

DISTRIBUTION SHEET

To N. K. Lane H6-30	From P. D. Rittmann H6-30	Page 1 of 1
Project Title/Work Order WHC-SD-WM-CM-012 Rev 0 Configuration Management Plan for the GENII Software		Date Dec 9, 1994
		EDT No. 158933
		ECN No. na

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
B. E. Hey	H4-64	X			
N. K. Lane	H6-30	X			
F. M. Mann	H0-36	X			
P. D. Rittmann	H6-30	X			
CENTRAL FILES (2) + orig.	L8-04	X			
OSTI (2)	L8-07	X			

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, make any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

DEC 12 1994

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT 158933

35 Station 21

2. To: (Receiving Organization) Risk Methodology and Integration		3. From: (Originating Organization) Risk Methodology and Integration		4. Related EDT No.: na	
5. Proj./Prog./Dept./Div.: Hanford Technical Services		6. Cog. Engr.: Paul D. Rittmann, PhD CHP		7. Purchase Order No.: na	
8. Originator Remarks: Please review and approve.				9. Equip./Component No.: na	
11. Receiver Remarks:				10. System/Bldg./Facility: general	
				12. Major Assm. Dwg. No.: na	
				13. Permit/Permit Application No.: na	
14. Required Response Date: December 19, 1994					

15. DATA TRANSMITTED					(F)	(G)	(H)	(I)
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Approval Designator	Reason for Transmittal	Originator Disposition	Receiver Disposition
1	WHC-SD-WM-CM-012		0	Configuration Management Plan for the GENII Software	na	4/1	na	na

16. KEY		
Approval Designator (F)	Reason for Transmittal (G)	Disposition (H) & (I)
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)	1. Approval 2. Release 3. Information 4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

(G)	(H)	17. SIGNATURE/DISTRIBUTION. (See Approval Designator for required signatures)								(G)	(H)
Reason	Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	Reason	Disp.
1	1	Cog.Eng. PD Rittmann	<i>Paul Rittmann</i>	12-7-94	H6-30						
1	1	Cog. Mgr. NK Lane	<i>NK Lane</i>	12-7-94	H10-30						
1	1	QA PJ Edwards	<i>PJ Edwards</i>	12-7-94	A4-79						
1	1	Safety EJ Krejci	<i>PREVO</i>	12/8/94	NI-72						
		Env.									

18. P. D. Rittmann H6-30 <i>Paul Rittmann</i> 12-7-94 Signature of EDT Date Originator		19. N. K. Lane H6-30 <i>NK Lane</i> 12/7/94 Authorized Representative Date for Receiving Organization		20. N. K. Lane H6-30 <i>NK Lane</i> 12/7/94 Cognizant Manager Date		21. DOE APPROVAL (if required) Ctrl. No. na <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/comments <input type="checkbox"/> Disapproved w/comments	
---	--	--	--	--	--	--	--

RELEASE AUTHORIZATION

Document Number: WHC-SD-WM-CM-012, Rev. 0

Document Title: Configuration Management Plan for the GENII Software

Release Date: 12/12/94

**This document was reviewed following the
procedures described in WHC-CM-3-4 and is:**

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

V. L. Birkland

12/12/94

V. L. Birkland

TRADEMARK DISCLAIMER. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

This report has been reproduced from the best available copy. Available in paper copy and microfiche. Printed in the United States of America. Available to the U.S. Department of Energy and its contractors from:

U.S. Department of Energy
Office of Scientific and Technical Information (OSTI)
P.O. Box 62
Oak Ridge, TN 37831
Telephone: (615) 576-8401

Available to the public from: U.S. Department of Commerce
National Technical Information Service (NTIS)
5285 Port Royal Road
Springfield, VA 22161
Telephone: (703) 487-4650

SUPPORTING DOCUMENT

1. Total Pages 14

2. Title

Configuration Management Plan for the GENII Software

3. Number

WHC-SD-WM-CM-012

4. Rev No.

0

5. Key Words

Configuration, GENII

6. Author

Name: Paul D. Rittmann, PhD CHP

Paul Rittmann
Signature

Organization/Charge Code 8H500/D44A6

7. Abstract

This document describes the configuration controls which are planned for use by WHC in accordance with WHC-CM-3-10. The configuration controls cover the GENII software, the GENII user's guide, the list of GENII users at WHC, and the backup copies. Revisions to the software must be approved prior to distribution in accordance with this configuration management plan.

8. RELEASE STAMP

OFFICIAL RELEASE
BY WHC
DATE DEC 12 1994

35 STATION 21

Configuration Management Plan for the GENII Software
Paul D. Rittmann, PhD CHP November 29, 1994

1.0 INTRODUCTION

The GENII program calculates doses from radionuclides released into the environment for a variety of possible exposure scenarios. The user prepares an input data file with the necessary modelling assumptions and parameters. The program reads the user's input file, computes the necessary doses and stores these results in an output file. The output file also contains a listing of the user's input and gives the title lines from the data libraries which are accessed in the course of the calculations.

1.1 Purpose and Scope

The purpose of this document is to provide users of the GENII software with the configuration controls which are planned for use by WHC in accordance with WHC-CM-3-10. The controls are solely for WHC employees. Non-WHC individuals are not excluded, but no promise is made or implied that they will be informed of errors or revisions to the software.

The configuration controls cover the GENII software, the GENII user's guide, the list of GENII users at WHC, and the backup copies. Revisions to the software must be approved prior to distribution in accordance with this configuration management plan.

1.2 Overview

The GENII software was released by PNL for use by WHC in August 1988. Documentation was provided later that year¹. The software is not copyrighted or protected in any way. It is fully in the public domain.

Due to the large number of users at WHC, the PNL GENII custodian (PGC) was willing to treat the appointed WHC GENII custodian (WGC) as the only point of contact for software distribution to WHC employees. Revisions and bug reports have since been funnelled through the WGC.

Numerous errors in the program have been discovered due to gaps in the verification testing at PNL. Several revisions have been issued by the PGC. The latest revision made by PNL was in December of 1990. Since then PNL has made no changes to either the code or the data libraries. In July, 1993, a revision² to the data libraries was approved and released to users.

¹Napier, B. A., et al., *GENII - The Hanford Environmental Radiation Dosimetry Software System* (PNL-6584), Battelle Pacific Northwest Laboratory, Richland, WA, December, 1988.

²Rittmann, P. D., *Verification Tests for the July 1993 Revision to the GENII Radionuclide and Dose Increment Libraries*, WHC-SD-WM-TI-596, October, 1993.

1.3 Definitions

GENII Software - the GENII program and its data libraries.

GENII User's Guide - the manuals containing the operating instructions, model and algorithm descriptions, code and library listing, and verification tests. This includes documents which elaborate on software revisions.

Hanford Environmental Dose Overview Panel (HEDOP) - group of individuals employed by DOE contractors who have been charged with the responsibility of ensuring consistency in the models and assumptions used in the environmental transport and exposure modelling for releases of hazardous materials from DOE facilities at the Hanford site. Approves changes to the GENII software prior to general distribution on the Hanford Site.

HEDOP Reviewers - individuals appointed by the HEDOP to review and approve documents containing calculations of human exposure to environmental releases from the Hanford Site. These reviewers may approve calculations which involve modified GENII data libraries.

PNL GENII Custodian (PGC) - employee of PNL who is responsible for meeting the software configuration management requirements of PNL for the GENII software. The PGC has the authority to revise the program, the data libraries and the user's guide.

WHC GENII Custodian (WGC) - employee of WHC who is responsible for meeting the software configuration management requirements of WHC for the GENII software. The WGC is the point of contact between the PGC and the WHC GENII users.

2.0 MANAGEMENT

2.1 Organization

Only two organizations with active roles in this configuration management plan. The first is the organization in PNL which claims the PGC (B. A. Napier) as a member. Currently this is the Pathway and Environmental Modeling Group of the Health Risk Assessment Department. The second is the organization which claims the WGC (P. D. Rittmann) as a member. Currently this is the Risk Methodology and Assessment Group of the Engineering Support Organization. No special interface protocols exist other than those required for inter-contractor communications.

2.2 Responsibilities

PNL GENII Custodian (PGC):

1. Maintain the GENII software in accordance with the approved PNL software configuration management procedures.
2. Notify the WGC of discovered errors in the software.
3. Revise the software and user's guide on a schedule determined by the availability of funding and the significance of the changes.
4. Obtain HEDOP approval of software changes prior to general distribution on the Hanford Site.
5. Provide the WGC with revised software and user's guide once they are approved for general distribution.

WHC GENII Custodian (WGC):

1. Maintain a list of WHC employees who use the GENII software.
2. Provide the GENII software to WHC employees who request it.
3. Remove the names of those requesting to be removed from the user list.
4. Provide orientation on the use of the GENII software to new users.
5. Notify WHC users of any errors (bugs) which are discovered. Also advise users on methods to compensate for the bugs or avoid them altogether.
6. Notify the PGC of errors which the PGC has not reported. Also recommended software enhancements suggested by WHC users.
7. When new versions are received, test them for unexpected new errors by comparing results from the new version with results from previous versions. Distribute the new version to WHC users once this benchmark testing is has been documented.
8. Keep backup copies of the (1) GENII software, (2) the current list of WHC users, and (3) WHC test case input and output on floppy disks in the event that the working copies on hard disks become unusable.

WHC GENII Users:

1. Install GENII according to procedures contained in this configuration management plan. Notify the WGC of any problems encountered while installing the GENII software.
2. Notify the WGC of possible errors or suggested improvements in the GENII software.
3. Obtain written approval from a qualified HEDOP reviewer of all calculations involving environmental releases from the Hanford Site.
4. When the GENII software is no longer needed, send a request in writing or electronic mail to the WGC to be removed from the user list. The user should then delete the files in the \GENII subdirectory and remove this directory from his hard disk.

3.0 SOFTWARE CONFIGURATION MANAGEMENT ACTIVITIES

3.1 Configuration Identification

The items controlled by this document are identified as follows:

- Software - The executable program is identified by its revision number. The current version of the GENII program is 1.485. Any future revisions will be assigned a new revision number by the PGC. The data libraries are tracked by the date last revised.
- User's Guide - The GENII User's Guide is identified by the document number. Any addenda have document numbers which the issuing organizations find appropriate. WHC-issued documents intended for general use on the Hanford Site must be supporting documents.
- User List - The list of current WHC users is kept by the WGC. This document is revised whenever the WGC learns of new users or users who no longer have need for the software.
- Backup Copy - Working copies of the software are normally stored on the hard disk assigned to the WGC, as well as the HLAN drive used by the WGC. In addition, backup copies are maintained on floppy diskettes stored in the office assigned to the WGC. This office is currently Room 2104 of the 2440 Stevens Building. These floppy diskettes are labelled for proper identification. The files listed in Appendix A are the minimum required to be backed up.

3.2 Configuration Control

Software Distribution

1. The user is sent a descriptive message and a DOS batch file which does two tasks. First, it installs the software by extracting the compressed files and placing them on the user's hard disk. Second, it tests the installation to ensure the user's hardware configuration will give correct answers. The batch file runs one or more test cases and compares the output generated with the correct output. If all is well, the only differences are the date and time of the two runs. The test case results (GENII output files and comparison files) must be returned to the WGC for evaluation. Once these results are received and determined to be acceptable, the user's name is added to the list of verified GENII users.
2. Users connected to the HLAN are sent an electronic mail message with a DOS batch file attached. The batch file installs and tests the software according to paragraph 1. The results of the test cases are stored on the file server from which the software was downloaded.
3. Users without HLAN connection are sent a floppy disk with the archive files and a DOS batch file. The batch file installs and tests the software according to paragraph 1. The results of the test cases are stored in an archive file on the user's hard disk. The user is requested to send a copy of this file to the WGC to register the software.

Software Revisions

1. Revisions to either the executable program or the data files are only distributed to individuals on the WGC list of GENII users. Before the revised software can be distributed, the WHC members of the HEDOP must approve the changes.

2. Distribution of the revised software uses the same batch files as are used for a first-time installation. The nature and number of test cases may change however.
3. Users on the HLAN are notified by electronic mail. Other users are notified by plant mail, with a diskette enclosed. The WGC may visit those individuals to oversee the installation and retrieve the test case results.

Software Backup by WGC

1. The minimum required backups are the files listed in Appendix A.
2. The files are copied onto appropriately labelled floppy diskettes and stored in the office of the WGC.

Transition of Custodianship

1. In the event that the current WGC transfers this responsibility to another individual, the new WGC must be given the items controlled in this configuration management plan.
2. The new WGC should be informed about the contents of each file listed in Appendix A. In addition, the current WGC should review the custodian responsibilities with the new WGC.

3.3 Configuration Status Accounting

The status of the items controlled by this document is determined as follows:

- Software - The executable program is tracked by its revision number. The current version of the GENII program is 1.485. Any future revisions will be assigned a new revision number by the PGC. The data libraries are tracked by the date last revised.
- User's Guide - The GENII User's Guide is tracked by the document number. Any addenda have document identities which the issuing organizations find appropriate. WHC-issued documents must be supporting document.
- User List - The list of WHC users kept by the WGC is current if it contains the names of all persons submitting installation test result files who have not subsequently requested to be removed from the list.
- Backup Files - The floppy diskettes containing backups are current if the user list on the hard disk is the same as the user list on the backup diskette.

3.4 Audits and Reviews

Revisions to the GENII software are examined by the WGC or other qualified individual. The revisions must be technically justified. The implementation of the revisions must be checked by the WGC or other qualified individual. Normally this involves either hand calculations or comparisons between the old and new version output. The results of these tests are a basis on which the WHC members of the HEDOP approve the revisions for distribution within WHC.

3.5 Access Control

The PGC is responsible for the source code, which is not normally distributed to users. Therefore, the executable will only be modified by the PGC. Such modifications must be approved by the HEDOP prior to general distribution to Hanford users.

The program places the title lines of the data files accessed into the program output file. In addition to the title line is the DOS file date, which allows any reviewer to verify that the data libraries were not modified prior to the run. Any calculations involving modified data libraries must be approved by qualified HEDOP reviewers.

3.6 Backup and Recovery

The files which need to be backed up are listed in Appendix A. These files are copied to labelled floppy diskettes and stored in the office of the WGC. The backup copy of the list of WHC users needs to be updated with each new user so that the official backups are always current.

4.0 TOOLS, TECHNIQUES, AND METHODOLOGIES

The software distribution batch files have several important characteristics to avoid installation problems for both the WGC and the user. These are summarized below. An example batch file is attached.

1. The batch files should be self-explanatory. Adding a command line parameter after the batch file name will cause it to do something. With no parameter, the batch file should offer a brief summary of what it does and what it needs as a command line parameter.
2. The batch files should not erase files on the user's hard disk indiscriminately. For example, the deletion of files using wild card characters is to be avoided. Instead, the files should be deleted by name so that existing user data will not be affected.
3. The batch files should avoid common errors such as network unavailability, insufficient disk space for files or RAM space for the test cases.

5.0 RECORDS COLLECTION AND RETENTION

Normally, no records are generated under this configuration management plan. If any are generated, they must be released as supporting documents.

Appendix A. Files Required to be Copied to Floppies for Backups

Principal GENII 1.485 Program and Data Files:

File Name	Size	File Date/Time	File Name	Size	File Date/Time
APPREN BAT	4055	7-Jun-91 08:55	GRDF DAT	17408	8-May-90 12:38
APPRENTI DAT	10624	2-Dec-88 17:11	JF-POP BAT	1695	27-Oct-93 12:23
APPRENTI EXE	189710	3-Dec-90 14:26	JF10010 5Y	4096	10-Mar-88 08:46
APRHELP1 DAT	45331	1-Dec-88 17:12	JF10010 9Y	4754	26-Aug-92 10:12
APRHELP2 DAT	51667	1-Dec-88 17:12	JF10061 5Y	4224	10-Mar-88 08:46
BIOAC1 DAT	6656	30-Aug-88 11:49	JF10061 9Y	4754	26-Aug-92 10:13
CLASS-D BIN	171308	23-Jul-93 22:15	JF10089 5Y	4224	10-Mar-88 08:47
CLASS-D TXT	53	23-Jul-93 22:12	JF10089 9Y	4754	26-Aug-92 10:13
CLASS-MA BIN	170754	23-Jul-93 22:15	JF20010 5Y	4224	10-Mar-88 08:48
CLASS-MA TXT	65	23-Jul-93 22:12	JF20010 9Y	4758	26-Aug-92 10:14
CLASS-OL BIN	140134	29-Aug-88 13:25	JF20061 5Y	4224	10-Mar-88 08:49
CLASS-OL TXT	128	29-Aug-88 11:08	JF20061 9Y	4758	26-Aug-92 10:14
CLASS-PN BIN	166215	23-Jul-93 22:15	JF20089 5Y	4224	10-Mar-88 08:50
CLASS-PN TXT	58	23-Jul-93 22:12	JF20089 9Y	4758	26-Aug-92 10:14
CLASS-W BIN	166733	23-Jul-93 22:15	JF30010 5Y	4224	10-Mar-88 08:51
CLASS-W TXT	59	23-Jul-93 22:12	JF30010 9Y	4752	26-Aug-92 10:15
CLASS-Y BIN	166552	23-Jul-93 22:15	JF30061 9Y	4752	26-Aug-92 10:21
CLASS-Y TXT	50	23-Jul-93 22:12	JF30089 9Y	4752	26-Aug-92 10:21
CLASS-Y2 BIN	171963	23-Jul-93 22:15	JF40010 5Y	4224	10-Mar-88 08:52
CLASS-Y2 TXT	65	23-Jul-93 22:12	JF40010 9Y	4759	26-Aug-92 10:21
CLASS BAT	1891	27-Oct-93 12:24	JF40061 9Y	4759	26-Aug-92 10:22
CLASSES	18305	23-Jul-93 22:14	JF40089 9Y	4759	26-Aug-92 10:22
CMP EXE	8224	15-Mar-89 16:05	JF50010 9Y	1192	19-Oct-93 13:52
COLOR COM	400	22-Aug-85 15:19	JF50061 9Y	1192	19-Oct-93 13:52
COLOR DOC	979	22-Aug-85 15:19	JOINTFRE IN	4758	26-Aug-92 10:14
DEFAULT 50	3594	24-Aug-90 12:09	PARAMS DAT	16256	12-Mar-90 15:47
DEFAULT 95	3712	28-Mar-90 12:15	PD EXE	13456	6-Oct-93 22:27
DEFAULT IN	3712	28-Mar-90 12:15	POP100 80	1536	19-Feb-88 13:33
DOSE EXE	245314	3-Dec-90 14:32	POP100 90	2211	4-Feb-92 15:10
DOSINC DAT	170754	23-Jul-93 22:15	POP200 80	1536	19-Feb-88 13:45
DOSINC OUT	65	23-Jul-93 22:12	POP200 90	2211	4-Feb-92 15:17
DOSSUM DAT	2816	11-Jun-88 15:53	POP300 80	1536	19-Feb-88 13:43
EDE-01	13857	23-Jul-93 22:14	POP300 90	2211	4-Feb-92 15:25
EDE-50	13856	23-Jul-93 22:14	POP400 80	1536	19-Feb-88 13:41
EDE-70	13856	23-Jul-93 22:14	POP400 90	2203	4-Feb-92 15:30
ENV EXE	286568	3-Dec-90 14:30	PSEE EXE	6720	28-Oct-93 11:52
ENVIN EXE	309575	3-Dec-90 14:27	RMDBYELE DAT	3332	24-Aug-90 10:42
F77L EER	10240	14-Mar-89 11:19	RMDLIB DAT	13316	23-Jul-93 10:26
FILENAME DAT	1408	30-Nov-88 11:47	RMDLIB LRG	13318	23-Jul-93 10:23
FREE DOC	3484	28-Jun-86 09:45	RMDLIB SML	13316	23-Jul-93 10:26
FREE EXE	6144	28-Jun-86 09:52	RUN BAT	2499	5-Nov-93 10:06
FTRANS DAT	7712	19-Jul-93 09:37	TI-30006	223442	30-Jun-93 10:02
FTRANS SG	7707	19-Jul-93 09:36	TI-596	161293	12-Oct-93 11:49
FTRANS ZG	7712	19-Jul-93 09:37	TRANSFER 485	68632	19-Dec-90 13:29
GAMEN DAT	15488	14-May-90 08:43	ZOO DOC	39357	24-Aug-86 13:03

Additional GENII Software Files (INTDF):

File Name	Size	File Date/Time	File Name	Size	File Date/Time
DIT-1	IN 1046	20-Nov-90 13:08	RI	BAT 3655	30-Jan-92 09:00
DIT-2	IN 1153	20-Nov-90 13:08	RMD-D	LIB 13339	15-Nov-90 08:08
DIT-3	IN 872	21-Nov-90 13:20	RMD-MAX	LIB 13348	15-Nov-90 08:18
DIT-4	IN 518	21-Nov-90 13:09	RMD-PNL	LIB 13324	15-Nov-90 08:14
DIT-5	IN 500	21-Nov-90 13:11	RMD-SD	LIB 972	21-Nov-90 13:17
DO-BIN	18	31-Oct-90 13:14	RMD-SW	LIB 972	21-Nov-90 13:15
FILENAME	DAT 1326	15-Jun-89 08:06	RMD-SY	LIB 972	21-Nov-90 13:18
FREE	DOC 3484	28-Jun-86 09:45	RMD-W	LIB 13345	15-Nov-90 08:10
FREE	EXE 6144	28-Jun-86 09:52	RMD-Y	LIB 13336	15-Nov-90 08:11
GRP-1	IN 1046	15-Nov-90 08:22	SEE	IN 22784	21-Sep-87 09:07
GRP-2	IN 1153	15-Nov-90 08:23	SEE1	DAT 381720	28-Aug-88 13:59
GRP-3	IN 872	21-Nov-90 13:20	SEE2	DAT 640893	28-Aug-88 14:04
GRP-4	IN 518	21-Nov-90 13:08	SEE3	DAT 408226	30-Nov-87 14:43
GRP-5	IN 500	21-Nov-90 13:11	TEST	IN 508	30-Jan-92 08:48
HEADER	PDR 66	22-Nov-89 18:37	UNFORMAT	EXE 118672	12-Apr-88 13:18
INTDF	EXE 490104	3-Dec-90 14:33	UNFORMAT	FOR 3764	14-Sep-88 00:36
METADATA	DAT 22753	14-Dec-90 14:25			

Additional GENII Software Files (EXTDF):

File Name	Size	File Date/Time	File Name	Size	File Date/Time
ENERGY	1 611	5-May-92 08:56	RE	BAT 2028	15-Mar-93 12:27
ENERGY	DAT 208664	16-Apr-93 14:16	RMDLIB	1 208	5-May-92 08:55
EXTDF	DOC 2517	16-Apr-93 14:20	RMDLIB	DAT 13567	30-Apr-93 17:00
EXTDF	EXE 299783	3-Dec-90 14:33	SURFACE	IN 178	15-Mar-93 12:19
FILENAME	DAT 1326	15-Jun-89 08:16	SURFACE	OUT 6095	31-Mar-93 14:38
ISOLIB	DAT 10752	12-Jul-88 14:10	SURFACE	SCN 9278	31-Mar-93 14:38

Additional GENII Software Files (DITTY):

File Name	Size	File Date/Time	File Name	Size	File Date/Time
AIRREL	IN 256	9-Feb-88 11:15	DITTY	IN 476	28-Sep-88 08:30
BIOAC1	DAT 6656	30-Aug-88 11:49	DITTY	OUT 29365	19-Dec-90 12:12
DITTY-D	DSF 100493	3-Dec-90 10:01	FILENAME	DAT 1326	15-Jun-89 08:21
DITTY-MA	DSF 100503	3-Dec-90 10:02	FTRANS	DAT 7168	29-Aug-88 12:27
DITTY-OL	DSF 100480	30-Aug-88 13:55	GRDF	DAT 17408	8-May-90 12:38
DITTY-PN	DSF 100507	3-Dec-90 10:02	README	DIT 299	19-Dec-90 11:46
DITTY-W	DSF 100488	3-Dec-90 10:02	RMDLIB	DAT 13333	15-Nov-90 08:21
DITTY-Y	DSF 100490	3-Dec-90 10:02	WATREL	IN 2888	28-Sep-88 08:40
DITTY	EXE 444624	3-Dec-90 14:23			

Installation Files and User List:

File Name	Size	File Date/Time
GET-GEN BAT	5829	10-Nov-93 08:18
GET-GEN MSG	1224	5-Nov-93 13:24
USERS LST	-----	----- (varies with each new user)

Testing Documentation:

File Name	Size	File Date/Time	File Name	Size	File Date/Time
ACUTE IN	10416	21-Oct-94 07:57	POST-DRL OUT	19348	21-Oct-94 10:16
ACUTE OUT	63909	21-Oct-94 07:58	SURF-WAT IN	10927	24-Oct-94 13:35
CHRONIC IN	10418	21-Oct-94 07:57	SURF-WAT OUT	22532	24-Oct-94 13:36
CHRONIC OUT	20231	21-Oct-94 07:59	TST-DOC WQ1	17217	7-Nov-94 16:41
POST-DRL IN	10802	21-Oct-94 10:15			

**Appendix B. DOS Batch File for Installation Via HLAN
(GET-GEN.BAT)**

In the following lines the "^" represents ESC, which is ASCII character #27.

```
@Echo Off
: Author: Paul D. Rittmann
: Type GET-GEN for instructions on how to use this.

SET GEN2=\\WHC71\PAGROUP
If ZIP%1==ZIP Goto SHOW-HOW

Echo ^[37m
Echo First, ^[36m connect %~USER% to %GEN2%
Echo ^[35m
For %%f in (L M O P Q R) Do If not exist %%f:*.* set PDR=%%f:
NET USE %PDR% %GEN2%
If exist %PDR%*.* Goto NET-OK
Echo ^[36m
Echo Had trouble connecting to %GEN2% !!
Echo
Echo Call Paul Rittmann on 376-8715 (or send a ccMail message) !!
Echo ^[35m
Goto FINISH

:NET-OK
CD %PDR%\PDR\GENII
%PDR%
%1
If not exist \PDR\GENII\GEN-93.ZOO Goto DRIVE-OK
Echo ^[36m
Echo Can't find Drive %1 !!??
Echo ^[32m
Echo Please try again with a valid drive letter.
%~BDRIVE%
Goto FINISH

:DRIVE-OK
Echo ##### Installing on Drive %1 ##### >> %PDR%~USER%.CFG
Echo >> %PDR%~USER%.CFG
SET >> %PDR%~USER%.CFG
%1
Echo ^[33m
If exist \GENII\*.* Goto UPDATE
MD \GENII
CD \GENII
Echo GENII needs about 3.5 Mbyte of free disk space.
%PDR\FREE 3500000
Goto DISK-OK

:UPDATE
CD \GENII
If ZIP%2==ZIP Goto WHOLETHING
Zoo eO %PDR%GEN-MAIN CHECKOUT CHECKWIN TEST&?.* CMP.EXE > NUL
```



```

Echo      ++++++ >> %PDR%~USER%.CFG
Echo      ++++++ Test Cases Only ++++++ >> %PDR%~USER%.CFG
Echo      ++++++ >> %PDR%~USER%.CFG
Goto TESTS

```

```
:WHOLETHING
```

```

Echo The GENII update needs about 1.5 Mbyte of free disk space.
%PDR%FREE 1500000

```

```
:DISK-OK
```

```
If ERRORLEVEL 1 Goto USED-UP
```

```
Echo ^[37m
```

```
Echo Second, ^[36m copy the Zoo files from %GEN2% to %1\GENII
```

```
Echo ^[35m
```

```
For %%f in (MAIN 93) DO COPY %PDR%GEN-%%f.ZOO > NUL
```

```
Echo ^[37m Third, ^[36m prepare drive %1 to receive Version 1.485, and
```

```
Echo unpack the files, i.e., let the files out of the Zoo!
```

```
: Remove the INTDF files
```

```
FOR %%f in (SEE.IN SEE1.DAT SEE2.DAT SEE3.DAT METADATA.DAT) DO If exist %%f DEL %%f
```

```
FOR %%f in (INTDF.EXE INTDF.IN INTDF.OUT WORK.BUF) DO If exist %%f DEL %%f
```

```
: Remove the EXTDF files
```

```
FOR %%f in (ENERGY.DAT ISOLIB.DAT EXTDF.EXE EXTDF.IN EXTDF.OUT) DO If exist %%f DEL %%f
```

```
: Remove the DITTY files
```

```
FOR %%f in (DITTY.EXE DITTY.IN DITTY.OUT) DO If exist %%f DEL %%f
```

```
FOR %%f in (DSFCT30.DAT AIRREL.IN WATREL.IN) DO If exist %%f DEL %%f
```

```
: Remove the GENII files
```

```
FOR %%f in (DOSINC.DAT DOSINC.OUT ENV.IN ENV.OUT MEDIA.OUT) DO If exist %%f DEL %%f
```

```
FOR %%f in (DOSEQA.OUT GENII.IN GENII.OUT GENII2.OUT DOSE.OUT) DO If exist %%f DEL %%f
```

```
FOR %%f in (1 2 3 4 5) DO If exist JF%%f00??.* DEL JF%%f00??.*
```

```
FOR %%f in (1 2 3 4) DO If exist POP%%f00.* DEL POP%%f00.*
```

```
FOR %%f in (CLASS2.BAT CLASSES.TXT ZOO.EXE) DO If exist %%f DEL %%f
```

```
DIR >> %PDR%~USER%.CFG
```

```
Echo ^[35m
```

```
For %%f in (MAIN 93) DO Zoo e0 GEN-%%f > NUL
```

```
For %%f in (MAIN 93) DO DEL GEN-%%f.ZOO
```

```
:TESTS
```

```
Echo ^[37m Finally, ^[36m test the current installation.^[35m
```

```
FREE M 360000
```

```
If ERRORLEVEL 1 Goto NO-ROOM
```

```
Echo ^[36m
```

```
Echo This will take about 5 minutes on a 386 machine (15 minutes on a 286).
```

```
COPY CLASS-MA.BIN DOSINC.DAT > NUL
```

```
COPY CLASS-MA.TXT DOSINC.OUT > NUL
```

```
COPY JF20061.9Y JOINTFRE.IN > NUL
```

```
Call RUN TEST&1
```

```
COPY JF20089.9Y JOINTFRE.IN > NUL
```

```
Call RUN TEST&2
```

```
COPY TEST&1.OUT+TEST&2.OUT %~USER%.OUT > NUL
```

```
Echo ^[33m
```

```
Echo If 45 lines are different, the output is verified.
```

```
Echo (Only the date/time of the run was different.)^[36m
```

```

If not Q%WIN?%==Q COPY CHECKWIN CHECKOUT > NUL
CMP CHECKOUT %~USER%.OUT PAULS.CHK
If exist %PDR%*. * Goto AWAKE
    USE %PDR% /D
    USE %PDR% %GEN2%
    CD %PDR%\PDR\GENII
:AWAKE
TYPE PAULS.CHK >> %PDR%~USER%.CFG
For %%f in (PAULS.CHK CHECKOUT CHECKWIN DOSEQA.OUT TEST&?.*) DO DEL %%f
COPY %~USER%.OUT %PDR%
DEL %~USER%.OUT
Echo ^[45;33m
Echo
Echo          The Version 1.485 installation is complete !!
Echo
Echo          Be sure to get HEDOP approval of your work !!
Echo
Echo ^[40;36m
Goto FINISH

:NO-ROOM
S:\BIN\MAPMEM >> %PDR%~USER%.CFG
Echo ^[36m
Echo  There is not enough free memory to run the GENII test cases !!
Echo
Echo  Call Paul Rittmann on 376-8715 (or send a ccMail message) !!
Goto FINISH

:SHOW-HOW
Echo ^[1;33m
Echo  *****11-93***** ^[37m Instructions for GET-GEN.BAT ^[33m *****11-93*****
Echo ^[36m
Echo  Purpose: ^[32m To install/update/test the main GENII files from the HLAN.
Echo ^[36m
Echo  Example: ^[32m To install/update/test the GENII files on drive D:,
Echo             type the command ^[37m GET-GEN D: ^[32m (The ":" is important!)
Echo             To only run the test cases, type ^[37m GET-GEN D: TESTS
Echo ^[36m
Echo  What Happens: ^[32m
Echo  (1) The batch file logs onto %GEN2%.
Echo             (You must be connected to the HLAN for this to work!)
Echo  (2) Old GENII files are deleted, or a new subdirectory named
Echo             \GENII is created on the drive you specified.
Echo  (3) Archive files containing the GENII software are copied from
Echo             the HLAN and unpacked.
Echo  (4) Two small test cases are run to certify your hardware.
Echo             (When running only the test cases, steps 2 and 3 are skipped.)
Echo  (5) Test results are returned to the HLAN for review by the
Echo             WHC code custodian, Paul Rittmann. You will be notified
Echo             if any irregularities are found.
Echo ^[33m
Echo  *****11-93*****11-93*****11-93*****
Goto END

```

```

:USED-UP

```

```
Echo Not enough free disk space! >> %PDR%~USER%.CFG
Echo ^[36m
Echo   Whoa !! Drive %1 does not have enough free space !!
Echo ^[32m
Echo   Erase some files, or try another disk drive.
```

```
:FINISH
USE %PDR% /D
SET PDR=
```

```
:END
SET GEN2=
Echo ^[37m
```