

BPEL COP™

BPEL COP™ – Code Review in Seconds

BPEL COP™ is an auditing tool developed by Sierra Atlantic to automate BPEL code validation and correction. The BPEL COP™ tool checks on completeness and compliance with standards, conventions and best practices, as defined in the naming convention guidelines. This provides an opportunity to confirm the validity of the code from the design and development efforts.

The audit identifies the differences in the coding practice suggested by the guidelines and the code. It also reveals those aspects that should have been addressed by the existing code. When the audit is complete, BPEL COP™ identifies coding anomalies and provides FIXALL button to apply naming conventions.

Why Choose BPEL COP™

Reduces Code Review Time By 90%

BPEL COP™ automates code validation and corrections; it reduces code review time by 90% and provides naming convention discrepancies as a HTML based report, which contains the dashboard of code violations. Output Report screenshot is displayed below



ActivityName	TotalActivities	SuccessCount	FailureCount	Status
BPEL_AssignActivityCheck	2	2	0	Success
BPEL_InvokeActivityCheck	1	0	1	Fail
BPEL_CompensateActivityCheck	0	0	0	There are no activities that support this Rule
BPEL_DecideActivityCheck	0	0	0	There are no activities that support this Rule
BPEL_FlowActivityCheck	0	0	0	There are no activities that support this Rule
BPEL_JavaEmbeddingActivityCheck	0	0	0	There are no activities that support this Rule
BPEL_PickActivityCheck	0	0	0	There are no activities that support this Rule
BPEL_ReplyActivityCheck	1	0	1	Fail
BPEL_ReceiveActivityCheck	1	0	1	Fail

Figure 1–Sample Output Report

Flexible – Allows Custom definition of Naming Conventions Rules

BPEL COP™ provides rules file for creating customized rules. Code review team can define the rules as per their requirements. BPEL COP™ will read the “Rules File” and perform code validation.

```
<Rule name="BPEL_ReplyActivityCheck" description="All Reply activities in a BPEL pr
  executor="XPathExecutor">
  <Property name="xpath" defaultValue="//reply/@name" />
  <Property name="assertValue" defaultValue="(Reply){1}([a-zA-Z])([a-zA-Z_0-9])
</Rule>
```

Figure 2–Customizable Rules

Benefits of BPEL COP™:

- Automated Code Validations
- Code review time reductions
- JDeveloper Plug-in
- Automated Code Fix option
- User Interface to customize rules

Ease of Use – Code Review Just a Click Away

BPEL COP™ provides JDeveloper Plug-in, to invoke it, right click and select “Validate with BPELCOP”, making it easy for the code review to check for naming convention violations.

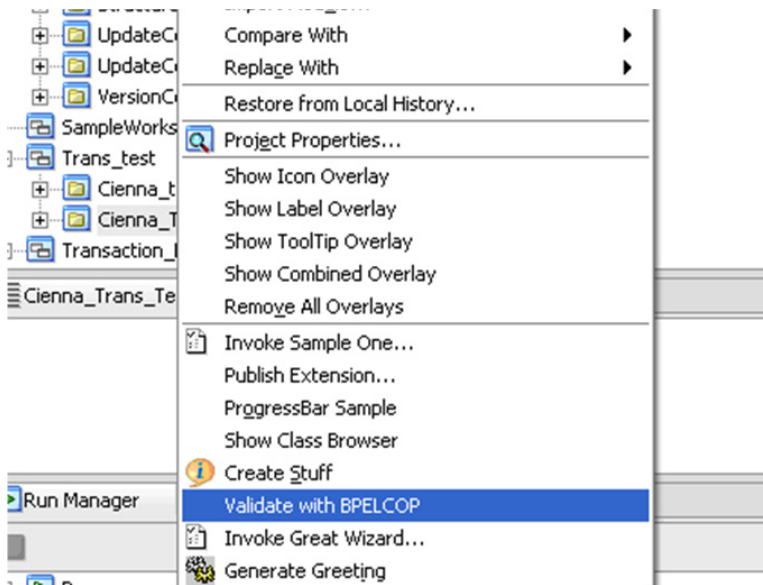


Figure 3 – Easy Invoke from JDeveloper

AutoFix Option – Saves Even More Time

BPEL COP™ makes fixing of coding violations easy, it provides “FixAll” button which will automatically fix the coding violations errors detected by the tool.

Fault Activity Details by Rule

BPEL_InvokeActivityCheck				
Suggestion	All Invoke activities in a BPEL process should follow the pattern: Invoke(Partner Link Name){Call/Start}(Operation)			
Expected Value	((Invoke){1}([a-zA-Z_]{1}[a-zA-Z_0-9]*)*{Call/Start}{1}([a-zA-Z_]{1}[a-zA-Z_0-9]*)*)			
FaultValue	Line Number	Column Number	Fix	
invoke_abc	61	166	<input type="text"/>	

BPEL_ReplyActivityCheck				
Suggestion	All Reply activities in a BPEL process should follow the Pattern: Reply(Message Name)			
Expected Value	(Reply){1}([a-zA-Z_]{1}[a-zA-Z_0-9]*)*			
FaultValue	Line Number	Column Number	Fix	
replyOutput	68	131	<input type="text"/>	

BPEL_ReceiveActivityCheck				
Suggestion	All receive activities in a BPEL process should follow the Pattern: receive(A name describing the functionality)			
Expected Value	(Receive){1}([a-zA-Z_]{1}[a-zA-Z_0-9]*)*			
FaultValue	Line Number	Column Number	Fix	
receiveInput	49	154	<input type="text"/>	

BPEL_SequenceActivityCheck				
Suggestion	All Sequence activities in a BPEL process should follow the Pattern: {Name describing the Sequence Tasks}Sequence			
Expected Value	[a-zA-Z_0-9_]{1}(Sequence){1}			
FaultValue	Line Number	Column Number	Fix	
main	47	24	<input type="text"/>	

Fix All

Figure 4 – FixAll Button to Fix all Errors @ one go



About Sierra Atlantic

Sierra Atlantic is the leader in offshoring enterprise applications and outsourced product development. With expertise derived from deep R&D relationships with enterprise software leaders such as Oracle and Microsoft, we provide product development and IT services including implementation, integration, development, upgrade, testing and support. Sierra Atlantic is headquartered in Fremont, California and maintains operations in 16 countries across North America, Europe and Asia Pacific. For more information, please visit www.SierraAtlantic.com.

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