

**Office of Environment, Safety and Health
Process Guide for the Management and Use of
Software Quality and Central Registry List Server**



Prepared by
U.S. Department of Energy
Office of Environment, Safety and Health
Office of Corporate Performance Assessment

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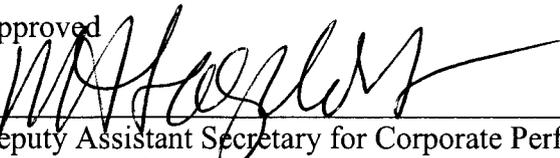
ACRONYMS

AHE	Applications Hosting Environment
CAM	Customer Account Manager
CIO	Chief Information Officer
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
EH	Office of Environment, Safety and Health
IP	Implementation Plan
MOA	Memorandum of Agreement
OCIO	Office of the Chief Information Officer
QA	Quality Assurance
SME	Subject Matter Experts
SQA	Software Quality Assurance
SQAS	Software Quality Assurance Subcommittee

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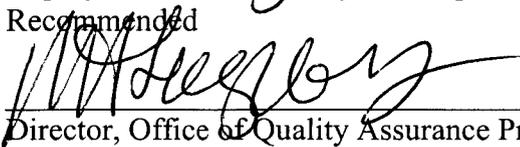
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Deputy Assistant Secretary for Corporate Performance Assessment

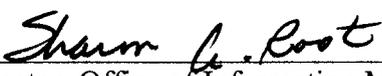
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1.0 INTRODUCTION

This process guide has been established to support of Commitment 4.4.2 of the DOE Implementation Plan (IP) for the Defense Nuclear Facilities Safety Board (DNFSB or Board) Recommendation 2002-1, *Quality Assurance for Safety Software at Department of Energy Defense Nuclear Facilities*. The Office of Quality Assurance Programs (EH-31) will use this process guide to administer and manage the Software Quality Assurance (SQA) Central Registry (CENTREG) list server.

To facilitate continuous improvement in SQA and technology, the Department has established a list server as one method of information sharing, communicating lessons learned, new technology, and innovative techniques that are related to safety software and SQA. The CENTREG list server is for information sharing only. It is not intended as a mechanism to disseminate formal action item requests, elevate issues that require action, or to solicit responses from the CENTREG membership, any membership subset or an individual.

The CENTREG list server will be available to both Federal and contractor personnel involved with safety software. The CENTREG list server is a non-moderated server with subscription approval required. The CENTREG list server is implemented using the L-Soft LISTSERV application.

2.0 RESPONSIBILITIES

2.1 EH Responsibilities

The Department is committed to establishing and maintaining relationships and communication with experts and organizations in the safety software community. The Office of Environment,

Safety and Health (EH) has a corporate leadership role in quality assurance, and is responsible for ensuring the effectiveness of these efforts.

2.1.1 The Office of Quality Assurance Programs, EH-31

The Office of Quality Assurance Programs (EH-31) is responsible for the sharing of information on topics related to software safety, software and quality engineering, and their associated issues. EH-31 has collaborated with the Office of Information Management (EH-33) to establish a mechanism to meet that responsibility.

The mechanism to deliver the information has been determined to be a list server named the CENTREG list server. The Director, Office of Quality Assurance Programs is the owner of the CENTREG list server and may perform or delegate all duties and tasks associated with that responsibility. EH-31 staff members are responsible for monitoring the daily activity of the CENTREG list server.

2.1.2 The Office of Information Management, EH-33

The Office of Information Management (EH-33) is responsible for the establishment and management of the SQA CENTREG list server. This includes the identification of the services to be provided, the guidelines for authorizing subscriptions, oversight of the list server messages, and archival storage of any messages. EH-31 will work closely with the Office of Information Management (EH-33) to administer the CENTREG list server.

2.2 CIO Responsibilities

The Assistant Secretary for Environment, Safety and Health has established a Memorandum of Agreement (MOA) with the Office of the Chief Information Officer (OCIO) to deliver information technology services to EH. Those services include network and mail administration, HelpDesk, End-User Support, and Applications Hosting Environment (AHE).

The CENTREG list server resides in the AHE and is administered by OCIO staff. All hardware and software procurement and software licenses are the responsibility of the OCIO. The daily availability of the list server is monitored by AHE staff.

The OCIO has appointed a Customer Account Manager (CAM) who is responsible for assuring that the information technology services procured through the MOA are delivered. The OCIO's CAM works with EH-33's point of contact on a daily basis to assure that all services are delivered effectively and efficiently.

3.0 LIST SERVER PROCESS

Appendix A contains a flow chart of the EH process used for the management and operations of the CENTREG list server. Sections 3.1 through 3.3 describe the various actions within the flow chart.

3.1 Managing Subscription Service

3.1.1 Initial Subscriptions

The CENTREG list server will initially be populated with members from the DOE Nuclear Weapons Complex Software Quality Assurance Subcommittee (SQAS), SQA IP subject matter experts (SMEs) panel, DNFSB staff, and EH-31 staff.

3.1.2 New Subscriptions

New CENTREG list server members can subscribe by sending email to LISTSERV@VM1.HQADMIN.DOE.GOV. In the body of the text type "SUBSCRIBE CENTREG" then the new member's name. The CENTREG list server owner (EH-31) will receive the request and either approve or reject the subscription. Once approved, the new subscriber will be notified by email. All further communications with the new member will be sent to the email address from which the "SUBSCRIBE" message was sent.

3.1.3 Removing Subscriptions

Individual subscribers can be removed from the list at any time by sending a "SIGNOFF CENTREG" command in the message body to LISTSERV@VM1.HQADMIN.DOE.GOV. This message must be sent from the subscription email address. Members wishing to change email addresses must first "SIGNOFF" from their old addresses and resubscribe from their new addresses.

3.1.4 Periodic Review of Subscriptions

The CENTREG list server owner will periodically review the list server membership and remove or cause to be removed any member that is inactive or no longer meets the guidelines for membership.

3.1.5 Guidelines for Approving Subscriptions

Membership to the CENTREG list server is at the discretion of the Director of the Office of Quality Assurance Programs. The membership will generally be limited to individuals and organizations within or external to DOE whom have an interest in the software engineering and quality engineering processes, practices, and technologies associated with safety software.

3.2 Using the CENTREG List Server

Posting and receiving messages is as simple as using email. Messages are automatically sent to the member's email Inbox. The members standard email application can be used as with any email to send, receive, or manage the messages.

3.2.1 Posting/Sending Messages

To post a message to the CENTREG list server membership, address the email to CENREG@VM1.HQADMIN.DOE.GOV. Caution should be used when posting and replying to messages. The message sent will be distributed to the entire CENTREG membership.

The CENTREG list server is intended for the sharing of information among its members on topics related to software safety, software and quality engineering, and their associated issues. Any misuse of the CENTREG list server may result in the member being removed from the CENTREG list server.

Attachments to messages generally are not stored and retrieved in the proper format. If possible, in consideration of retrieving archived messages, do not include attachments to the messages. Additionally, since email applications have varying levels of acceptable formats and users can configure email applications to handle these formats differently, it may be best to send simple text messages.

3.2.2 *Receiving Messages*

Messages are automatically sent to the member's email Inbox. The member can use the features of their email application to read, reply, and manage the messages. Caution should be used when replying to messages. The message sent will be distributed to the entire membership.

3.2.3 *Retrieving Previous Messages*

Contributions sent to the CENTREG list server are automatically archived. A list of the available archive files can be viewed by sending an "INDEX CENTREG" command in the message body to LISTSERV@VM1.HQADMIN.DOE.GOV. The files can be retrieved by sending a "GET CENTREG LOGxxxx" command, or using LISYSERV's database search facilities. For more information send a "INFO DATABASE" command in the message body to LISTSERV@VM1.HQADMIN.DOE.GOV.

3.3 Monitoring Messages

The Director, EH-31 will assign a staff member and an alternate to monitor daily messages posted to the CENTREG list server. These staff members will be responsible for assuring that the messages are examined and are appropriate. If any messages are incorrectly posted they should be redirected to the appropriate organization or individual and the individual incorrectly posting the message notified.

4.0 SECURITY CLASSIFICATION ISSUES

All communications MUST be UNCLASSIFIED. The welcome notice to all users when they subscribe will remind the membership of this warning.

5.0 GUIDE FOR USERS

The Central Registry Web Page will give users instructions on how to subscribe and unsubscribe, who to contact for assistance, and guidance on use of the CENTREG list server such as security classification issues. Additional information on LISYSERV commands can be found in the LISYSERV reference card. The reference card can be obtained by sending an "INFO REFCARD" command in the message body to LISTSERV@VM1.HQADMIN.DOE.GOV. A complete users' guide is available through EH-31 administrative staff.

6.0 TRAINING

There is no formal training for using the CENTREG list server. Instructions to perform basic operations are provided in an email sent to the subscriber upon acceptance of his/her membership. This message includes contact information for individuals that can provide additional assistance.

**APPENDIX A. SOFTWARE QUALITY AND CENTRAL REGISTRY LIST SERVER
FLOW CHART**

