GENERAL

A software baseline (SWBL) is a specification or product that has been formally reviewed and agreed upon, that thereafter serves as the basis for use and further development, and that can be changed only by using an approved change control process. (Ref. NQA-1). A software baseline includes the computer program (code and [configuration] data) and the computer program documentation. In layman's terms, one may think of this as the information and computer program files that are needed to run the software for a specific application. See attached SWBL example for items that may be listed as part of a SWBL.

For additional detail on developing a software baseline (SWBL), see STD-342-100, *Engineering Standards Manual, Chapter 21, SOFT-GEN.*

LANL personnel: Endeavor to use Chapter forms as-is and report issues and improvement ideas to the Chapter 21 POC. POC may authorize other methods equivalent to chapter forms in writing.

LANL subcontractors must use Chapter forms to satisfy Chapter requirements for SSC software. For Non-SSC software, subs may either use their own forms or integrate, adapt, and reformat the forms; either approach is acceptable so long as key functions, data, and approvals are retained.

HEADER

Field	Entry Information
Software Name	Enter the name of the software in the upper right hand corner of the header as shown in the example form (e.g. Software Baseline for CBT).
SWBL No.	The numbering scheme of this form follows that of the SRLM's document control/records management system. For software used in the operation of existing or new LANL facilities, use numbering scheme and process specified in AP-341-402, *Engineering Document Management in Operating Facilities,* e.g., SWBL-03-0216-1234.
Rev.	Enter the revision number. Initial approved issue of the software baseline is 0.

1.0   ASSOCIATED FACILITY, SYSTEM AND SOFTWARE INFORMATION

Field	Entry Information
1.1	Enter the name of the software.
1.2	Enter the two-digit Technical Area (TA) number(s) where the software is used.
1.3	Enter the facility number(s) where the software is used.

Field	Entry Information
1.4	Enter the facility name(s) where the software is used.
1.5	For ES- and SB-Div Non-SSC software and SSC software, enter the software identification number (SWID). The SWID should be the same SWID as on the Form 2033. SWIDs are obtained in accordance with AP-341-402, *Engineering Document Management in Operating Facilities.* Ensure the SWID is part of the SWBL and subsequent software documentation.
1.6	For SSC software, enter the equipment identification (CLI) number associated with the software per ESM Chapter 1, Section 200 (e.g., 03-0216-HVAC-BAS-1). For Non-SSC software, enter NA.
1.7	Enter a description of the software. Include the primary functions and systems associated with the software.

2.0   SOFTWARE BASELINE - DOCUMENTS

Field	Entry Information
2.1	Enter the document number in accordance with the SRLM's document control records/management system. Include revision number.
2.2	Enter the document title.
2.3	Enter a description of the document.
2.4	Enter the Attachment name and physically attach electronic copies of the document files (e.g. on a compact disc or other media). Ensure the file names match the names listed in the SWBL. *Note*: Methods other than physically attaching the files to the SWBL (e.g., hyperlinking to documents in a electronic data management system (EDMS) may be used as long as they conform to the governing document control/records management program and ensure file integrity and retrievability.

3.0   SOFTWARE BASELINE – COMPUTER PROGRAMS

Field	Entry Information
3.1	Enter the computer program name, revision and where possible, file extension (e.g. exe). Use of a file folder that includes several files is acceptable for programs where multiple files make listing them separately too onerous. If using unique file folder, enter "folder" in this box after the name and revision.
3.2	Enter the computer program description. Describe what it does/how it supports the overall use of the software.
3.3	Enter the Attachment name and physical attach electronic copies of the computer program files (e.g., on a compact disc or other media). Ensure the file names match the names listed in the SWBL. *Note*: Methods other than physically attaching the files to the SWBL may be used as long as they conform to the governing document control/records management

Field	Entry Information
	program and ensure file integrity and retrievability.

4.0   PREPARED BY/REVIEWED BY/APPROVED BY

Field	Entry Information
4.1	Enter SO name, Z number, organization, signature, and date. For assistance in determining the SO, see SOFT-GEN Appendix C: *SO and SRLM Decision Diagram for FAC-COE.*
4.2	Review and as appropriate, approve by entering SRLM name, Z number, organization, signature, and date. For assistance in determining the SRLM, see SOFT-GEN Appendix C: *SO and SRLM Decision Diagram for FAC-COE.*
4.3, 4.n+1…	Add additional reviewers/approvers as required by the SRLM. Review and as appropriate, approve by entering additional reviewer/approver name, Z number, organization, signature, and date.

5.0   REVISIONS

Field	Entry Information
5.1	Enter the revision number here and update the revision number in the form header.
5.2	Enter the date of the revision.
5.3	Enter a summary description of what was changed and the reason for the change.

SWBL No.:	SWBL-03-2332-12345	Rev.:	0

1.0 ASSOCIATED SOFTWARE INFORMATION

1.1 Software Name	Combustible Material Tracker (CBT) Software				
1.2 TA No.:	03	1.3 Facility No.:	2333	1.4 Facility Name:	Nonproliferation Security Facility (NSF)
1.5 SWID:	03-2333-0047		1.6 Equipment ID:	NA	

1.7 Software Description:
The software is used as a tool to track combustible material.

2.0 SOFTWARE BASELINE – DOCUMENTS

2.1 Document Number (including revision)	2.2 Document Title	2.3 Document Description
SWDS-15-03-NSF-0001	CBT Software Data Sheet (SWDS)	Documents software-specific information to supplement ESM Chapter 21
SWRS-15-03-NSF-0002	CBT Software Requirements Specification	Requirements document
SWTM-15-03-NSF-0003	CBT Software Requirements Traceability Matrix	Traceability document that traces requirements from the SRS through the software lifecycle.
SWRL-15-03-NSF-0004	CBT Software Risk List (Register)	Listing and ranking of risks for the software throughout its lifecycle.
SWHA-15-03-NSF-0005	CBT Software Hazard Analysis	Hazard analysis of software and integrated software/hardware system.
SWDD-15-03-NSF-0006	CBT Software Design Document	Software design. Includes system configuration including associated hardware and facility interfaces and key support software configuration
SWTP-15-03-NSF-0007	CBT Software Acceptance Test and In-Use Test Plan	Test plan document that describes acceptance and in-use tests.
SWTR-15-03-NSF-0008	CBT Software Acceptance Test Report	Describes acceptance test results and acceptance.
SWMM-15-03-NSF-0009	CBT Software Maintenance Manual	Detailed technical manual for software subject matter expert (SME) to use for troubleshooting and maintaining the software.

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2.0 SOFTWARE BASELINE – DOCUMENTS

2.1 Document Number (including revision)	2.2 Document Title	2.3 Document Description
SWUM-15-03-NSF-0010	CBT Software User Manual	User manual. Includes general instructions for use, including limitations.
AP-15-03-NSF-0007	CBT Software Administrative Procedure	Administrative procedure that integrates the software into the facility day-to-day operations.
SWLI-15-03-SNF-1110	CBT Software License/License Key	License and license key required to use the software

2.4 Document files are located in:

Attachment A: CBT SWBL-15-03-2332-0234 Document Files.

3.0 SOFTWARE BASELINE – COMPUTER PROGRAMS

3.1 Computer Program File/Folder Name (including revision)	3.2 Computer Program Description
CBT 1.02.exe	Primary executable computer program that provides overall system function
CBT Master Database 1.2. mdb	The primary database of material.
Microsoft Windows XP Professional SP1.1	Off the shelf (OTS) support software that is the operating system on client computers.
Microsoft Server 2003 R2 Folder	OTS support software that is the operating system on computer servers.
Microsoft Access Database 2000 SP1.01 Folder	OTS support software that provides data storage on servers and client computers.
Microsoft Outlook 2013 SP1.0 Folder	OTS support software that provides email notifications of transactions.

3.4 Computer program files are located in:

Attachment B: CBT SWBL-15-03-2332-0234 Computer Program Files.

4.0 PREPARED BY/REVIEWED BY/APPROVED BY

4.1 Prepared By – Software Owner (SO), *(Name, Z number, Organization, Signature and Date):*

Tom Thompson, 143987, NEN-2, 10/1/2015

4.2 Reviewed and Approved By – Software Responsible Line Manager (SRLM), *(Name, Z number, Organization, Signature and Date):*

Michael Bradley, 114987, NEN-2, 10/2/2015

4.3 Reviewed and Approved By – Others as required by SRLM, *(Name, Z number, Organization, Signature and Date):*

None Required by SRLM (Not Applicable)

5.0 REVISIONS

5.1 Revision	5.2 Date	5.3 Change Description and Reason for Change
0	10/02/2015	Original Issue

LANL

STD-342-100, Chapter 21, Software, Section SOFT-GEN: General Software Requirements
SOFT-GEN-FM01, Software Baseline Form (SWBL) with Example, Rev. 0 (06/23/16)