

Chapter 2 – INTRODUCTION TO THE OVERLAY

The VV&A Overlay has been designed to apply across a wide range of functional applications. The purpose of this Overlay is to provide a more detailed view of the VV&A processes implied by the FEDEP. Currently, these processes represent the best practices available to the VV&A community. The VV&A overlay is a tailorable process and is offered as guidance to all participants in FEDEP activities. Like the FEDEP, the activities of the VV&A Overlay will usually be executed iteratively, rather than linearly, with the successive refinement of its products. The exact nature of any execution thread depends entirely upon the intended use, the federation components and the information needed to support the VV&A processes.

This Overlay identifies and describes the recommended VV&A processes that should be followed to assure the acceptability and utility of federations for particular intended uses. In order to adapt to the needs of individual member nations, this Overlay recognizes that the VV&A processes must always support some form of acceptance of the federations for their intended use, but that only some of those federations will be formally accredited. The overlay also identifies and describes the information feeding and resulting from those processes as well as the relationships between the FEDEP and the VV&A processes and their respective information products. In addition, this overlay defines those terms uniquely needed to characterize the FEDEP VV&A Overlay. This overlay takes special care to use and build upon existing standards, standard terms and their definitions whenever possible.

Finally, as a convenience, this Overlay uses the term “VV&A Team” to refer to those people directly involved in executing the federation VV&A processes. The VV&A Team is not responsible for validating or verifying the individual federates although they do rely upon the products of these activities and may require supplemental verification and validation to gain the information they need for federation VV&A. The VV&A Team does however have primary responsibility for federation validation activities. The membership of the VV&A Team depends upon the needs of the activities being executed, the personnel resources available and the expectations of the federation User/Sponsor.

The VV&A activities described in the overlay, while being generally applicable to most HLA federations, are intended to be tailored to meet the needs of each individual intended use. Every federation application is unique. The extent to which these VV&A processes can be performed for a given federation application will depend on a number of factors, including the quality of the requirements information and the resources allocated to the VV&A Team. The activities recommended in this Overlay should be used as a starting point for developing the specific approach to federation VV&A needed to support the intended use.

Some factors to be considered when tailoring VV&A processes to best fit the circumstances of each individual application include:

- Tailoring is driven by risk and resource constraints (e.g., available information, budget, skills, time);
- Quantifying and minimizing risk are factors that drive tailoring decisions;
- Risk associated with federation use (use risk) is a function of the quality of the federation V&V information;
- The absence of certain information input to the VV&A processes will limit the quality of the content of the VV&A products;
- Tailoring decisions have an impact upon use risk and the resources required, and this impact should be understood and documented;

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- The VV&A processes should leverage testing and data collection tasks and describe this in the Federation Accreditation Plan and V&V Plan;
- Any tailoring should adhere to any existing policies, standards or guidelines that may be relevant to the intended use; and
- Tailoring may be done at any time in the federation VV&A processes.