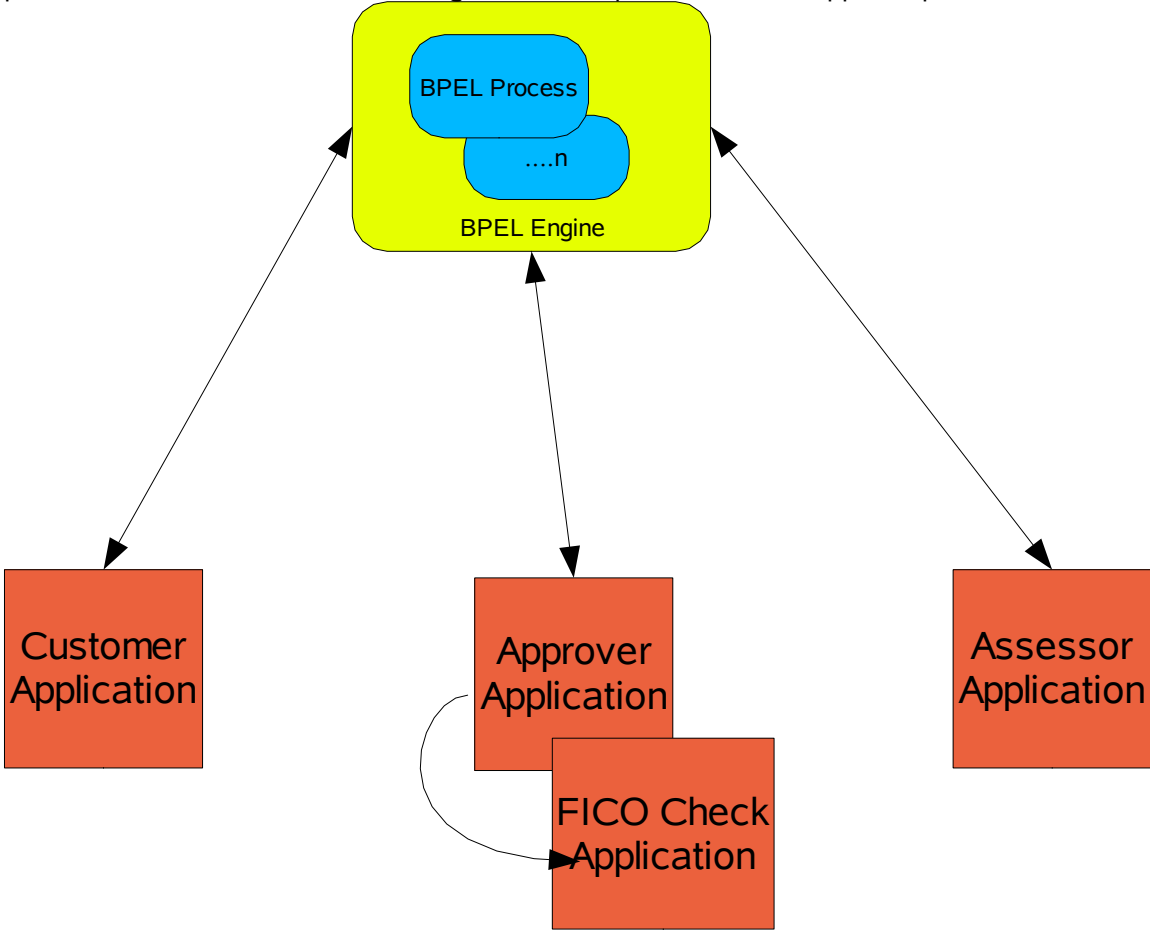


Use case ID	A-E-Loan-001
Use case name	Multi-start activities using loan approval scenario ¹
Description	<p>A loan process to secure funds to purchase a commercial property is a complex interaction where multiple parties can be involved not only in the business event but the checks and balances to execute.</p> <p>In this loan approval case, a customer interacts with approver, and an assessor that compiles multiple levels of credit and assessment input to provide a risk rating. A FICO checker also provides a credit score. The risk rating is a direct input into the loan approval process.</p>  <pre> graph TD subgraph BPEL_Engine [BPEL Engine] BPEL_Process[BPEL Process] subn[....n] end Customer[Customer Application] --> BPEL_Engine Approver[Approver Application] --> BPEL_Engine Approver --> FICO[FICO Check Application] FICO --> BPEL_Engine Assessor[Assessor Application] --> BPEL_Engine </pre>
Original Submitter	Sid Askray and Monica J. Martin
Champion	Sid Askray and Monica J. Martin
Status	New
Related Issues	<p>See:</p> <p>Issue 2, Subfunctions or subprocesses</p> <p>Issue 5, Suspend and resume</p> <p>Issue 78, Multi-start activities</p> <p>None, Composition and Decomposition</p> <p>Links to Issues 30, 53-59, 15, Those cited for Process Coordination</p>
TC Disposition	[tbd] Discussion 9 December 2003

¹ WS-BPEL TC implementation subgroup, working session scenario

Non-functional requirements and assumptions	<p>Composition/decomposition of processes, subfunctions or subprocesses may be outside of or touch on the scope of WS-BPEL. This use case may assist in determining this. Outstanding work items:</p> <ol style="list-style-type: none"> 1. Error handling and compensation 2. Event handling 3. Variability of asynchronous operations 4. Broadcast 5. Binding dependencies
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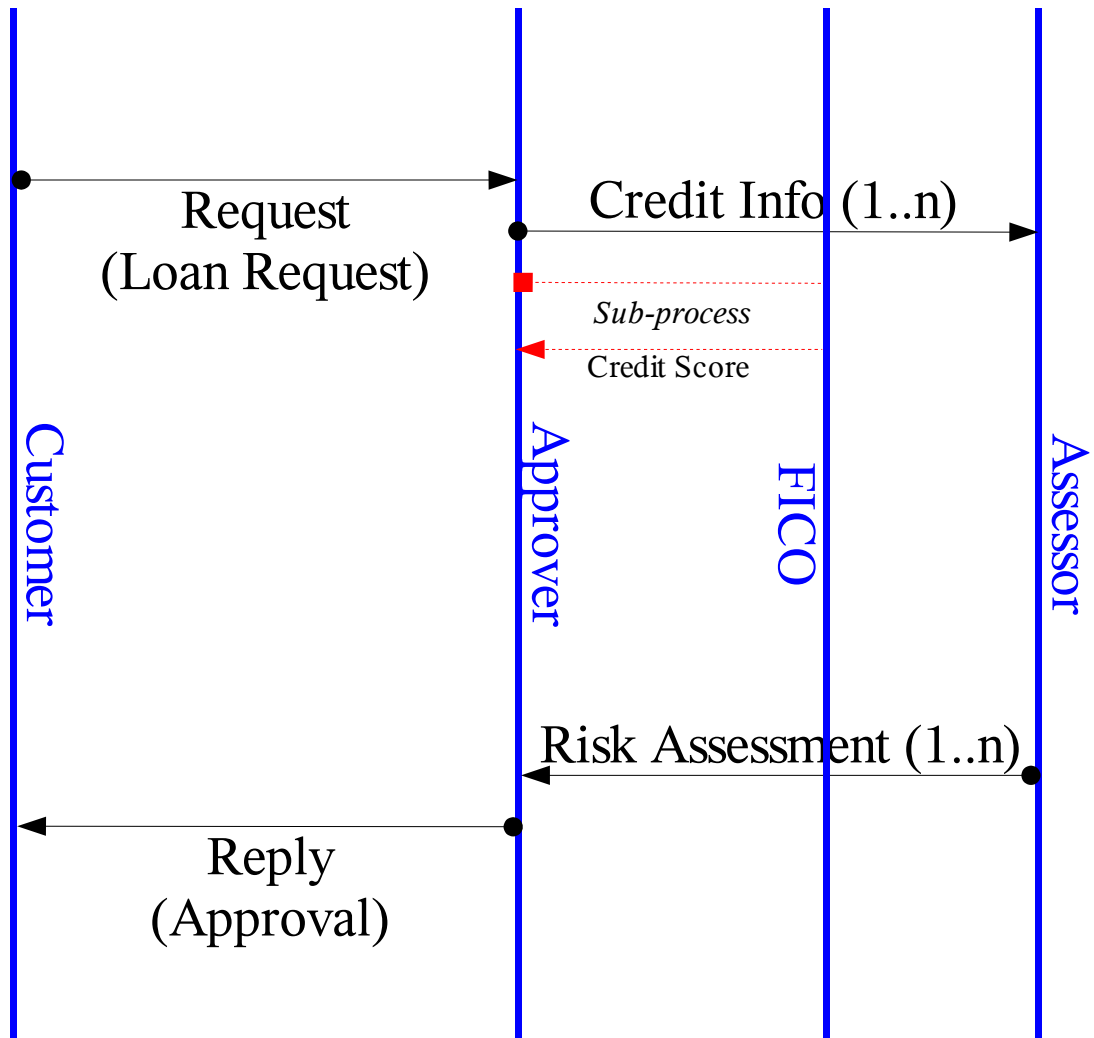
Related business flow	<p>The customer engages in a commercial property interaction. The property sale is contingent on loan approval.</p> <ol style="list-style-type: none"> 1. Customer submits requested credit information to the loan approver. <ol style="list-style-type: none"> a. Customer submits address, gross income base, assets and liabilities. b. Gross income base provides some indicator of the level of risk assessment processing required on the application (i.e. One or more credit reports may be required). c. In certain instances during the loan approval process, the customer may be required to provide documents or references to documents to the approver in order to substantiate credit information.² [attachments, binding] d. The information may be provided via an application, email or other means.³ [attachments, binding] 2. Approver receives credit information and service processing begins based on credit information provided. [1..n correlation sets] <ol style="list-style-type: none"> a. The approver asks the FICO checker for a credit score. This child process is dependent on the approval process. <ol style="list-style-type: none"> i. The credit score may require additional credit score decisions by the approver: base credit and/or variable credit rating and credit rating type. ii. The approver may require a variable rating may be required in the same or separate interaction to the assessor. [Different operations on same portType] iii. If a variable rating is required, it can be provided in a separate interaction at the original request of the approver. iv. The approver may choose to suspend the risk assessment based on the credit score. b. Credit information is provided to one or more assessors for evaluation, either in one or more communications by the approver [Broadcast] <ol style="list-style-type: none"> i. Gross income base provides an indicator of the ratings required on the risk. [multiple variables, possible different operations on same portType] c. The approver has the right to ask the assessor to suspend a response to further review a late submission of credit information or to respond to the FICO checker results that impact that risk assessment. <ol style="list-style-type: none"> i. The approver will specify whether or not processing continues by the assessor. ii. The approver may specify processing continues but a response cannot be provided until the complete assessment can be
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² Brings up two questions related to attachments and whether or not the process is impacted when it is 'bound.'

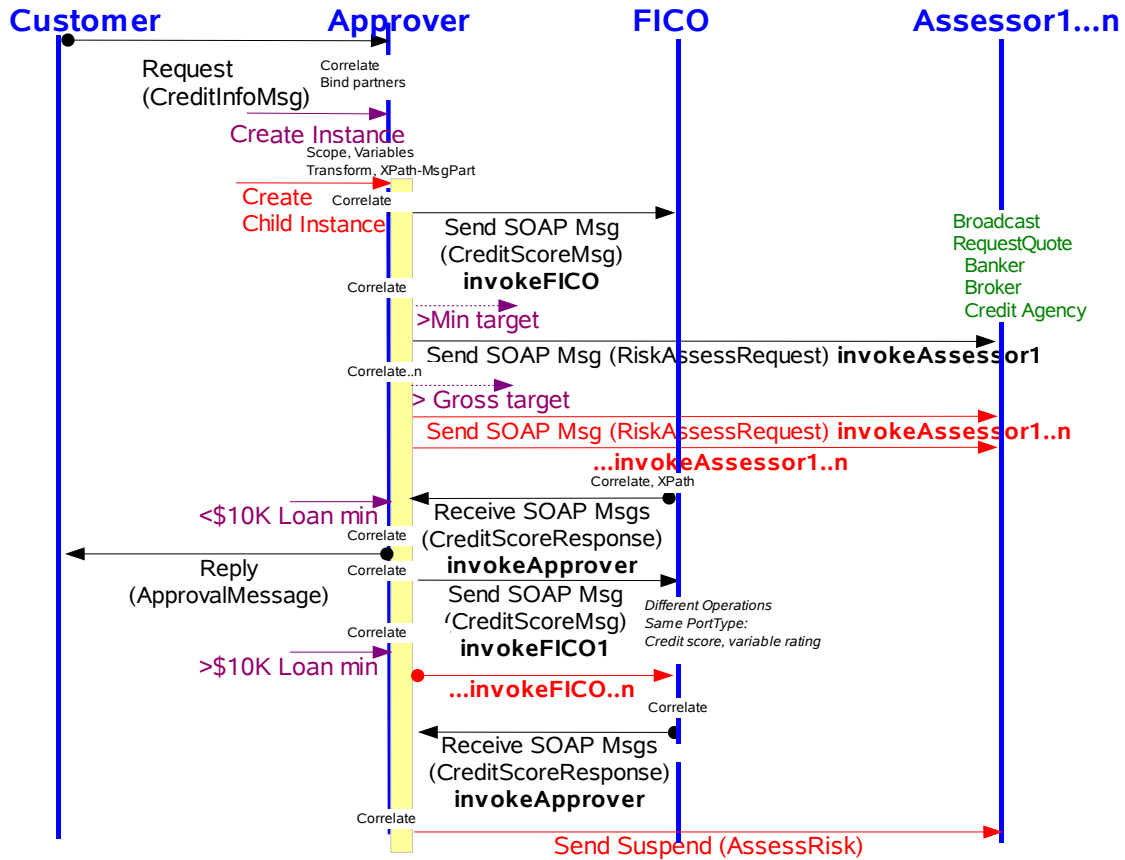
³ See previous comment.

	<p>provided. [suspend, resume]</p> <ol style="list-style-type: none"> 3. Once the assessor(s) has(ve) evaluated the credit information, a risk assessment is provided to the approver. <ol style="list-style-type: none"> a. If a separate interaction is required, this is a sub-process of the risk assessment between the assessor and approver. [subprocess] b. If credit information is missing to effectively provide a risk assessment, either, based on specific rules, either could occur: <ol style="list-style-type: none"> i. Request for more information from the approver (and to the customer). ii. Error and reply to the approver to reinitiate the process. 4. The approver evaluates the credit score and then the risk assessment information. If successful, communicates an approval to the customer.
Typical preceding flow	By request, the customer submits credit information to the loan organization.
Typical following flow	Customer is granted or denied loan approval. If successful, a commercial property interaction is completed and the records documented and stored for historical, government, legal and customer purposes.
Begins When	Customer request
Actors	<p>Customer Approver FICO Checker Assessor</p> <p>Note: In this case, the processing of the credit information by the assessor (and supporting agencies) is not exposed in this use case.</p>
Preconditions	<ol style="list-style-type: none"> 1. Customer request initiated. 2. Credit information made available by the customer. 3. Property is available [indirect; may not be exposed].
Ends when	<p>Commercial property interaction is complete</p> <p>Note: Recording and storage is outside of the use case.</p>
Success Postconditions	An approver approves the commercial property request from the customer.
Alt-Postcondition-1	An approver rejects the commercial property request from the customer.
Alt-Postcondition-2	Customer withdraws the request.
Activity Diagram (no standard)	<p>Business activity diagram</p> <p>See below [1] High Level [2][3] Detailed</p>
Abstract BPEL	[tbd]
Executable BPEL	[tbd]

[1]



[2]



[3]

