

Support Advisory 49138: Instrumenting an async method results in System.Runtime.InteropServices.SEHException

Summary

AppDynamics has discovered an issue triggered when the .NET agent attempts to instrument any async method encapsulated in a generic class or method. In most cases this will result in a System.Runtime.InteropServices.SEHException. In rare cases, an application hang could result.

Affected Software

Product	Component	Version
AppDynamics .NET APM	.NET Agent	4.1 versions below 4.1.3

Impact

Application Exception : Instrumentation of a method described in the Summary will result in an SEHException.

Examples

```
// An async method called inside of a generic class will trigger the exception.
class GenericClass<T>
{
    async Task AsyncMethod()
    {
        //Do work...
    }
}

// An async method called inside of a generic method will also trigger the exception.
class MyClass
{
    public async void MyMethod<T>(T input)
    {
        await AsyncMethod();
    }
}
```

Workaround

- Customers running version 4.1.0 – 4.1.2 versions of the agent are advised to upgrade to 4.1.3 or later, or
- Edit the .NET Agent Configuration file to disable the AsyncStateMachineInstrumentor, as described in the following steps.

To disable AsyncStateMachineInstrumentor:

- Open the following file, depending on your version of Windows:
 - Windows Server 2008 and later:
%ProgramData%\AppDynamics\DotNetAgent\Config\config.xml
 - Windows Server 2003:
%AllUsersProfile%\Application Data\AppDynamics\DotNetAgent\Config\config.xml
- Replace or update the <machine-agent> node to include:

```
<machine-agent>
  <instrumentation>
    <instrumentor name="AsyncStateMachineInstrumentor" enabled="false" />
  </instrumentation>
</machine-agent>
```

- Restart the AppDynamics.Agent.Coordinator service and then all instrumented processes.