# Introduction

This document describes available services that design to be used by internal system and external party.

# Services

## MovieListService

1. This service provides information retrieval functions, i.e. retrieve for movie details and movie schedule.
2. Business entities are mapped to specific service entities using MLEntityMapperTranslator before send to client.
3. Custom fault contract is used to throw certain exception to client.
4. Project name MovieBooking.MovieListWAS

Operation Contracts:

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| List<SvcMovieSchedule> MovieScheduleListPerMovie(string movieName) | Retrieve movie schedule list for a movie, movie name as the parameter |
| List<SvcMovieSchedule> MovieScheduleListPerDay(DateTime dt) | Retrieve movie schedule list for a day, date as the parameter |
| SvcMovie MovieDesc(string movieName) | Retrieve movie description for a movie, movie name as the parameter |

Architecture Scope:

|  |  |
| --- | --- |
| **Scope** | **Selection** |
| Binding | basicHttpBinding |
| Instancing | PerCall; Currently set max 20 calls |
| Security | NA |
| Hosting | Windows service  Service installer: MovieBooking.MovieListWAS.exe |

## CollectionService

1. This service provides information retrieval functions, i.e. retrieve for paid bookings for a day, total revenue and ticket sold for a day.
2. Business entities are mapped to specific service entities using EntityMapperTranslator before send to client.
3. Custom fault contract is used to throw certain exception to client.
4. Project name MovieBooking.SI.Web

Operation Contracts:

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| List<SvcBooking> GetBookingListByDateRange(DateTime startDate, DateTime endDate) | Retrieve paid booking list for a date range, specify booking date start and end as the parameter |
| List<SvcBooking> GetBookingListByDate(DateTime startDate) | Retrieve paid booking list for a day, booking date as the parameter |
| SvcRevenue GetDailyRevenue(DateTime startDate) | Retrieve total revenue amount and total number of ticket sold for a day, payment date as the parameter |

Architecture Scope:

|  |  |
| --- | --- |
| **Scope** | **Selection** |
| Binding | wsHttpBinding |
| Instancing | PerSession; With timeout control; Currently set max 2 sessions |
| Security | Message-level; Authentication using certificate |
| Hosting | IIS |

Server and client certificate for test:



## PaymentService

1. This service provides creation and update of payment records.
2. Project name MovieBooking.SI.Web.

Operation Contracts:

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| int Insert(Payment payment) | Insert new payment record |
| bool Update(Payment payment) | Update payment record |

Architecture Scope:

|  |  |
| --- | --- |
| **Scope** | **Selection** |
| Binding | netTcpBinding |
| Hosting | Self-hosting |

## HallListService

1. This service is middle layer between presentation layer and BLL layer. It retrieves hall information and return the result to presentation layer. It also provides update and insert new hall.
2. Project name MovieBooking.SI.Web.

Operation Contracts:

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| IEnumerable<Hall> GetHallList(int Id) | Get hall information |
| bool updateHall(MovieBooking.BLL.Entities.Hall myHall) | Update hall information |
| bool addHall(MovieBooking.BLL.Entities.Hall myHall) | Add new hall and it’s details |

Architecture Scope:

|  |  |
| --- | --- |
| **Scope** | **Selection** |
| Binding | basicHttpBinding and wsHttpBinding |
| Security | Message-level; Windows authentication |
| Hosting | IIS |

## MovieDetService

1. This service retrieves movie information and return the result to presentation layer.
2. Project name MovieBooking.SI.Web.

Operation Contracts:

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| Movie GetMovieDetails(int ID) | Get movie information |

Architecture Scope:

|  |  |
| --- | --- |
| **Scope** | **Selection** |
| Binding | basicHttpBinding and wsHttpBinding |
| Security | Message-level; Windows authentication |
| Hosting | IIS |

## MovieScheduleService

1. This service retrieves movie schedule information and return the result to presentation layer.
2. Project name MovieBooking.SI.Web.

Operation Contracts:

|  |  |
| --- | --- |
| **Method Name** | **Description** |
| IEnumerable<MovieSchedule> GetMovies() | Get movie schedule information |

Architecture Scope:

|  |  |
| --- | --- |
| **Scope** | **Selection** |
| Binding | basicHttpBinding and wsHttpBinding |
| Security | Message-level; Windows authentication |
| Hosting | IIS |