

Rebuilding the Tower of Babel - The Case for a Unified Architecture Framework

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Abstract. The book of Genesis tells the story of how the peoples of the earth came together to build an enormous tower. To confound them in their task, God changed the languages of the different groups of people so that they were unable to communicate. Since they could not coordinate their efforts, the project was abandoned and the different groups dispersed throughout the world. The same problem exists today in the world of Enterprise Architecture Frameworks. Although they express similar concepts, interchange between the different frameworks is awkward at best, time consuming, and leads to misunderstanding and miscommunication. This lack of communication was highlighted in a recent report on the conflict in Afghanistan, where the lack of interchange of architectures was cited as a limiting factor in coalition efforts and may have contributed to loss of life. This paper will assess the current situation, examine international efforts to solve it, and identify future challenges. This will include: _ The role of standards for collaboration and communication_ Standards and standards organizations_ The Object Management Group (OMG)_ A brief history of Military Architectural Frameworks_ The interoperability problems of frameworks_ The Unified Architecture Framework (UAF) effort_ Using reference architectures to define a common conceptual _dictionary__ Systems engineering, acquisition, and process_ Vertical and horizontally complementary emerging standards_ Future problems and potential solutions.