

Khaos Control

Web Integration Error Handling

Exception Handling

In the event that a web service call causes an internal exception to be raised, the web service will respond with a standard SOAP exception which may be used to retrieve further information on the cause. The information provided can be particularly useful during the development phase of integrations, as mistakes in the implementation are more easily identified upon examination of the exception. Exception text is extremely useful in any correspondence with KCS support personnel.

Please note that it is technically possible for **any** call to the web service to potentially raise an exception, for example; when given invalid parameters, or in the event of connectivity issues. It is, therefore, important that any application interfacing with the web service be equipped to handle and potentially recover from this situation whenever possible (even if only to display a notice to the end-user suggesting they retry their request or contact the vendor).

An example SOAP exception response is shown below:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/">
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
      <faultcode>SOAP-ENV:Client</faultcode>
      <faultstring>This tag will contain information about the exception</faultstring>
      <faultactor>Exception</faultactor>
      <detail>
        <NS1:ERemotableException xmlns:NS1="urn:InvokeRegistry"
xsi:type="NS1:ERemotableException"/>
      </detail>
    </SOAP-ENV:Fault>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Many development languages provide intrinsic methods of trapping and parsing exceptions that occur during SOAP calls (such as try...catch blocks, etc). Please consult your language or SOAP reference manual for further information.

The exception responses generated by the Web Service also include a <detail> section that will specify the exception type and the exception inheritance down to the base exception type, for example (highlighted):

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/">
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
      <faultcode>SOAP-ENV:Client</faultcode>
      <faultstring>Interface not supported</faultstring>
      <faultactor>EIntfCastError</faultactor>
      <detail>
        <NS1:EWebServiceError xmlns:NS1="urn:WebServiceP" xsi:type="NS1:EWebServiceError">
          <ExceptionClassName xsi:type="xsd:string">EIntfCastError</ExceptionClassName>
          <ExceptionInheritance xsi:type="xsd:string">EIntfCastError,Exception</ExceptionInheritance>
        </NS1:EWebServiceError>
      </detail>
    </SOAP-ENV:Fault>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Please Note: Not all exceptions raised via the web service mean that something has gone wrong with the SOAP call. For instance, if you try to order an item that is discontinued, you will receive an error saying that this item cannot be added to the order because it is discontinued. It is up to the web developer to deal with errors like this.