

 Independent Verification & Validation Program	NASA IV&V SWAT Request Process	IVV 20 Version: H Effective Date: April 3, 2012
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APPROVAL SIGNATURES		DATE
Natalie Alvaro (original signature on file)	IMS Manager	03/30/2012

VERSION HISTORY			
Version	Description of Change	Author	Effective Date
Basic	Initial Release	Jeff Northey	04/01/2005
A	Added references to IVV 04 and IVV 20-1	Jeff Northey	11/02/2005
B	Updated to conform with IVV 05-2 Rev K.	Jeff Northey	02/03/2006
C	Clarified WWW request scope (per PAR # 2007-P-238)	Jeff Northey	06/06/2007
D	Quality Manual hyperlink updated	Stephanie Ferguson	03/10/2008
E	Update process flow diagrams to align with Facility Management paradigm	Stephanie Ferguson	05/07/2008
F	Changed "IV&V Facility" to "IV&V Program"	Stephanie Ferguson	02/19/2009
G	Name change to SWAT from Tools Lab	Luigi Long	01/25/2011
H	Remove references to IVV 04 and "major request"	Jerry Sims	04/03/2012

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REFERENCE DOCUMENTS	
Document	Title
IVV QM	NASA IV&V Quality Manual
IVV 10	Software and Hardware Configuration Management
IVV 16	Control of Records
IVV 20-1	World Wide Web Resource Review and Approval
NPR 1441.1	NASA Records Retention Schedules

If any process in this document conflicts with any document in NODIS, this document shall be superseded by the NODIS document. Any reference document external to NODIS shall be monitored by the Process Owner for current versioning.

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1.0 Purpose

The purpose of this system level procedure (SLP) is to establish a consistent method for submitting and processing requests for access to NASA IV&V Software Assurance Tools (SWAT) resources.

2.0 Scope

This SLP applies to all personnel who support the NASA IV&V Program. This SLP is applicable to requests for SWAT resources as defined in this SLP, including requests for resources to be used in web site hosting and development. Changes to existing web sites are governed by each web site's configuration management process (see IVV 10, *Software and Hardware Configuration Management*).

3.0 Definitions and Acronyms

Official NASA IV&V roles and terms are defined in the [Quality Manual](#). Specialized definitions identified in this SLP are defined below.

3.1 Annual NASA IV&V IT Requirements Meeting

The Annual NASA IV&V Information Technology (IT) Requirements Meeting is a meeting held once per government fiscal year with the purpose of collecting information about IT (hardware and software) needs for the following fiscal year. This information is used to identify requirements and create the IT budget. All NASA IV&V Program stakeholders are invited to attend and provide input. Input may include suggestions for new tools, identification of possible improvements in IT resources, and other related input.

3.2 Implementer

The Implementer is an individual or entity performing the technical implementation of an approved request.

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3.3 NASA IV&V SWAT

The NASA IV&V SWAT is a repository of Computer Aided Software Engineering (CASE) resources. In this SLP, the NASA IV&V SWAT will be referred to as the “SWAT.”

3.4 Request

A request can be submitted via email, phone, or by other means. The following are examples of request types:

- Access to a tool housed in the SWAT (e.g., Observation, Requirements (or Risks), Backlog and Issue Tracking system [ORBIT], Dynamic Object-Oriented Requirements System [DOORS])
- Installation of a new tool or web site on the SWAT servers (e.g., a commercial off-the-shelf [COTS] or developed tool)
- Purchase of a new resource for the SWAT
- Use of SWAT resources to develop a new tool or web site (e.g., Oracle database, Microsoft SQL Server)

A request typically includes the following information:

- Resource being requested
- Names of individuals who need to access the resource
- Justification for use of the resource
- Implementation timeframe
- Project for which the resource is being requested
- NASA Point of Contact (NPOC) for that project

3.5 Requester

The Requester is an individual or group submitting a request for access to a SWAT resource. A Requester can be anyone who is supporting the NASA IV&V Program.

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3.6 Requirements Meeting

The Requirements Meeting is a meeting with the intent of addressing all questions and issues regarding the request. When the meeting is complete:

- Implementers should have enough information to implement the request
- SWAT Lead (and any other approvers) should have enough information to make an approval decision regarding the request

Requirements Meeting participants may include, but are not limited to:

- SWAT Lead
- Requester
- NPOC
- Implementer

3.7 Resource

A Resource is a CASE tool, a support document, a development environment, web space, etc. For information regarding what resources are currently available, contact the SWAT Lead, or visit the SWAT web site at <http://tools.ivv.nasa.gov/>.

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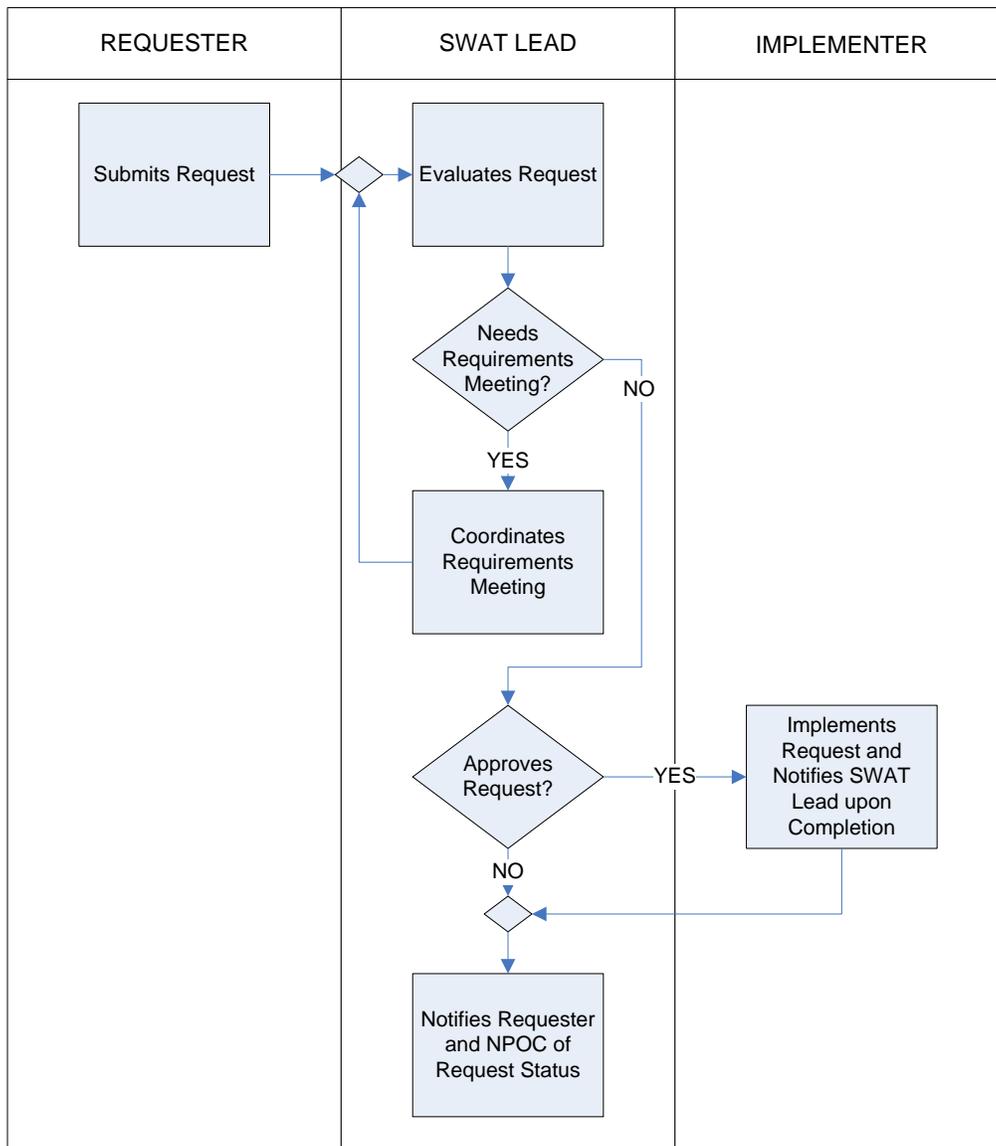
3.8 Acronyms

CASE	Computer Aided Software Engineering
COTS	Commercial Off-The-Shelf
DOORS	Dynamic Object-Oriented Requirements System
IMS	NASA IV&V Management System
IT	Information Technology
NPOC	NASA Point of Contact
NPR	NASA Procedural Requirement
ORBIT	Observation, Requirements (or Risks), Backlog and Issue Tracking system
PITS	Project Issue Tracking System
PM	Project Manager
QM	Quality Manual
SLP	System Level Procedure
SWAT	Software Assurance Tools

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4.0 Process Flow Diagram

The following diagram depicts processes described in this document, and the responsibilities and actions that shall be performed by process participants. Any information supplemental to the depicted processes will appear after the diagram.



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4.1 Procedure

The following procedure establishes a consistent method for submitting and processing SWAT requests.

4.1.1 Request Submission

The Requester shall submit the request to the SWAT Lead. Currently receipt of requests has been delegated to the SWAT Help Desk. The request can be submitted via email, phone, or by other means.

The SWAT Lead shall ensure that the request is documented.

4.1.2 Request Evaluation

4.1.2.1 Initial Evaluation

The SWAT Lead shall evaluate the request. Evaluation criteria include, but are not limited to, clarity, completeness, validity, resource use justification, proposed implementation timeline, and SWAT capabilities.

If questions or issues arise during the request evaluation that cannot be appropriately answered via email, phone, or by other means, the SWAT Lead shall convene a Requirements Meeting.

For requests involving the use of World Wide Web resources (e.g., web space), the SWAT Lead shall inform the Requester of the need to follow IVV 20-1, *World Wide Web Resource Review and Approval*.

4.1.2.2 Requirements Meeting

If necessary, the SWAT Lead is responsible for convening a Requirements Meeting. The SWAT Lead shall ensure that Requirements Meeting minutes are recorded and retained. The intent of the

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Requirements Meeting is to address all questions and issues regarding the request and its implementation. When the Requirements Meeting is complete:

- Implementers should have enough information to implement the request
- SWAT Lead (and any other approvers) should have enough information to make an approval decision regarding the request

Following the requirements meeting, the SWAT Lead shall re-evaluate the request starting with Section 4.1.2, *Request Evaluation*, of this SLP.

4.1.3 Request Decision

The SWAT Lead shall provide final approval or denial of the request. The SWAT Lead may seek the approval of the appropriate NPOC before providing the final approval. The NPOC is typically the Project Manager (PM) for an IV&V project or the lead for a Research Initiative. For example, the SWAT Lead may consult the NPOC to ensure that the Requester is a valid member of the NPOC's project.

If the request is approved, the SWAT Lead shall inform the Implementer that the request is to be implemented.

If the request is denied, the status shall be communicated per Section 4.1.5, *Notification*, of this SLP.

4.1.4 Implementation

If the request has been approved, the SWAT Lead shall ensure that the request is properly implemented. This includes communication with the Implementer as necessary.

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4.1.5 Notification

The SWAT Lead shall ensure that the Requester and NPOC are informed of the status of the request. If the request has been denied, the Requester may revise and resubmit the request per Section 4.1.1, *Request Submission*, of this SLP.

4.2 Annual NASA IV&V IT Requirements meeting

Once per year, at a minimum, the SWAT Lead is responsible for convening the Annual NASA IV&V IT Requirements Meeting. The purpose of this meeting is to collect and evaluate information about IT needs for the upcoming fiscal year. Both hardware and software needs will be considered. The SWAT Lead shall ensure that meeting minutes are recorded and retained.

5.0 Metrics

Any metrics associated with this SLP are established and tracked within the NASA IV&V Metrics Program.

6.0 Records

The following records will be generated and filed in accordance with this SLP and IVV 16, *Control of Records*, and in reference to NASA Procedural Requirement (NPR) 1441.1, *NASA Records Retention Schedules*.

Record Name	Original	Vital	Responsible Person	Retention Requirement	Location
Requirements Meeting Minutes	Y	N	SWAT Lead	Destroy when 2 yrs old (1/78I)	Email Server
Approval/Denial Documentation	Y	N	SWAT Lead	Destroy when 2 yrs old (1/78I)	Email Server
Annual NASA IV&V IT Requirements Meeting Minutes	Y	N	SWAT Lead	Destroy when 2 yrs old (1/78I)	ECM