Document on Amazon Seller Central and MWS implementation

**Amazon Seller Central Reports** **:**

There are five reports to be downloaded from Amazon Seller Central such as Business Report, Payment Report, Manage FBA Inventory Report, Reserved Inventory Report and Storage Fees Report. The nuget package used in C# .Net for web scraping method is ‘OpenQA.Selenium’. As using Chrome Browser the nuget package for that is ‘OpenQA.Selenium.Chrome’.

- The ‘IWebDriver’ interface object is used to control the browser and do web scraping. The ‘IWebDriver’ interface has functions such as Navigate(), FindElement(). A interface called ‘IWebElement’ is also used to access the elements in a web page.

- Login to Amazon Seller by the URL ‘https://sellercentral.amazon.com/’, and with the valid credentials. This is done by using the following code.

// Web Driver Object

IWebDriver driver;

// Amazon Seller Central Login Page

driver.Navigate().GoToUrl("https://sellercentral.amazon.com/");

driver.FindElement(By.ClassName("secondary")).Click();

driver.FindElement(By.Id("ap\_email")).SendKeys(SC\_LoginID);

driver.FindElement(By.Id("ap\_password")).SendKeys(SC\_LoginPwd);

driver.FindElement(By.Id("signInSubmit")).Click();

- In the Configuration File the ‘SC\_LoginID’ contains the value for the login username and ‘SC\_LoginPwd’ contains the value for the login password.

**1. Business Report :**

- In the home page click on the ‘Reports’ tab and select ‘Business Reports’, on the left pane click on ‘Detail Page Sales and traffic’ which will be under ‘By ASIN’ category.

- For the above procedure I have straight away navigated to the Business Reports page’s URL.

(i.e) driver.Navigate().GoToUrl("https://sellercentral.amazon.com/gp/site-metrics/report.html#reportID=102%3ADetailSalesTrafficBySKU&runDate=&fromDate=&toDate=");

- For downloading the past three days business report I have looped through 3 times using the date value. The Business Report is downloaded as a .csv file.

// Downloading Past 3 Days' Reports by looping through dates

for (int i = -1; i > -4; i--)

{

// Looping through Dates and setting the Date Value

var DateValue = DateTime.Now.AddDays(i).ToString("MM/dd/yyyy").Replace("-", "/");

// Setting From Date

IWebElement FromDateBox = driver.FindElement(By.Id("fromDate2"));

FromDateBox.Clear();

FromDateBox.SendKeys(DateValue + Keys.Enter);

// Setting To Date

IWebElement ToDateBox = driver.FindElement(By.Id("toDate2"));

ToDateBox.Clear();

ToDateBox.SendKeys(DateValue + Keys.Enter);

// Downloading the Report

driver.FindElement(By.Id("export")).Click();

driver.FindElement(By.Id("downloadCSV")).Click();

}

After this I have edited the downloaded csv file to add the details such as ‘Transaction Date’, ‘Account’, ‘Country’ and ‘Reference URL’. Then I have combined all the 3 days 3 csv files into 1.

**2. Reserved Inventory Report :**

- In the home page click on the ‘Rpeorts’ tab and select ‘Fulfillment’, on the left pane click on ‘Reserved Inventory’ which will be under ‘Inventory’ category.

- For the above procedure I have straight away navigated to the Reserved Inventory page’s URL and downloaded the report.

(i.e)driver.Navigate().GoToUrl("https://sellercentral.amazon.com/gp/ssof/reports/search.html#orderAscending=&recordType=ReserveBreakdown&noResultType=&merchantSku=&fnSku=&FnSkuXORMSku=&reimbursementId=&orderId=&genericOrderId=&asin=&lpn=&shipmentId=&problemType=ALL\_DEFECT\_TYPES&hazmatStatus=&inventoryEventTransactionType=&fulfillmentCenterId=&transactionItemId=&inventoryAdjustmentReasonGroup=&eventDateOption=1&fromDate=mm%2Fdd%2Fyyyy&toDate=mm%2Fdd%2Fyyyy&startDate=&endDate=&fromMonth=1&fromYear=2019&toMonth=1&toYear=2019&startMonth=&startYear=&endMonth=&endYear=&specificMonth=1&specificYear=2019");

driver.FindElement(By.XPath("//\*[@id=\"requestCsvTsvDownload\"]/tr[1]/td[2]/button")).Click();

driver.FindElement(By.XPath("//\*[@id=\"downloadArchive\"]/table/tbody/tr[1]/td[5]/a")).Click();

After this I have edited the downloaded csv file to add the details such as ‘Transaction Date’, ‘Account’, ‘Country’ and ‘Reference URL’.

**3. Managed FBA Inventory Report :**

- In the home page click on the ‘Rpeorts’ tab and select ‘Fulfillment’, on the left pane click on ‘Manage FBA Inventory’ which will be under ‘Inventory’ category.

- For the above procedure I have straight away navigated to the Manage FBA Inventory page’s URL and downloaded the report.

(i.e)driver.Navigate().GoToUrl("https://sellercentral.amazon.com/gp/ssof/reports/search.html?#orderAscending=&recordType=FBA\_MYI\_UNSUPPRESSED\_INVENTORY&noResultType=&merchantSku=&fnSku=&FnSkuXORMSku=&reimbursementId=&orderId=&genericOrderId=&asin=&lpn=&shipmentId=&problemType=ALL\_DEFECT\_TYPES&hazmatStatus=&inventoryEventTransactionType=&fulfillmentCenterId=&transactionItemId=&inventoryAdjustmentReasonGroup=&eventDateOption=1&fromDate=mm%2Fdd%2Fyyyy&toDate=mm%2Fdd%2Fyyyy&startDate=&endDate=&fromMonth=1&fromYear=2019&toMonth=1&toYear=2019&startMonth=&startYear=&endMonth=&endYear=&specificMonth=1&specificYear=2019");

driver.FindElement(By.XPath("//\*[@id=\"requestCsvTsvDownload\"]/tr[1]/td[2]/button")).Click();

driver.FindElement(By.XPath("//\*[@id=\"downloadArchive\"]/table/tbody/tr[1]/td[5]/a")).Click();driver.FindElement(By.XPath("//\*[@id=\"downloadArchive\"]/table/tbody/tr[1]/td[5]/a")).Click();

After this I have edited the downloaded csv file to add the details such as ‘Transaction Date’, ‘Account’, ‘Country’ and ‘Reference URL’.

**4. Payments Report :**

- In the home page click on the ‘Rpeorts’ tab and select ‘Payments’, in the payments page select ‘Date Range Reports’.

- For the above procedure I have straight away navigated to the Date range reports page’s URL and downloaded the report.

(i.e)driver.Navigate().GoToUrl("https://sellercentral.amazon.com/payments/reports/custom/request?tbla\_daterangereportstable=sort:%7B%22sortOrder%22%3A%22DESCENDING%22%7D;search:undefined;pagination:1;");

driver.FindElement(By.XPath("//\*[@id=\"drrGenerateReportButton\"]/span/input")).Click();

driver.FindElement(By.XPath("//\*[@id=\"drrReportTypeRadioTransaction\"]")).Click();

driver.FindElement(By.XPath("//\*[@id=\"drrReportRangeTypeRadioCustom\"]")).Click();

driver.FindElement(By.XPath("//\*[@id=\"drrFromDate\"]")).SendKeys(DateTime.Now.AddDays(-2).ToString("MM/dd/yyyy").Replace("-", "/") + Keys.Enter);

driver.FindElement(By.XPath("//\*[@id=\"drrToDate\"]")).SendKeys(DateTime.Now.AddDays(-2).ToString("MM/dd/yyyy").Replace("-", "/") + Keys.Enter);

driver.FindElement(By.XPath("//\*[@id=\"drrGenerateReportsGenerateButton\"]/span/input")).Click();

driver.FindElement(By.ClassName("drrRefreshTable")).Click();

driver.FindElement(By.XPath("//\*[@id=\"downloadButton\"]")).Click();

After this I have edited the downloaded csv file to add the details such as ‘Transaction Date’, ‘Account’, ‘Country’ and ‘Reference URL’.

**5. Storage Fees Report :**

- In the home page click on the ‘Rpeorts’ tab and select ‘Fulfillment’, on the left pane click on ‘Monthly Storage Fees’ which will be under ‘Payments’ category.

- For the above procedure I have straight away navigated to the Monthly Storage Fees page’s URL and downloaded the report.

(i.e)driver.Navigate().GoToUrl("https://sellercentral.amazon.com/gp/ssof/reports/search.html#orderAscending=&recordType=STORAGE\_FEE\_CHARGES&noResultType=&merchantSku=&fnSku=&FnSkuXORMSku=&reimbursementId=&orderId=&genericOrderId=&asin=&lpn=&shipmentId=&problemType=ALL\_DEFECT\_TYPES&hazmatStatus=&inventoryEventTransactionType=&fulfillmentCenterId=&transactionItemId=&inventoryAdjustmentReasonGroup=&eventDateOption=1&fromDate=mm%2Fdd%2Fyyyy&toDate=mm%2Fdd%2Fyyyy&startDate=&endDate=&fromMonth=1&fromYear=2019&toMonth=1&toYear=2019&startMonth=&startYear=&endMonth=&endYear=&specificMonth=1&specificYear=2019");

driver.FindElement(By.XPath("//\*[@id=\"specificMonthDownload\"]/option[9]")).Click();

driver.FindElement(By.XPath("//\*[@id=\"specificYearDownload\"]/option[1]")).Click();

driver.FindElement(By.XPath("//\*[@id=\"requestCsvTsvDownload\"]/tr[1]/td[2]/button")).Click();

driver.FindElement(By.XPath("//\*[@id=\"downloadArchive\"]/table/tbody/tr[1]/td[5]/a")).Click();

After this I have edited the downloaded csv file to add the details such as ‘Transaction Date’, ‘Account’, ‘Country’ and ‘Reference URL’.

**Amazon MWS Reports** **:**

The report downloaded from Amazon Marketplace Web Sevice is ‘FBA Storage Fees Charges’. The nugget package used for implementing Amazon MWS reports is ‘MarketplaceWebService’.

- The prerequisites to download the Amazon MWS reports are ‘AccessKeyId’, ‘SecretAccessKey’, ‘MerchantID’, ‘MWS\_AuthToken’, ‘ServiceURL’ and ‘ReportType’.

- All the prerequisites values will be in Configuration File.

- The 1st object to be created is for ‘MarketplaceWebServiceConfig’ class and the ‘ServiceURL’ will be assigned.

(i.e) MarketplaceWebServiceConfig config = new MarketplaceWebServiceConfig();

config.ServiceURL = "https://mws.amazonservices.com";

- Then the object for ‘MarketplaceWebServiceClient’ class is created and all the needed parameters are assigned.

(i.e) MarketplaceWebServiceClient service = new MarketplaceWebServiceClient(

accessKeyId,

secretAccessKey,

applicationName,

applicationVersion,

config);

- Then the object for ‘RequestReportRequest’ class is created and all the needed parameters are assigned to request the report.

(i.e) RequestReportRequest reportRequest = new RequestReportRequest();

reportRequest.Merchant = merchantID;

reportRequest.MWSAuthToken = mwsauthtoken;

reportRequest.ReportType = "\_GET\_FBA\_STORAGE\_FEE\_CHARGES\_DATA\_";

reportRequest.StartDate = DateTime.Parse(DateTime.Now.AddMonths(-1).ToString("dd/MM/yyyy"));

reportRequest.EndDate = DateTime.Now;

reportRequest.ReportOptions = "true";

- Then creating the object for ‘RequestReportResponse’ class to handle the response for requested report.

(i.e) RequestReportResponse reportResponse = service.RequestReport(reportRequest);

- Getting the report request list by creating the object for ‘GetReportRequestListRequest’ class and adding the needed parameters.

(i.e) GetReportRequestListRequest reportRequestList = new GetReportRequestListRequest();

reportRequestList.Merchant = merchantID;

reportRequestList.MWSAuthToken = mwsauthtoken;

- Handling the Response of Report Request List by getting the requested report data and writing it as a .csv file.

(i.e) GetReportRequestListResponse reportRequestListReponse = service.GetReportRequestList(reportRequestList);

foreach (ReportRequestInfo info in reportRequestListReponse.GetReportRequestListResult.ReportRequestInfo)

{

if (info.ReportRequestId.Equals(requestID))

{

reportStatus = info.ReportProcessingStatus;

if (reportStatus == "\_DONE\_")

{

// Getting the Report using Report ID

GetReportRequest getReport = new GetReportRequest();

getReport.ReportId = info.GeneratedReportId;

getReport.Merchant = merchantID;

getReport.MWSAuthToken = mwsauthtoken;

// Writting the Report as a File

string filename = Path.Combine(directoryFullPath, "FBA\_StorageFeesReport-" + DateTime.Now.ToString("dd/MM/yyyy") + ".csv");

getReport.Report = File.Open(filename, FileMode.OpenOrCreate,FileAccess.ReadWrite);

GetReportResponse report\_response = service.GetReport(getReport);

getReport.Report.Close();

break;

}

}

else

{

continue; // Only concerning about the requested report, not all the reports being generated

}

}