

Question

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Request Timeout in Business Processes

I want to send requests from custom BP with timeout and be able to understand that timeout event happened.

I thought that I need to implement `OnTimeout` method in my process (in either caller or callee), however it seems like `OnTimeout` is never called.

Let's say we have this parent process:

```
Class Timeout.Parent Extends Ens.BusinessProcess [ ClassType = persistent ]
{
Method OnRequest(pRequest As Ens.StringContainer, Output pResponse As Ens.StringContainer) As %Status {
    set sc = ..SendRequestSync("Timeout.Child", pRequest, .pResponse, 5)
    if ($$$ISOK(sc) && ('$isObject(pResponse))) {
        set text = "Caught timeout"
        $$$TRACE(text)
        set pResponse = ##class(Ens.StringContainer).%New(text)
    }
    quit sc
}
Method OnTimeout(request As Ens.StringContainer, ByRef response As Ens.StringContainer, callrequest As Ens.StringContainer, pCompletionKey As %String) As %Status
{
    set text = "TIMEOUT PARENT"
    $$$TRACE(text)
    set response = ##class(Ens.StringContainer).%New(text)
    quit $$$OK
}
}
```

And this child process:

```
Class Timeout.Child Extends Ens.BusinessProcess [ ClassType = persistent ]
{
Method OnRequest(pRequest As Ens.StringContainer, Output pResponse As Ens.StringContainer) As %Status
{
    hang 10
    set text = "OnRequest CHILD"
    $$$TRACE(text)
    set pResponse = ##class(Ens.StringContainer).%New(text)
    quit $$$OK
}
Method OnTimeout(request As Ens.StringContainer, ByRef response As Ens.StringContainer, callrequest As Ens.StringContainer, pCompletionKey As %String) As %Status
{
    set text = "TIMEOUT CHILD"
}
```

```
$$$TRACE(text)
set response = ##class(Ens.StringContainer).%New(text)
quit $$$OK
}
}
```

However, neither `OnTimeout` method gets called. Why?

I've found a workaround: if `SendRequestSync` returns `$$$OK` but response is empty that means we got a timeout error.

Is there a better way to detect timeouts in Sync calls?

Additionally, how can we catch a timeout with async calls? `SendRequestAsync` doesn't have a timeout parameter at all.

[Code sample](#).

[#Business Process \(BPL\)](#) [#Interoperability](#) [#Ensemble](#) [#InterSystems IRIS](#)

Source URL: <https://community.intersystems.com/post/request-timeout-business-processes>