

Oracle[®] MICROS Symphony Extensibility Compatibility Guide



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Preface

A Symphony POS architecture change in version 19.2 affects apps built against the extensibility API DLLs. Extensibility developers must take action to maintain compatibility.

Purpose

This document provides details of what extensibility app developers need to do to maintain compatibility with Symphony 19.2.

Audience

This document is intended for extensibility developers for Symphony.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received and any associated log files
- Screenshots of each step you take

Documentation

Oracle MICROS product documentation is available on the Oracle Help Center at <http://docs.oracle.com/en/industries/food-beverage/>

Revision History

Date	Description of Change
December 2020	Initial publication.

Introduction

A Symphony POS architecture change in v19.2 affects apps built against the extensibility API DLLs.

Scope of Document

This document serves as a guidance for extensibility developers on actions required to maintain compatibility with Symphony 19.2, including:

- General implications of the Symphony architecture change.
- Actions required to maintain compatibility.
- How to configure specific extensibility apps for multiple Symphony versions.
- Implementation specific implications.

2 General Implications

The Symphony POS architecture changed in 19.2 adding functionality for STS Gen2, for both on-premises and Cloud. This change affected Extensibility API forwards and backwards compatibility.

Any Symphony 19.2 Extensibility solution needs to be built against Symphony 19.2 Core DLL's:

- *Ops.dll*
- *PosCommonClasses.dll*
- *PosCore.dll*

Compatibility

Extensibility solutions are neither forwards nor backwards compatible with 19.2. Specifically:

1. A Symphony 19.2 Extensibility solution is **not** backwards compatible. It will not run on Symphony Client 19.1, or 18.2 and earlier.
2. Any existing Symphony Extensibility solution (built against Symphony 19.1, 18.2 or earlier) is **not** forwards compatible. It will not run on Symphony 19.2 Client.

Maintaining Compatibility with Recompile

A recompile of existing extensibility solutions will be necessary against the 19.2 DLLs to maintain compatibility with Symphony 19.2. In many cases, this will be sufficient.

If *DataStoreClient* or *GetBusinessDateTime* are referenced in the code, then code changes will be required. See the section later in this document detailing implementation specific changes when **more** than just a recompile is necessary.

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Urgency and Timing

Simphony Enterprise Cloud can be updated to 19.2 without an updated client extensibility solution in place. However, updated client extensibility solutions **must** be in place before Simphony **clients** are updated to 19.2. A Simphony client is able to stay on a previous version for days or weeks after Simphony Enterprise Cloud is updated to 19.2. This provides some flexibility for the development and/or deployment of updated extensibility solutions.

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Configuring for Multiple Versions

Simphony allows simultaneous support for new and old extension applications, as described here. EMC offers the functionality needed to maintain version specific Extension Application Content (aka Simphony Extensibility DLLs).

Extension Applications (EMC)

EMC provides configuration for extension DLLs by version. It is through this configuration screen where it will be important to specify both the new and old versions, one for Simphony versions prior to 19.2, and one for 19.2 and later. Pictured is a sample of such a configuration.

Extension Application Contents

#	Zoneable Key	Description	Option Bits	Disk File Name	Target	Version
1	NewtonSoft.Json	NewtonSoft.Json	0000000000000000 ***	Newtonsoft.Json.dll	FF1FFFFFF ***	(any) - (any) ***
2	VSDC	VSDC DLL	0000000000000000 ***	VSDC.dll	FF1FFFFFF ***	(any) - 19.1 ***
3	VSDC_19_2	VSDC DLL	0000000000000000 ***	VSDC.dll	FF1FFFFFF ***	19.2 - (any) ***
4	VSDCExtension	VSDCExtension	0000000000000000 ***	VSDCExtension.dll	FF1FFFFFF ***	(any) - 19.1 ***
5	VSDCExtension_19_2	VSDCExtension	0000000000000000 ***	VSDCExtension.dll	FF1FFFFFF ***	19.2 - (any) ***

Implementation Specific Implications

Simphony Extensibility internal *DataStoreClient* (*OpsContext.DataStore*) is deprecated and should no longer be used with Simphony 19.2.

Source needs to be updated to make use of the Extensibility *DataStoreClient* only (namespace *Micros.PosCore.Extensibility.DataStore*). Sample code is provided below.

Functionality around *OpsContext.GetBusinessDateTime()* has changed and needs to be updated. Sample code is provided below.

DataStoreClient

This sample below is based on a single Visual Studio solution that includes two Simphony Extensibility projects, one built against an earlier Simphony version, the second built against Simphony 19.2.

Deprecated use of Simphony Extensibility internal *DataStoreClient*:

```
var taxDefinitions = this.OpsContext.DataStore.ReadTaxRecords();
foreach (var taxDefinition in taxDefinitions)
{
    if (taxDefinition.TaxType == 3)
    {

```

The screenshot shows a Visual Studio IDE with a code editor on the left and a Solution Explorer on the right. The code in the editor uses `OpsContext.DataStore` and `DataStoreClient`. The Solution Explorer shows a project named `Micros.PosCore.DataStore.DbRecords.DbTax` with a file `DataStoreClient.ReadTaxRecords()`. A warning icon is visible in the Solution Explorer, and a tooltip message reads: "ExtensibilityFramework - Available ExtensibilityFramework_19_2 - Not Available. You can use the navigation bar to switch context."

Correct use of Simphony Extensibility *DataStoreClient*:

```
var taxDefinitions = this.DataStore.ReadTaxRecords();
foreach (var taxDefinition in taxDef
{
    if (taxDefinition.TaxType == 3)
    {

```

The screenshot shows a Visual Studio IDE with a code editor on the left and a Solution Explorer on the right. The code in the editor uses `DataStore` and `DataStoreClient`. The Solution Explorer shows a project named `Micros.PosCore.Extensibility.DataStore.DbRecords.DbTax` with a file `DataStoreClient.ReadTaxRecords()`.

GetBusinessDateTime

Change in the Signature of the *GetBusinessDateTime()* method:

GetBusinessDateTime() method in earlier Simphony versions:

```
public Micros.EGatewayHandlerCommon.BusinessDateTimes GetBusinessDateTime(FinancialCalendarData calendarData);
public decimal GetCheckSubtotalByDateTime()
```

GetBusinessDateTime() method in Simphony 19.2:

```
public BusinessDateTimes GetBusinessDateTime(PosCore.Extensibility.DataStore.DbRecords.FinancialCalendarData calendarData);
[Obsolete("GetBusinessDateTime is using internal types that you may not be able to access, please use the Micros.PosCore.Extensibility.DataS
public Micros.EGatewayHandlerCommon.BusinessDateTimes GetBusinessDateTime(PosCore.DataStore.DbRecords.FinancialCalendarData calendarData);
public List<PosCore.Extensibility.DataStore.DbRecords.FinancialCalendarData> GetBusinessDateTimesByDateRange(DateTime startDate, DateTime endDate);
```