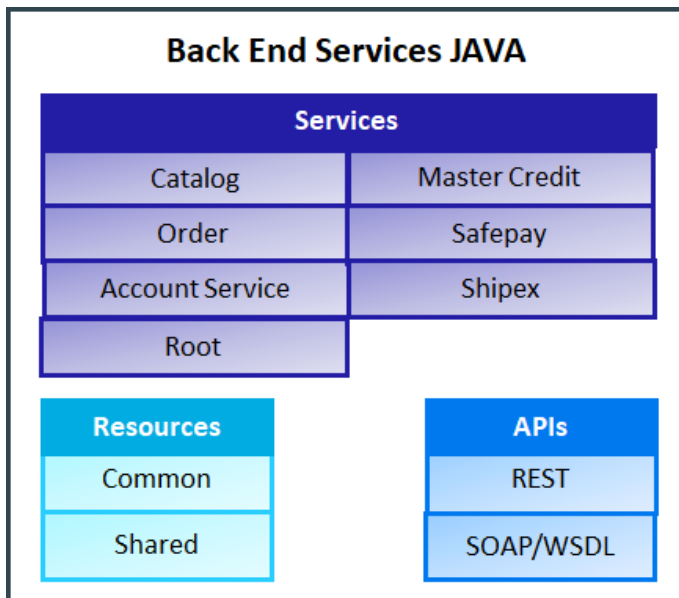**Registered address:** The Lawn, 22-30 Old Bath Road, Berkshire, RG14 1Q

# Section 3. AOS Back End Details and APIs

Each AOS environment (local, staging, nightly, and production), has its own back end that can be configured differently using the AOS Management Console.

- The staging, nightly, and production environments are all on Amazon Web servers.
- Using these environments for testing and debugging helps to isolate problems.

## Services

As you learned earlier, the AOS back end consists of the components shown in this diagram.



The back end is composed of seven standalone services and two resource components. Each of the seven services is a standalone service that can be deployed to a different container.

- Each service has its own properties file used during build time to configure key elements in the service.
- The back end resides *locally* on your own machine or in a Nimbus environment. For details about Nimbus, see:
  http://www.nimbusproject.org/doc/nimbus/platform/
- The back end uses Java as its runtime environment and was recently updated to Java 11.

## Flexibility

The front end, Android, iOS, and Management Console, can each run with any of the back-end environments. This gives you a lot of flexibility. **NOTE:** Make sure the back-end and front-end versions are the same.

For example you can present Mobile Center working with a test script on Android, where AOS is running with the production environment as its back end. Then you can change to a local back-end environment at runtime and show different Mobile Center abilities.

# Database

Three services communicate with the PostgreSQL database: **accountService**, **catalog**, and **order**. These services can be viewed as the "controller layer" of the MVC (Model-View-Controller) architectural pattern.

The database is composed of three schemes that correspond to the three services communicating with the database: account schema, catalog schema, and order schema. We use PostgreSQL to simulate a large-scale database for our customers.

The database is completely separate and can be deployed to a different container or server.

# Back-end Configuration

The back end can be configured easily using the AOS Management Console.  The source code is not public; however, the account service is made public on a GitHub it repository [https://github.com/aosapp/account-service](https://github.com/aosapp/account-service) where you can see the basic architecture of our services.

AOS is continually developing and growing as we accept requests from all Micro Focus groups for additional adjustments and clarifications. We are happy to oblige whenever possible!

# APIs

We provide REST and SOAP APIs for any developer who wants to send requests to AOS without using the Web interface.  The APIs allow you to perform every AOS function programmatically without ever going through the AOS website. Each API is a service, named according to the function it performs.

### REST APIs

- **Catalog:** Catalog controller
- **Order:** Order controller
- **Common-1.1.7-SNAPSHOT:** Master Credit controller
- **SafePay:** Safe Pay controller

### SOAP APIs
- **Account service:** Account controller
- **Shipex:** Shipping controller

**NOTE:** You can access the APIs from local and public environments. The APIs are listed in a well-organized manner in these locations:
- [https://www.advantageonlineshopping.com/api/docs/](https://www.advantageonlineshopping.com/api/docs/)
- [http://www.advantageonlineshopping.com/accountservice/accountservice.wsdl](http://www.advantageonlineshopping.com/accountservice/accountservice.wsdl)
- [http://www.advantageonlineshopping.com/ShipEx/shipex.wsdl](http://www.advantageonlineshopping.com/ShipEx/shipex.wsdl)