

ELISTexec.8100.Final.SOL7.SVD

**Defense Information Infrastructure (DII)
Common Operating Environment (COE)**

**Software Version Description (SVD)
for the
Enhanced Logistics Intratheater Support Tool (ELIST)
Software Segment Version 8.1.0.0
for Solaris 7**

26 February 2002

Prepared for:

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1. Scope

This document is the *Software Version Description (SVD) for the Enhanced Logistics Intratheater Support Tool (ELIST) Software Segment*. It contains basic information about the segment.

1.1 Identification

The ELIST Software Segment is one of seven segments that make up the DII COE ELIST mission application. The distributed segment software, data, and documentation are **Unclassified**.

Table 1 identifies all the segments of the ELIST mission application. In the table, each segment is given a number by which it may be referenced in this document. The table also gives the name, the segment type (and, if a data segment, the segment scope), the current version number, and the directory name assigned to each segment.

Table 1. Segments of the ELIST Mission Application

Segment Number	Segment Name	Segment Type / Scope	Version Number	Directory Name
1	ELIST Global Data Segment	Data / Global	8.1.0.0	ELISTglob
2	ELIST Database Instance Segment	Data / Segment	8.1.0.0	ELISTdbinst
3	ELIST Database Fill Segment	Data / Local	8.1.0.0	ELISTdbfill
4	ELIST Database Segment	Database	8.1.0.0	ELISTdb
5	ELIST Database Utility Segment	Software	8.1.0.0	ELISTdbutil
6	ELIST Software Segment	Software	8.1.0.0	ELISTexec
7	ELIST Reference Data Segment	Data / Local	8.1.0.0	ELISTrefdata

All seven segments have the following identification properties in common:

Segment Prefix¹:	ELIST
Platform(s)²:	Sun/Solaris 7
DII COE Versions:	4.2.0.0P4 or later

All seven of the ELIST segments must be installed before you can use the ELIST mission application.³

Refer to the *Introduction to the Enhanced Logistics Intratheater Support Tool (ELIST) Mission Application and its Segments: Global Data Segment, Database Instance Segment, Database Fill Segment, Database Segment, Database Utility Segment, Software Segment, and Reference Data Segment* for the following:

¹ Note carefully that all segments have the same prefix. This is not typical of multisegment DII COE mission applications.

² Implementation of the ELIST segments for PC/Windows NT 4.0 is lagging behind and will follow shortly. This documentation covers only the Sun/Solaris 7 platform but will be supplemented or replaced when an implementation becomes available for NT.

³To save space, however, the ELIST Database Fill Segment can be removed after successfully installing the ELIST Database Segment.

- an overview of the mission application and all of its segments in the context of the application;
- considerations applicable to the use of ELIST with classified data;
- the definitions of key concepts and terms used throughout the ELIST documentation;
- a complete list of the available ELIST documentation;
- a brief history of ELIST; and
- basic information pertinent to the client/server configuration and installation of the ELIST segments.

1.2 Segment Overview

The ELIST Software Segment contains scripts that allow general ELIST users to edit ETPFDDs and run ELIST simulations. These scripts, which represent the end-user functions of ELIST, are launched in the standard way used for software segments, *i.e.*, from a desktop icon. The end-user functions supported by the ELIST Software Segment correspond to the following feature names:

- **Run ELIST**
- **Run ETEdit**

ETEdit is fully encapsulated inside ELIST and is therefore also available when running the latter.

This segment also contains scripts that allow administrative ELIST users to add NIMA map reference data to, or delete such data from, the ELIST Reference Data Segment. The administrative functions supported by the ELIST Software Segment correspond to the following feature names:

- **Add Map Data**
- **Delete Map Data**

Instructions for using these features can be found in the *User's Manual (UM) for the Enhanced Logistics Intratheater Support Tool (ELIST) Software Segment*.

1.3 Points of Contact

The development of ELIST was sponsored by the Military Traffic Management Command (MTMC) Transportation Engineering Agency (TEA). ELIST was implemented by MTMC/TEA and Argonne National Laboratory (ANL). For administrative and program management support, including the permission that DISA Configuration Management (CM) requires to release the distribution media for the ELIST mission application to prospective users, contact

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For technical support of a segment-specific (*i.e.*, DII COE-related) nature, contact

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1.4 Product Information

Product Qualification: Completed in-house testing

Product Restrictions: Releasable to military organizations (like OSD; Joint Staff; EUCOM, CENTCOM, and other CINCs) and perhaps other government organizations with approval of MTMCTEA. Consult Chapter 8 of Army Regulation 5-11 (see citation in Section 2.1.4, below), then contact the ELIST Project Officer at the address given in Section 1.3

Product Dependencies: Java Platform 2 (JAVA2) 4.3.0.0 or later, plus
either
ORACLE DataBase Administration (ORADBA)
2.1.0.0/2.1.0 or later
or
ORACLE RDBMS (ORAS) 2.1.0.0/8.1.6.1 or later⁴

⁴ If the application client platform on which the ELIST Software Segment is installed is the same platform as the database server platform on which the ELIST Global Data Segment, the ELIST Database Instance Segment, the ELIST Database Fill Segment, the ELIST Database Segment, and the ELIST Database Utility Segment are installed, then this dependency is satisfied by the ORACLE RDBMS (ORAS) segment already installed on that platform. If the application client and database server are different platforms, then this dependency is satisfied by the installation of the ORACLE DataBase Administration (ORADBA) segment on the application client platform.

2. Referenced Documents

The following documents are referenced in this document.

2.1 Government Documents

2.1.1 DII COE ELIST Documents

Introduction to the Enhanced Logistics Intratheater Support Tool (ELIST) Mission Application and its Segments: Global Data Segment Version 8.1.0.0, Database Instance Segment Version 8.1.0.0, Database Fill Segment Version 8.1.0.0, Database Segment Version 8.1.0.0, Database Utility Segment Version 8.1.0.0, Software Segment Version 8.1.0.0, and Reference Data Segment Version 8.1.0.0 for Solaris 7, ELIST.8100.Final.SOL7.Intro, Argonne National Laboratory, 26 February 2002

User's Manual (UM) for the Enhanced Logistics Intratheater Support Tool (ELIST) Software Segment Version 8.1.0.0 for Solaris 7, ELISTexec.8100.Final.SOL7.UM, Argonne National Laboratory, 26 February 2002

Installation Procedures (IP) for the Enhanced Logistics Intratheater Support Tool (ELIST) Global Data Segment Version 8.1.0.0, Database Instance Segment Version 8.1.0.0, Database Fill Segment Version 8.1.0.0, Database Segment Version 8.1.0.0, Database Utility Segment Version 8.1.0.0, Software Segment Version 8.1.0.0, and Reference Data Segment Version 8.1.0.0 for Solaris 7, ELIST.8100.Final.SOL7.IP, Argonne National Laboratory, 26 February 2002

Software Test Plan/Description/Report (STP_STD_STR) for the Enhanced Logistics Intratheater Support Tool (ELIST) Global Data Segment Version 8.1.0.0, Database Instance Segment Version 8.1.0.0, Database Fill Segment Version 8.1.0.0, Database Segment Version 8.1.0.0, Database Utility Segment Version 8.1.0.0, Software Segment Version 8.1.0.0, and Reference Data Segment Version 8.1.0.0 for Solaris 7, ELIST.8100.Final.SOL7.STP_STD_STR, Argonne National Laboratory, 26 February 2002

2.1.2 Other DII COE Documents

N/A.

2.1.3 Other ELIST Documents

ELIST v.8.1: User's Manual, ANL/DIS/TM-62, Argonne National Laboratory, February 2002

ETEdit v.1.0: User's Manual, ANL/DIS/TM-63, Argonne National Laboratory, February 2002

2.1.4 Other Government Documents

Army Regulation 5-11, *Management of Army Models and Simulations*, Army HQ, Washington DC, 10 July 1997. Available on the World Wide Web at <http://www.amso.army.mil/ar5-11>. POC: Debra Ridgeway, Army Model Simulation Office, DSN 329-0012 ext. 24, comm. (703) 601-0012 ext. 24, email debra.ridgeway@hqda.army.mil

2.2 Non-Government Documents

N/A.

3. Version Description

3.1 Inventory of Materials Released

NOTE: See Section 1.4 for Product (*i.e.*, Releasability) Restrictions.

The ELIST Software Segment for Solaris 7, Version 8.1.0.0, CM Number 10103, 26 February 2002, is distributed in `MakeInstall` format on two CDs, one externally labeled “Master” and the other “Backup,” and both externally labeled “ELIST Mission Application Software.” The other segments of the ELIST mission application are distributed on the same CDs.

Documentation for the ELIST SoftwareSegment is also distributed on two CDs, one externally labeled “Master” and the other “Backup,” and both externally labeled “ELIST Mission Application Documentation.” Documentation for the other segments of the ELIST mission application is distributed on the same CDs. On these CDs, the documentation pertinent to the ELIST Software Segment can be found in the following directories:

- ELIST directory
 - *Introduction to the Enhanced Logistics Intratheater Support Tool (ELIST) Mission Application and its Segments: Global Data Segment Version 8.1.0.0, Database Instance Segment Version 8.1.0.0, Database Fill Segment Version 8.1.0.0, Database Segment Version 8.1.0.0, Database Utility Segment Version 8.1.0.0, Software Segment Version 8.1.0.0, and Reference Data Segment Version 8.1.0.0 for Solaris 7, ELIST.8100.Final.SOL7.Intro, Argonne National Laboratory, 26 February 2002*
 - *Installation Procedures (IP) for the Enhanced Logistics Intratheater Support Tool (ELIST) Global Data Segment Version 8.1.0.0, Database Instance Segment Version 8.1.0.0, Database Fill Segment Version 8.1.0.0, Database Segment Version 8.1.0.0, Database Utility Segment Version 8.1.0.0, Software Segment Version 8.1.0.0, and Reference Data Segment Version 8.1.0.0 for Solaris 7, ELIST.8100.Final.SOL7.IP, Argonne National Laboratory, 26 February 2002*
 - *Software Test Plan/Description/Report (STP_STD_STR) for the Enhanced Logistics Intratheater Support Tool (ELIST) Global Data Segment Version 8.1.0.0, Database Instance Segment Version 8.1.0.0, Database Fill Segment Version 8.1.0.0, Database Segment Version 8.1.0.0, Database Utility Segment Version 8.1.0.0, Software Segment Version 8.1.0.0, and Reference Data Segment Version 8.1.0.0 for Solaris 7, ELIST.8100.Final.SOL7.STP_STD_STR, Argonne National Laboratory, 26 February 2002*
- ELISTexec directory
 - *Software Version Description (SVD) for the Enhanced Logistics Intratheater Support Tool (ELIST) Software Segment Version 8.1.0.0 for*

Solaris 7, ELISTexec.8100.Final.SOL7.SVD, Argonne National Laboratory, 26 February 2002

- *User’s Manual (UM) for the Enhanced Logistics Intratheater Support Tool (ELIST) Software Segment Version 8.1.0.0 for Solaris 7*, ELISTexec.8100.Final.SOL7.UM, Argonne National Laboratory, 26 February 2002
- *ELIST v.8.1: User’s Manual*, ANL/DIS/TM-62, Argonne National Laboratory, February 2002
- *ETEdit v.1.0: User’s Manual*, ANL/DIS/TM-63, Argonne National Laboratory, February 2002

3.2 Pertinent Documentation

All pertinent documentation is delivered with the segment (see Section 3.1).

3.3 Inventory of Software Contents

The directory structure of the ELIST Software Segment, as distributed, can be inferred from the listing of the `FileAttribs` descriptor file in Appendix A.7.

The segment is a software segment. Besides the installation and deinstallation scripts, it contains scripts for the four functions listed in Section 1.2, which are the executable features of the segment.

3.4 Changes Installed

N/A.

3.5 Waivers

See Appendix C.

3.6 Adaptation Data

N/A.

3.7 Installation Instructions

Installation instructions for all the segments of the ELIST mission application can be found in the *Installation Procedures (IP) for the Enhanced Logistics Intratheater Support Tool (ELIST) Global Data Segment, Database Instance Segment, Database Fill Segment, Database Segment, Database Utility Segment, Software Segment, and Reference Data Segment*.

The computer system resources required by the ELIST Software Segment are as follows:

- RAM required: 512 MB⁵

⁵ This is the minimum RAM required to run small-scale or moderate simulations efficiently. 1.5 GB of RAM is recommended to avoid virtual memory thrashing when running large-scale simulations.

- Disk space required: 8811 KB

The executable code for the ELIST mission application is represented by the four features of the ELIST Software Segment that can be executed after installation. Two of them, **Run ELIST** and **Run ETEdit**, are for general ELIST users, and two, **Add Map Data** and **Delete Map Data**, are for administrative ELIST users.

3.8 Possible Problems and Known Errors

There were no known problems or errors when this document was prepared.

Improvements driven by requirements of the sponsor are continually being made in the software of this segment, and new versions of this segment (and possibly others in the ELIST mission application) can be expected to make those improvements available periodically.

In addition, several improvements in the start-up scripts for the **Run ELIST** and **Run ETEdit** features of this segment are planned for future releases:

- A check that the user has an account in the ELIST database instance will be made, so that the script will display an appropriate message instead of starting ELIST or ETEdit. Currently, the user is prompted for his/her database account password even if no such account exists.
- Checks that the user has entered the proper password for his/her account in the ELIST database instance and that the account is not locked will be made, so that the script will display an appropriate message instead of starting ELIST or ETEdit. Currently, that program reports that it is unable to connect to the database only after it is started and partially initialized; it then terminates abnormally.

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4. Notes

The ELIST Software Segment must be installed on a platform configured as an application client. In the current implementation, that platform must be a Sun workstation. Installation of the ELIST Software Segment requires the Java Platform 2 (JAVA2) segment to be installed on the same platform. If the application client platform and the database server platform are the same machine, then the ORACLE RDBMS (ORAS) segment must also be installed on that machine; if they are different machines, then the ORACLE DataBase Administration (ORADBA) segment must be installed on the application client platform. The ELIST Reference Data Segment must also be resident on the same machine when ELIST or ETedit is executed, but it need not be present when the ELIST Software Segment is installed, the two segments can be installed in either order. The prerequisites for the segments named above, in turn, are documented in their SVDs. Further information on system configuration can be found in the *Installation Procedures (IP) for the Enhanced Logistics Intratheater Support Tool (ELIST) Global Data Segment, Database Instance Segment, Database Fill Segment, Database Segment, Database Utility Segment, Software Segment, and Reference Data Segment.*

The following acronyms are (or may be) used in this document.

Acronym	Definition
ANL	Argonne National Laboratory
CD	Compact Disk
CENTCOM	Central Command
CINC	Combined Intelligence Center (as used in this document)
CM	Configuration Management
COE	Common Operating Environment
DB	Database
DBA	Database Administrator
DII	Defense Information Infrastructure
DISA	Defense Information Systems Agency
DSN	Defense Switched Network
DTED	Digital Terrain Elevation Data
ELIST	Enhanced Logistics Intratheater Support Tool (DII COE segment prefix)
ETedit	ETPFDD Editor
ETPFDD	Expanded Time Phased Force Deployment Data
EUCOM	European Command
GB	Gigabyte(s)
HQ	Headquarters
IP	Installation Procedures
I&RTS	Integration and Runtime Specification
LAN	Local Area Network
KB	Kilobyte(s)
MB	Megabyte(s)
MTMC	Military Traffic Management Command
N/A	Not Applicable
NFS	Network File System
NT	New Technology (an Operating System for Microsoft Windows)

ORADBA	ORACLE DataBase Administration (DII COE segment prefix)
ORAS	ORACLE RDBMS (DII COE segment prefix)
OS	Operating System
OSD	Office of the Secretary of Defense
PC	Personal Computer
POC	Point of Contact
RDBMS	Relational Database Management System
RAM	Random Access Memory
STD	Software Test Description
STP	Software Test Plan
STR	Software Test Report
SVD	Software Version Description
TEA	Transportation Engineering Agency
UM	User's Manual

5. Acknowledgements

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6. Documentation Improvement and Feedback

Comments and other feedback on this document should be directed to:

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Appendix A. Contents of the Descriptor Files in the SegDescrip Directory

The contents of the descriptor files in the SegDescrip directory are reproduced in this appendix.

A.1 SegName File

```
#####
# SegName descriptor file for the ELIST Software Segment
# Segment Prefix: ELIST
# Segment Directory: ELISTexec
#####

$TYPE:SOFTWARE
$NAME:ELIST Software Segment
$PREFIX:ELIST

# END OF FILE
```

A.2 SegInfo File

```
# This is the SegInfo file for the ELIST Software Segment.

[Security]
UNCLASS

[Hardware]
$CPU:SPARC
$DISK:8811:1
$OPSYS:SOL
$MEMORY:512000

# NOTE: 512MB is the recommended minimum RAM for efficient processing of modest
# simulations. For large simulations, 1GB or 1.5GB of RAM are recommended to
# avoid VM thrashing, which seriously degrades JAVA performance.

[Requires]
{
  ORACLE DataBase Administration:ORADBA:/h/COTS/ORADBA:2.1.0.0/2.1.0
$OR
  ORACLE RDBMS:ORAS:/h/COTS/ORAS:2.1.0.0/8.1.6.1
}
Java Platform 2:JAVA2:/h/COTS/JAVA2:4.3.0.0

# NOTE: This segment does not express a dependency on the ELIST Reference Data
# Segment because that segment need not be installed to install this segment.
# It is needed at run time, however, and the runELIST script checks to make sure
# that it is available at that time. The same could be said for the other
# dependent segments named above, but they are listed here for the purpose of
# documentation. (Their availability is verified at run time, however.)

[Icons]
ELISTexecIcons

[COEServices]
$GROUPS
elistusr:419
elistadm:420
$PASSWORDS
elistown:418:419:ELIST File Owner:/:/bin/sh

[Direct]
$ROOT:PostInstall

# The above is needed only to add SUID to particular scripts (see comment in
```

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```
# FileAttribs). They comply with Rgmt. 5-14 because the UID of the scripts is
# not root; furthermore, they are secure because the UID is a non-login account
# (elistown) and nobody has write permission on them.
```

```
[FilesList]
$PATH:$DATA_DIR/global/ELISTglob/data
$FILES
# This segment reads the following file to determine the SID of the ELIST
# database instance and the name of the DB Server:
Instance_Info
$PATH:$DATA_DIR/local/ELISTrefdata/data
$DIRS
# This segment reads and can write static map raster product data from files
# stored under the following directories:
wvsplus
mapcds
$PATH:/usr/bin
# This segment executes shell scripts from the preceding directory.
$PATH:$TMPDIR
# This segment creates temporary files in the preceding directory.
$PATH:/h/COTS/ORADBA
$FILES
# This segment executes the following script (OR the subsequently named one)
# to find Oracle's home directory:
Scripts/.profile.ORADBA
$PATH:/h/COTS/ORAS
$FILES
# This segment executes the following script (OR the previously named one)
# to find Oracle's home directory:
Scripts/.profile.ORAS
$PATH:/var/opt/oracle
$FILES
# The following Oracle files and directories are the minimum used in
# performing database accesses:
oratab
listener.ora
tnsnames.ora
$PATH:/
$DIRS
# In addition, if this machine is a Database Server, then the following are
# also used:
ora01
ora02
ora03
ora04
ora01/oradata
ora02/oradata
ora03/oradata
ora04/oradata
ora01/oracle_data_store
ora02/oracle_data_store
ora03/oracle_data_store
ora04/oracle_data_store
$PATH:/ora01/app/oracle/product/8.1.6
$FILES
# This segment directly invokes the following ORACLE vendor tools:
bin/sqlplus
bin/imp
bin/exp
bin/sqlldr
$FILES
# It also uses the following:
jdbc/lib/classes111.zip
$DIRS
# It also uses facilities from the following directory:
lib

# END OF FILE
```

A.3 VERSION File

```
# This is the VERSION descriptor for the ELIST Software Segment.
```

8.1.0.0 : 01/14/2002 : 14:42

END OF FILE

A.4 ReleaseNotes File

This is the ReleaseNotes file for the ELIST Software Segment.

The primary purpose of this segment is to house the executable Java code ("jars") for the main executable(s) of the ELIST mission application. A secondary purpose is to provide scripts to be used for adding NIMA raster product map data to the already-installed ELIST Reference Data Segment.

There are four executable features of this segment.

The first two, "Run ELIST" and "Run ETEdit," can only be executed by general ELIST users (i.e., members of the elistusr group to whom the General ELIST User profile has been assigned). They run ELIST and ETEdit, the EPTFDD editor, respectively. ETEdit can also be invoked from inside ELIST by clicking on the appropriate menu item.

The remaining two, "Add Map Data" and "Delete Map Data," can only be executed by administrative ELIST users (i.e., members of the elistadm group to whom the Administrative ELIST User profile has been assigned). They allow ELIST administrative users to add NIMA raster product map data (i.e., ADRG, CADRG, or DTED data) to the ELIST Reference Data Segment, using interactive GUI interfaces. When being added, such data are copied from a NIMA raster product map CD inserted into the CDROM drive.

This segment has only a trivial PostInstall script and only an empty DEINSTALL script.

This segment must be installed on the application client platform on which the ELIST Reference Data Segment is, or is to be, installed. These two segments can be installed and deinstalled in either order. Neither requires the other for a successful installation, but the executables and scripts in this segment check to make sure that the ELIST Reference Data Segment is installed before proceeding. The application client platform can be the same machine as the database server platform (on which the ORACLE RDBMS and the five ELIST segments related to the ELIST database are installed), or it can be a separate machine.

Introductory usage information on "Run ELIST" and "Run ETEdit" is contained in the User Manual (UM) for the ELIST Software Segment. The details of using "Run ELIST" and "Run ETEdit" are contained in the ELIST v.8.1: User's Manual and the ETEdit v.1.0: User's Manual, respectively (to which the UM directs the user). Complete usage information on "Add Map Data" and "Delete Map Data" is contained in the UM.

END OF FILE

A.5 PostInstall File

```
#!/bin/sh
```

```
# This is the PostInstall file for the ELIST Software Segment.
```

```
# It must run as root, and it is needed only to add the SUID bit to the
# the scripts named below.
```

```
chmod 4550 $INSTALL_DIR/bin/ELIST_AddMapData
chmod 4550 $INSTALL_DIR/bin/ELIST_DeleteMapData
```

```
exit 0
```

```
# END OF FILE
```

A.6 DEINSTALL File

```
#!/bin/sh

# This is the DEINSTALL script for the ELIST Software Segment.  It has
# nothing to do.

exit 0

# END OF FILE
```

A.7 FileAttribs File

```
# This is the FileAttribs descriptor for the ELIST Software Segment.

$SegDir:750:418:419
750:418:419:SegDescrip
750:418:419:SegDescrip/DEINSTALL
640:418:419:SegDescrip/FileAttribs
750:418:419:SegDescrip/PostInstall
640:418:419:SegDescrip/ReleaseNotes
640:418:419:SegDescrip/SegInfo
640:418:419:SegDescrip/SegName
640:418:419:SegDescrip/VERSION
640:418:419:SegDescrip/Validated
750:418:419:Integ
640:418:419:Integ/IntgNotes
640:418:419:Integ/VsOutput
750:418:419:data
750:418:419:data/Icons
640:418:419:data/Icons/ELISTexecIcons
640:418:419:data/Icons/runELIST.xpm
640:418:419:data/Icons/runETEdit.xpm
640:418:419:data/Icons/addMapData.xpm
640:418:419:data/Icons/delMapData.xpm
750:418:419:data/ELIST8_data
750:418:419:data/ELIST8_data/icons
640:418:419:data/ELIST8_data/icons/airport.gif
640:418:419:data/ELIST8_data/icons/bridge.gif
640:418:419:data/ELIST8_data/icons/port.gif
640:418:419:data/ELIST8_data/icons/seaport.gif
640:418:419:data/ELIST8_data/icons/tunnel.gif
640:418:419:data/ELIST8_data/data.attributeMatch
640:418:419:data/ELIST8_data/data.classMatch
640:418:419:data/ELIST8_data/tacwar.sample
640:418:419:data/ELIST8_data/tacwar.sample.support
640:418:419:data/ELIST8_data/tacwar.sample.unit
640:418:419:data/wvsColors.txt
750:418:419:bin
650:418:419:bin/ELIST_RunELIST
650:418:419:bin/ELIST_RunELISTsub
650:418:419:bin/ELIST_RunETEdit
650:418:419:bin/ELIST_RunETEditsub
550:418:419:bin/ELIST_LaunchMapDataMaint
# PostInstall turns on the SUID bit for the following two scripts.
550:418:420:bin/ELIST_AddMapData
550:418:420:bin/ELIST_DeleteMapData
640:418:419:bin/ANLInfo.jar
640:418:419:bin/ANLInfoSupport.jar
640:418:419:bin/DBF.jar
640:418:419:bin/ELIST.jar
640:418:419:bin/HLA.jar
650:418:419:bin/diff_geoloc
650:418:419:bin/diff_tucha
650:418:419:bin/dump_b8_script
650:418:419:bin/expand_script
650:418:419:bin/find_cscs
650:418:419:bin/import_tucha_flat
650:418:419:bin/load_MIDAS_script
650:418:419:bin/load_b8_script
650:418:419:bin/load_geofile_script
650:418:419:bin/load_jfast_script
650:418:419:bin/stld
650:418:419:bin/vehcar
```


ELISTexec.8100.Final.SOL7.SVD

```
640:418:419:bin/add_tucha4.sql
640:418:419:bin/del_tucha_4_and_6.sql
640:418:419:bin/delete_jfast_projection.sql
640:418:419:bin/dump_b8.sql
640:418:419:bin/dump_b8_select.sql
640:418:419:bin/ins_expand.sql
640:418:419:bin/ins_portsim_dates.sql
640:418:419:bin/ins_setup.sql
640:418:419:bin/load_to_target_234.sql
640:418:419:bin/load_to_target_234_all.sql
640:418:419:bin/load_to_target_234_const.sql
640:418:419:bin/load_to_target_4.sql
640:418:419:bin/update_b8.sql
640:418:419:bin/update_tucha.sql
640:418:419:bin/fms.awk
640:418:419:bin/libRPFTOC.so
640:418:419:bin/libANLUtills.so
```

```
# END OF FILE
```

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Appendix B. Contents of the Files in the Integ Directory

The contents of the files in the Integ directory are reproduced in this appendix.

B.1 IntgNotes File

This is the IntgNotes file for the ELIST Software Segment.

This submission Version 8.1.0.0 is the initial submission of the segment.

The ELIST Software Segment is part of the ELIST mission application. There are six other segments. All seven segments have the same segment prefix (ELIST).

This segment provides four "features":

- + Run ELIST and Run ETEdit, for performing simulations and editing TPFDDs, respectively. These are executable by general ELIST users.
- + Add Map Data and Delete Map Data, for managing the raster-product map data in the ELIST Reference Data Segment. These are executable by administrative ELIST users.

Refer to the "Introduction to the Enhanced Logistics Intratheater Support Tool (ELIST) Mission Application and its Segments: Global Data Segment, Database Instance Segment, Database Fill Segment, Database Segment, Database Utility Segment, Software Segment, and Reference Data Segment" for the following:

- + an overview of the mission application and all of its segments in the context of the application;
- + the definitions of key concepts and terms used throughout the ELIST documentation;
- + a complete list of the available ELIST documentation;
- + a brief history of ELIST; and
- + basic information pertinent to the client/server configuration and installation of the ELIST segments.

END OF FILE

B.2 Annotated VSOutput File

```
(W)-----|
Directory './ELISTExec/Scripts' was expected but not found.
This may be an error or indicate a violation of the COE.
```

***** Explanation:

The Scripts directory is not needed, and is in any event deprecated.

```
(W)-----|
There are 41 files in the executable directory.
Of these, 33 do not begin with the proper prefix [ELIST]
```

***** Explanation:

- (a) This segment defines no global environment variables, so visibility into its bin directory should not pose any compatibility problems with other segments.
- (b) The main executables of this segment are launched by double-clicking on their desktop icons. The bin directory contains other, subordinate, executables and scripts, not intended to be launched at the top level. Some of these files, like sql and awk scripts, are not actually executable, but there doesn't seem to be a more appropriate place for them.

Results of verification:

```
"/ELISTexec":  
  Totals  
  -----  
  Errors:    0  
  Warnings:  2
```

Appendix C. Chief Engineer Permissions and Waivers Requested

Chief Engineer Permission Request

SEGMENT DESIGNATION: ELIST Software Segment (ELIST)
CM Number: 10103
OPERATING SYSTEM: Solaris 7
MISSION APPLICATION NAME: Enhanced Logistics Intratheater Support Tool
TECHNICAL POC: Kenneth W. Dritz
Decision and Information Sciences Division
Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439
dritz@anl.gov

APPROVAL REQUESTED FROM: GCSS Chief Engineer
CHECKLIST ITEM: 5-7, Security Services section, “(UNIX) If privileged user permissions are required during segment installation or removal, the Chief Engineer has granted prior approval.”

APPROVAL REQUESTED: To use the \$ROOT keyword for this segment’s PostInstall script.

RATIONALE: See the Rationale for the Permission Request associated with checklist item 6-53 for this segment.

Chief Engineer Permission Request

SEGMENT DESIGNATION:	ELIST Software Segment (ELIST)
CM Number:	10103
OPERATING SYSTEM:	Solaris 7
MISSION APPLICATION NAME:	Enhanced Logistics Intratheater Support Tool
TECHNICAL POC:	Kenneth W. Dritz Decision and Information Sciences Division Argonne National Laboratory 9700 S. Cass Ave. Argonne, IL 60439 dritz@anl.gov
APPROVAL REQUESTED FROM:	GCSS Chief Engineer
CHECKLIST ITEM:	6-7, Standards Compliance section, “The segment is either completely compliant with the <i>DII COE User Interface Specifications</i> or has minimal ⁶ deviations that have been approved by the Chief Engineer.”
APPROVAL REQUESTED:	To depart in minimal ways from the <i>User Interface Specifications</i> .
RATIONALE:	Standards for GUI design were kept in mind when ELIST was originally developed several years ago, and, as a result, ELIST complies in large measure with the requirements that were later captured in the <i>DII COE User Interface Specifications</i> . However, several small deviations exist. (Three simple examples, all dealing with menus, are as follows: (1) Menu items do not include mnemonics or shortcuts. (2) After activating a menu by clicking the left mouse button on the menu title and then dragging the pointer into the menu, the menu is not dismissed when the pointer is dragged off the menu and the button is released (i.e., without activating an option). (3) The pointer does not change to a menu pointer when a menu action is pending.) The reasons for the deviations that exist vary. In some cases, Java preempted certain style decisions (i.e., made them for the developer without giving the developer a choice), or its libraries did not support the particular behavior or choices. In other cases, the sponsor did not require the particular behavior and didn’t provide funding to support it. It is possible that some of the Java shortcomings have been addressed in the time since the initial development of ELIST, and with effort (and support from the sponsor) we may be able to eliminate some of the minor deviations in a future release.

⁶ “Minimal” is defined in the *Style Guide* and in the absence of *Style Guide* direction, at the discretion of the Chief Engineer.

Chief Engineer Permission Request

SEGMENT DESIGNATION: ELIST Software Segment (ELIST)
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TECHNICAL POC: Kenneth W. Dritz
Decision and Information Sciences Division
Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439
dritz@anl.gov

APPROVAL REQUESTED FROM: GCSS Chief Engineer
CHECKLIST ITEM: 6-8, Standards Compliance section, “The segment is available on all COE-supported platforms unless otherwise approved by the Chief Engineer.”

APPROVAL REQUESTED: To provide this segment only for the Sun/Solaris 7 and PC/NT (or Win2K) platforms. At the present time, only the Solaris 7 version has been registered and implemented, but the Windows version will be registered and implemented in the near future.

RATIONALE: The sponsor, MTMC-TEA, only requires the ELIST mission application to operate on these platforms.

Chief Engineer Permission Request

SEGMENT DESIGNATION: ELIST Software Segment (ELIST)

CM Number: 10103

OPERATING SYSTEM: Solaris 7

MISSION APPLICATION NAME: Enhanced Logistics Intratheater Support Tool

TECHNICAL POC: Kenneth W. Dritz
Decision and Information Sciences Division
Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439
dritz@anl.gov

APPROVAL REQUESTED FROM: GCSS Chief Engineer

CHECKLIST ITEM: 6-53, Segment Descriptors section, “If any files need special permission/ownership settings, they are established through the `FileAttribs` descriptor if the descriptor supports the required setting. Exceptions to this are documented and approved by the Chief Engineer.”

APPROVAL REQUESTED: To use a mechanism other than `FileAttribs` to establish an ownership setting, because `FileAttribs` does not support setting the ownership of a file outside the segment. The setting is established in `PostInstall`.

RATIONALE: During the execution of the scripts representing two of the run-time features of this segment, map reference data can be added to directories of the ELIST Reference Data Segment or deleted from them. These directories, and the files in them, are owned by the `elistown` (418) file owner account registered by the ELIST segments, and they are writeable only by the owner. (Those two provisions are essential elements in the strategy for implementing Requirement 7-2.) The preferred mechanism for obtaining write access to such directories and files is for the writing to be performed by SUID scripts owned by the file owner account and executable by the appropriate group (which does not, itself, have permission to write into the directories or files). The scripts representing the aforementioned run-time features of this segment use SUID in exactly this way. As is well known and well documented, the `FileAttribs` descriptor is not able to support the establishment of SUID permissions, which must therefore be set in `PostInstall`; furthermore, `PostInstall` must run as `root` because the UID under which it otherwise would run is not that of the script files whose permission it has to change,

i.e., that of the file owner account. If the Segment Installer were to be changed to do a `setuid` to the UID of `PostInstall` (which in the case of this segment is already that of the file owner account), it would be possible to drop both this Permission Request and the one associated with checklist item 5-7 for this segment.

I&RTS Compliance Waiver Request

SEGMENT DESIGNATION:	ELIST Software Segment (ELIST)
CM Number:	10103
OPERATING SYSTEM:	Solaris 7
MISSION APPLICATION NAME:	Enhanced Logistics Intratheater Support Tool
TECHNICAL POC:	Kenneth W. Dritz Decision and Information Sciences Division Argonne National Laboratory 9700 S. Cass Ave. Argonne, IL 60439 dritz@anl.gov
CHECKLIST ITEM:	1-11, GUI Environment section, “The application complies with the style of the native GUI (e.g., Motif for UNIX, Windows for NT). (See GUI compliance requirements in the <i>DII COE User Interface Specifications</i> .)”
RATIONALE:	Minor deviations from the GUI style requirements brought into play by this item exist. A few of those deviations are documented in this segment’s Chief Engineer Permission Request for checklist item 6-7. Because it is at a higher compliance level, the Permission Request subsumes this Waiver Request. For further discussion, see the Permission Request.
MITIGATION STRATEGY:	As documented in the Permission Request, one of the reasons for the deviations is the fact that Java did not provide the capability of implementing some of the GUI style requirements when ELIST was first developed. If the sponsor approves the expenditure of funds for this purpose, we can investigate whether those impediments no longer exist, and possibly move in the direction of closer compliance in the next release.

I&RTS Compliance Waiver Request

SEGMENT DESIGNATION: ELIST Software Segment (ELIST)
CM Number: 10103
OPERATING SYSTEM: Solaris 7
MISSION APPLICATION NAME: Enhanced Logistics Intratheater Support Tool
TECHNICAL POC: Kenneth W. Dritz
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Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439
dritz@anl.gov

CHECKLIST ITEM: 5-30, GUI Environment section, “The segment is fully compliant with the style of the native GUI (see compliance requirements in the *DII COE User Interface Specifications*).

RATIONALE: Minor deviations from the GUI style requirements brought into play by this item exist. A few of those deviations are documented in this segment’s Chief Engineer Permission Request for checklist item 6-7. Because it is at a higher compliance level, the Permission Request subsumes this Waiver Request. For further discussion, see the Permission Request.

MITIGATION STRATEGY: As documented in the Permission Request, one of the reasons for the deviations is the fact that Java did not provide the capability of implementing some of the GUI style requirements when ELIST was first developed. If the sponsor approves the expenditure of funds for this purpose, we can investigate whether those impediments no longer exist, and possibly move in the direction of closer compliance in the next release.

I&RTS Compliance Waiver Request

SEGMENT DESIGNATION: ELIST Software Segment (ELIST)
CM Number: 10103
OPERATING SYSTEM: Solaris 7
MISSION APPLICATION NAME: Enhanced Logistics Intratheater Support Tool
TECHNICAL POC: Kenneth W. Dritz
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9700 S. Cass Ave.
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dritz@anl.gov

CHECKLIST ITEM: 6-40, Runtime Environment section, “If the segment creates temporary files, they are deleted when no longer needed.”

RATIONALE: Some of the temporary files created by this segment are not deleted.

MITIGATION STRATEGY: If the sponsor approves the expenditure of funds for complying with this requirement, we will satisfy it in the next release.

I&RTS Compliance Waiver Request

SEGMENT DESIGNATION:	ELIST Software Segment (ELIST)
CM Number:	10103
OPERATING SYSTEM:	Solaris 7
MISSION APPLICATION NAME:	Enhanced Logistics Intratheater Support Tool
TECHNICAL POC:	Kenneth W. Dritz Decision and Information Sciences Division Argonne National Laboratory 9700 S. Cass Ave. Argonne, IL 60439 dritz@anl.gov
CHECKLIST ITEM:	6-64, Java Conventions section, “The segment conforms to the Java naming conventions specified in Chapter 8 for Java classes, packages, method names, and interface names.”
RATIONALE:	ELIST was written in Java to achieve platform independence. Because ELIST was developed long before the decision to seek DII COE compliance was made, the code was written before the conventions presently in Chapter 8 even existed. Consequently, class package names do <i>not</i> start with the sponsor’s reverse domain name nor include the segment home directory name, and interface names do <i>not</i> begin with a capital I. The sponsor requires the DII COE version of ELIST to be compatible with the non-DII COE version, which must continue to exist. Compatibility means sharing a common code base, so that two separate versions do not have to be maintained.
MITIGATION STRATEGY:	No feasible solution to this problem exists without either maintaining two separate versions or changing the common code base to be DII COE-compliant. The sponsor does not wish to support two separate versions. Furthermore, doing the work to comply with this requirement by changing the common code base would be unproductive and would not achieve the cost-savings benefit envisioned by the COE. This requirement should apply only to <i>new</i> development projects.

I&RTS Compliance Waiver Request

SEGMENT DESIGNATION:	ELIST Software Segment (ELIST)
CM Number:	10103
OPERATING SYSTEM:	Solaris 7
MISSION APPLICATION NAME:	Enhanced Logistics Intratheater Support Tool
TECHNICAL POC:	Kenneth W. Dritz Decision and Information Sciences Division Argonne National Laboratory 9700 S. Cass Ave. Argonne, IL 60439 dritz@anl.gov
CHECKLIST ITEM:	6-65, Java Conventions section, “The segment does not use [the] company name to name packages, interfaces, classes, or methods.”
RATIONALE:	ELIST was written in Java to achieve platform independence. Because ELIST was developed long before the decision to seek DII COE compliance was made, the code was written before the conventions presently in Chapter 8 even existed. Consequently, the abbreviation (ANL) of the developer’s company name <i>does</i> appear in some package or method names, especially when the latter represent support functions that the developer has also used in other (non-DII COE) projects. The sponsor requires the DII COE version of ELIST to be compatible with the non-DII COE version, which must continue to exist. Compatibility means sharing a common code base, so that two separate versions do not have to be maintained.
MITIGATION STRATEGY:	No feasible solution to this problem exists without either maintaining two separate versions or changing the common code base to be DII COE-compliant. The sponsor does not wish to support two separate versions. Furthermore, doing the work to comply with this requirement by changing the common code base would be unproductive and would not achieve the cost-savings benefit envisioned by the COE. This requirement should apply only to <i>new</i> development projects.

Documentation Waiver Request

SEGMENT DESIGNATION: ELIST Software Segment (ELIST)
CM Number: 10103
OPERATING SYSTEM: Solaris 7
MISSION APPLICATION NAME: Enhanced Logistics Intratheater Support Tool
TECHNICAL POC: Kenneth W. Dritz
Decision and Information Sciences Division
Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439
dritz@anl.gov

DOCUMENTATION AFFECTED: Installation Procedures (IP)
REQUEST: To combine the Installation Procedures (IP) document for this segment with those of the other ELIST segments.

RATIONALE: The installation and deinstallation of this segment are intimately related to those of the other six segments of the ELIST mission application, and all seven segments must be installed to use the features of ELIST. Certain steps must be taken, and certain choices considered, to prepare for the installation of these segments, and certain special requirements come into play between the installation of individual segments or when segments are deinstalled and replaced with later versions. For all these reasons, as well as to allow installation guidelines common to all the segments to be expressed in one place and to allow for helpful cross-referencing between the installation (or deinstallation) instructions of one segment and those of another, the roles and functions of the IP documents normally associated with the seven segments individually have been combined into a single IP document. All the information that would have been provided in seven separate IP documents is available in this one document. There are clearly identified sections for each segment. This organization of the material is believed to be uncommonly helpful to the end user (the installer).

MITIGATION STRATEGY: Because much would be lost by conforming rigidly to the one-IP-per-segment expectation, there are no plans to do so.

Documentation Waiver Request

SEGMENT DESIGNATION: ELIST Software Segment (ELIST)

CM Number: 10103

OPERATING SYSTEM: Solaris 7

MISSION APPLICATION NAME: Enhanced Logistics Intratheater Support Tool

TECHNICAL POC: Kenneth W. Dritz
Decision and Information Sciences Division
Argonne National Laboratory
9700 S. Cass Ave.
Argonne, IL 60439
dritz@anl.gov

DOCUMENTATION AFFECTED: Software Test Plan (STP), Software Test Description (STD), and Software Test Report (STR)

REQUEST: To combine the Software Test Plan (STP), Software Test Description (STD), and Software Test Report (STR) documents for this segment into a single combined Software Test Plan/Description/Report (STP/STD/STR) document, and furthermore to combine the STP/STD/STR document for this segment with those of the other ELIST segments.

RATIONALE: Several of the ELIST segments are passive (data) segments for which the only appropriate test is the verification that the segment appears in the Segment Installer's list of currently installed segments after installation. The installation and deinstallation testing of other segments involves verification that `PostInstall` and `DEINSTALL` behave as anticipated when interacting with the system administrator. Functional testing of the two software segments benefits from a carefully orchestrated order of testing, so that verified features can be used to verify other features. For all these reasons, and because there is really only one Software Test Plan for the entire ELIST mission application, it makes eminent sense to combine several manuals as described in the Request. All the information that would have been presented in separate documents is available in the combined document, with a minimum of repetition. This organization recognizes the essential unity of the ELIST mission application and the uselessness of individual ELIST segments except in the context of the mission application as a whole.

MITIGATION STRATEGY: It is not practical or useful to conform to the rigid document guidelines concerning the STP/STD/STR documents, and there are no plans to do so.