Architectural Frameworks: Which Is Right for Your Organization?

P2P1-W05: Architectural Frameworks: Which Is Right for Your Organization?

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Architectural frameworks provide specification processes that can drive secure development and architectural threat analysis. Thirty security professionals gathered in a lively Peer2Peer session at RSA Conference 2018 to discuss how to choose from the many architecture frameworks available, and how to best use architecture frameworks in a security assurance program.

The group represented a variety of industries, including Aerospace, Banking, Commerce, Cyber Security, Financial Services, Gas and Electric, Health Services, Insurance, IT Security, Manufacturing, and Technology Services. A few open-ended questions started the conversation, and soon members of the group were sharing how they integrate security and architectural processes.

Acceptance of architecture framework methodologies

About one third of the participants stated that their organization uses a published architecture framework, while about a third had developed their own or adapted existing architecture frameworks. Other participants were present to learn how to start using an architecture framework. The most frequently mentioned frameworks were the Department of Defense Architecture Framework (DoDAF), Sherwood Applied Business Security Architecture (SABSA), and The Open Group Architecture Framework (TOGAF).

Diverse views on process

The group shared a variety of views on processes to create and review architectures, such as “Engineering drafts the specifications and Security reviews them”, versus “Engineering and Security co-author the specifications” versus “Either they or we produce the specifications”. In some the Security team was at the front of the process, and in others it was not. Decision making processes varied as well, such as the “Business makes the decisions and Security identifies risk and then advises”, versus “Security has the club” versus “It’s a discussion between Engineer and Security teams”.

Leveraging your architecture process

Some members of the group asked questions about architectural processes, many others shared answers about what worked for their organization, such as the following. When considering an architecture framework, choose the subset that works in your context. When in disagreement, refer to the architecture principles. The specification proves what was approved. To prevent the perception that architecture processes are taxing, show the business value of the processes, such as reuse of architecture artifacts and easier modification of products and processes.