

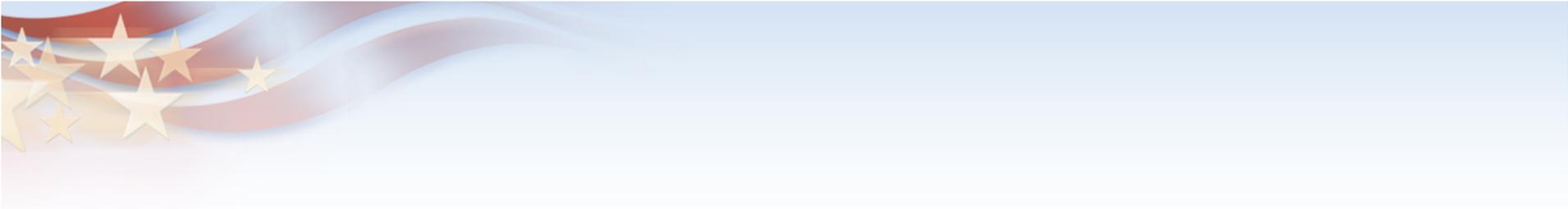
Asynchronous Many-Task Runtime Systems Working Group

(AMT RTS WG)

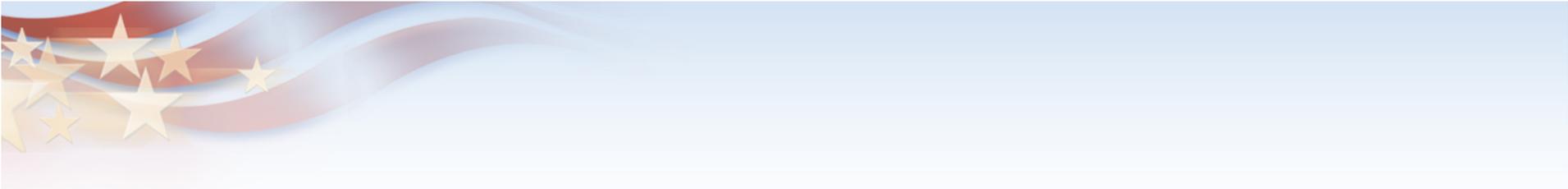
**Robert L. Clay
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**Salishan HPC Conference
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Gleneden Beach, OR**

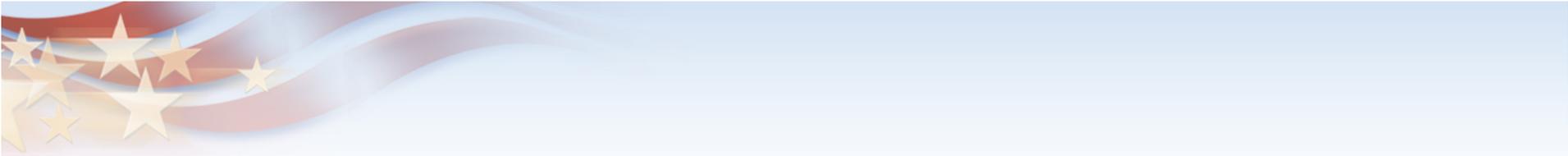




**We're kicking off a
working group to help
define best practices
within the AMT RTS
community.**



We're highly motivated, because we have to stand up a solution soon for ASC/ ATDM [and other program drivers].



**We'd like to work this
as a community effort
– developing best
practices and shared
approaches can help
us all.**

Shared Goals and Objectives

- **Develop a common view of the AMT RTS components and the architecture in which they fit.**
- **Develop the use cases and requirements that prioritize the R&D activities associated with the ATM RTS.**
- **Augment the community in their efforts to develop sharable AMT RTS components.**

PM/E Goals and Objectives

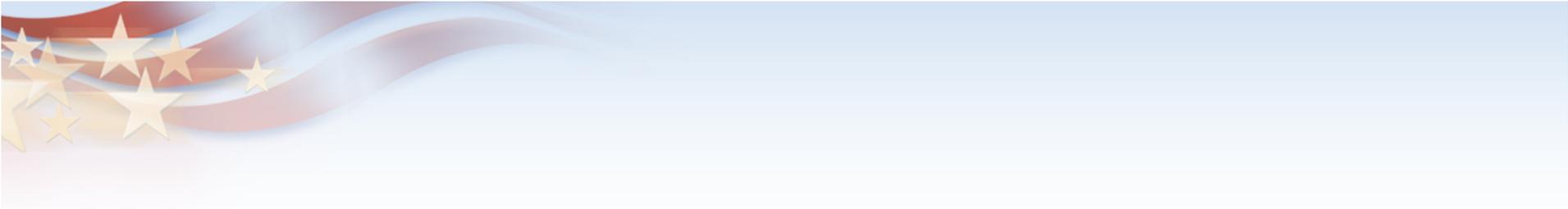
- **Develop a common set of APIs for the programmers to get started on writing code via AMT models. This is: a) not intended to be a standard, but rather a beginning to decouple the codes from AMT system implementations, and b) is targeted at the application/library-level developers, and c) not intended to include the high-level application-domain abstractions (e.g., meshes).**
- **Develop a shared model for the use of AMT RTS, and specifically to generate the use cases and requirements that help drive the RTS/OS developments.**
- **Develop a shared set of AMT-based proxy apps that reflect the DOE workload and provide a sound basis for co-design.**



RTS/OS Goals and Objectives

- **Develop a set of requirements based on the use cases and semantics of the shared model for the use of the AMT RTS.**
- **Use these requirements to identify the common capabilities and differentiating capabilities of current RTS R&D activities.**
- **Evaluate the ability of the common RTS capabilities to be encapsulated through a common interface.**
- **Develop a method for categorizing the differentiating RTS capabilities to better understand scope and potential impact.**





**If you'd like to participate,
contact either of us.**

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