

Name: COTS Integration Advisor (iStudio)

Presenter(s): Jesal Bhuta

Objective: Automates interoperability assessment for COTS-based software architectures. The tool inputs high-level COTS-based deployment architectures and COTS interoperability characteristics defined using a set of COTS interoperability attributes.

Rationale: Software development projects that utilize multiple commercial-off-the-shelf (COTS) products often confront interoperability conflicts causing budget and schedule overruns. Identification of such conflicts and their resolution mechanisms is essential for successful development with multiple COTS products. Unfortunately, acquiring information to perform interoperability analysis is a time-intensive process. Moreover, increase in the number of COTS products available to fulfill similar functionality leads to hundreds of COTS product combinations, further deteriorating COTS interoperability assessment landscape. Our tool iStudio automates interoperability assessment of COTS-based architectures and recommends possible resolutions to interoperability mismatches.

Target Users: This tool is designed for COTS software evaluation teams to assess the cost of integrating COTS

Runs On:

- Windows 95, 98, NT, 2000, XP
- Requires Microsoft .NET framework

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Technical Approach: The tool provides an interface to develop basic deployment architecture of the system. It interfaces with an online repository to retrieve COTS definitions and interoperability analysis rules to perform the actual analysis. It outputs a report for the evaluation team to identify the complexity of integrating the selected COTS products.

Developers:

Model Principle: Jesal Bhuta, Barry Boehm

Tool Development: Jesal Bhuta

Future Directions: The tool being demonstrated here is a prototype. Currently we are developing a more user friendly version of the tool, with additional features such as automatic retrieval of COTS definitions, save feature to save deployment architectures, and a modular design.