

ARCHIVE
On-line
Storage and Retrieval

for the

FACTS Software System

Installation & Technical Supplements

IT IS OUR RECOMMENDATION THAT ALL REGISTERS IN THE SYSTEM BE PRINTED TO HARDCOPY IN THE EVENT THAT LOSS OF DATA OCCURS AND TRANSACTIONS HAVE TO BE RECREATED

PLEASE NOTE: If Facts authorization code is changed, a new authorization code will be needed for Archive.

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Automatic Installation

Automatic installation with the running of “ACNSTALL” will automatically take care of steps 1,2 and 3 from the Manual Installation Instructions below. You still need to manually perform step 4 from the Manual Instructions.

Unix/AIX:

Extract the contents of the diskette into your FACTS home directory.

```
I.E.    #cd/usr/ssi6
        #tar -xvf/dev/fd0
```

Print the readme files and follow the installation instructions.

Windows/NT:

Use Notepad to open the readme files. Print and follow installation instructions.

Manual Installation (Optional)

Step 1: Add the ARCHIVE Printer link file. (ACNSTALL should do this automatically as link file “PA”)

Place the ARCHIVE printer driver file: arc.printer, in the ProvideX device directory. IE. /usr/ssi6/pvx/lib/_dev.

Run the PVX utilities program.

Select C for configuration.

Select L for link file.

Answer the remaining inputs as follows:

Link file: “PA”

File/device: /dev/null

Type of Link: P for printer

Terminal AUX Port: N for No

Select the archive printer from the list of available printers.

Step 2: Add the ARCHIVE 'Printer' in the Printer F/M. (ACNSTALL will add this as the next printer number available)

Add the ARCHIVE printer to the Printer F/M, assigning it the ProvideX link file, description, and carriage width entered above. No further information is required.

Step 3: Define program names in Program F/M and Menu F/M. (ACNSTALL will build the Archive Menu, but will not automatically add ACS000 to MMS000)

Define the following programs in Program F/M and in the Menu F/M in the order they appear below.

<u>Program</u>	<u>Name</u>	<u>Access</u>	<u>Printer</u>
ACS000	ARCHIVE Sub-System	AC	N
ACI110	View	ACV	N
ACP110	Print	ACP	Y
ACU110	Store	ACS	N
ACR110	List	ACL	Y
ACU130	Indexer	ACI	N
ACU160	Backup	ACB	N
ACU180	Restore	ACR	N
ACF115	Catalog F/M	ACF	N
ACU140	Catalog Rebuilder		N
ACU120	Removal		N
ACF995	Control F/M	ACC	N

Step 4: Setup the ARCHIVE Control F/M. (ACNSTALL does not automatically do this step)

Run the ARCHIVE Control F/M and define the system parameters as outlined in the ARCHIVE manual. Remember that ACNSTALL will define the Archive printer/link file as "PA."

Step 5: Set up *cron* to maintain the ARCHIVE working directory. (Optional)

Add the following line to your crontabs file for *root*.

```
30 5 * * 0-6 find {working_dir} -mtime +X -print | xargs -t -i rm {}
```

NOTE This is an option that should be incorporated if, within the ARCHIVE Control F/M, the Remove Indexed flag is set to 'N'. This line will remove all files in the working directory that are more than X days old.

Technical Support (*For FACTS affiliates. End users should direct their calls to their authorized FACTS affiliate.*)

To receive technical support for the ARCHIVE sub-system, have your ARCHIVE authorization code ready, and call (336) 272-1241 between the hours of 8AM and 5PM (EST), Monday-Friday, except holidays.

--or--

Report problems needing immediate support via e-mail to: support@designeddata.com

Issues you would like for us to address as an enhancement, or for non-critical bugs we could address in a monthly update, please direct to: arcissues@designeddata.com

Technical Information

ARCHIVE Creation

When a user selects the ARCHIVE printer, the ARCHIVE interface program (ACC010) creates a text file in the specified library directory. The information found within the Catalog F/M is then written to the file as a single record in a comma delimited format. (This record may then be used to rebuild the Catalog F/M record if it is inadvertently removed or becomes corrupt.) Control is then returned to the FACTS program and the output is directed to the previously defined text file via the ARCHIVE printer. Upon completion of the output, the ARCHIVE back-end interface program (ACC020) then confirms the integrity of the file, creates the Catalog F/M record, and compresses the text file, according to the compression type selected within the Control F/M.

ARCHIVE Index Files

To facilitate the ease of movement within the ARCHIVE View program, a keyed file is created from the text stored within the library. These files are temporary and are created through the ARCHIVE View and ARCHIVE Indexer programs.

Note: The ARCHIVE files are stored as text for several reasons. First of all, text files require approximately 60% of the space that would be needed to store the output in a direct access file. Secondly, to *index* each ARCHIVE at print time would more than double the amount of time required to create each ARCHIVE. Lastly, text files do not tend to become corrupt, as keyed files can. This indexing structure provides a *happy medium* for performance, storage capacity, and integrity.

Backup/Restore

The ARCHIVE Backup program copies all selected ARCHIVES to a temporary backup directory and a backup catalog file is created. The ARCHIVES are then transferred to the backup device, along with the catalog file, via the UNIX tar command. Once successfully transferred, the original ARCHIVES and their corresponding Catalog F/M records are removed.

The ARCHIVE Restore program downloads the backup catalog file from the media and allows the user to select ARCHIVES to restore. Once selected, the ARCHIVES are downloaded to their original libraries and their Catalog F/M records are restored.

File: ACCNTL -System Control File

Purpose : Maintain variables that control the function of the ARCHIVE Sub-System.

Record(s) Created: ACF995 - ARCHIVE Control F/M

Record(s) Deleted: ACF995 - ARCHIVE Control F/M

Key Size: 9

Bytes/Record : 276

Seq	Var	Description	Size	Type	Format
* 1	ACCNTL\$[0]	Record Type	3	A	'ACC'
* 2	ACCNTL\$[1]	Company Number	2	N	
* 3	ACCNTL\$[2]	Filler	4	N	'0000'
4	ACCNTL\$[3]	Use ARCHIVE Flag (Y/N)	1	A	
5	ACCNTL\$[4]	Last Archive Number Used	6	N	"000000"
6	ACCNTL\$[5]	ARCHIVE 'Printer'	3	A	
7	ACCNTL\$[6]	Compression Type (C/P/N)	1	A	
8	ACCNTL\$[7]	Password for ARCHIVE Removal	6	A	
9	ACCNTL\$[8]	Temporary Working Directory	50	A	
10	ACCNTL\$[9]	Library Directory Locations	120	A	
11	ACCNTL\$[10]	Job Stream Library	20	A	
12	ACCNTL\$[11]	Auto/Optional Update Flag (Y/N)	1	A	
13	ACCNTL\$[12]	Remove Indexed (Y/N)	1	A	
14	ACCNTL\$[13]	Tape Device Name	30	A	
15	ACCNTL\$[14]	Not Used	0		
16	ACCNTL\$[15]	ARCHIVE Authorization Code	12	N	

File: ACINDX - ARCHIVE Catalog File (Multi-keyed)

Purpose: Maintain attributes of all ARCHIVED output.

Record(s) Created : ACC010 - ARCHIVE Creation
ACF115 - ARCHIVE Catalog F/M

Record(s) Deleted: ACF115 - ARCHIVE Catalog F/M
ACU120 - ARCHIVE Removal

Key Size: 8/14 (Primary/Secondary)
Bytes/Record : 260

Seq	Var	Description	Size	Type	Format
1.	ACINDX\$[0]	Company Number	2	N	
2.	ACINDX\$[1]	Program Designation	6	A	
3.	ACINDX\$[2]	ARCHIVE Number	6	N	
4.	ACINDX\$[3]	Program Name/Description	30	A	
5.	ACINDX\$[4]	ARCHIVE Memo 1	60	A	
6.	ACINDX\$[5]	ARCHIVE Memo 2	60	A	
7.	ACINDX\$[6]	User Code	3	A	
8.	ACINDX\$[7]	User's Name	25	A	
9.	ACINDX\$[8]	Run Date	6	N	'YYMMDD'
10.	ACINDX\$[9]	Run Time	5	N	'HH.MM'
11.	ACINDX\$[10]	Security Level	1	N	
12.	ACINDX\$[11]	Storage Library (Directory)	20	A	
13.	ACINDX\$[12]	Storage Library Number	1	N	'0'
14.	ACINDX\$[13]	Number of Pages	6	N	'#####0'
15.	ACINDX\$[14]	Output Width	3	N	'##0'
16.	ACINDX\$[15]	Base File Name	11	A	
17.	ACINDX\$[16]	Register #	4	N	'000#' or Blank

Key 0 = [1:1:2]+[3:1:6]

Key 1 = [1:1:21]+[2:1:6]+[9:1:6]+[10:1:5]+ [3:1:6]

Release Notes:

- * When a pattern match is found within the text search in the ARCHIVE View CUI program, the *entire* line is then highlighted on the screen. This is done to flag the user in case the text on which he/she is searching is contained within a portion of the line not currently displayed within the 80 column view. The search does not automatically move to the column range where the text is found, since more than one match may exist within the range of lines being displayed.
- * Although the Control F/M allows each library directory to be 50 characters in length, try to limit the length of these libraries to around 30. Some problems have occurred in creating ARCHIVES with long library names, due to the 255 character limit on the ARCHIVE device alias. This will be corrected in future revisions.
- * The Backup/Restore functions should be thoroughly tested with test data before being used on live output. it is recommended that Backup/Restore sessions always be preceded by a system data backup.

Authorization Code Exclusively for:

FACTS:

ARCHIVE.

Software License Agreement:

The company listed above is hereby granted a non-exclusive, non-transferable license to use the ARCHIVE Sub-System Software on a single computer system.

Warranty:

The media and materials provided with the ARCHIVE Sub-System are covered by a 30 day replacement warranty. Designed Data Systems shall be under no liability for any damages whatsoever, without limit, including direct, indirect, special and consequential damages, loss of profits or other benefits arising out of, or in connection with, the use of this product.

Media installation instructions:

The files on the distribution media are in **UNIX** tar format, and are pathed off of the FACTS working directory, typically... ssi6/.

At a **UNIX** shell prompt, enter the following...

```
# cd {facts_working_directory}

# umask 0

# tar xvf /dev/{3.5_in_floppy_device_name}
```

The necessary MERGE files and a text file displaying an example device alias entry will go down in the current directory, with the data and program files being pathed as *data/AC/AC????* and *prog/AC/AC????* respectively.