

**Installation Procedures**  
**CONVEX FORTRAN Compiler V7.0.1**  
Document No. 720-001930-014

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**CONVEX Computer Corporation**  
Richardson, Texas USA

*Installation Procedures*  
*CONVEX FORTRAN COMPILER V7.0.1*

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# Installing CONVEX FORTRAN V7.0.1

This patch release of CONVEX FORTRAN is a complete release. CONVEX FORTRAN V7.0 does NOT need to be installed before this patch release.

Please review the list of choices below before beginning the installation process. You will be prompted during the installation process for this information.

1. Tape drive device name: The example below uses */dev/rmt20* (suitable for 9 track tapes). You should substitute the appropriate device name. A *no rewind* device is required. If you have a DAT tape, */dev/rdat0n* is appropriate.
2. Type of installation: Local or remote. If you are installing this product on the same system as the tape drive on which the installation tape is mounted, answer **local**, otherwise **remote**. For remote installations, log onto a system with a tape drive, not the system on which the product is to be installed. A remote installation requires *rsh* (remote shell) capabilities.
3. Install or de-install: Only install is currently supported.
4. Alternate directory selection: If you do not have adequate disk space in the */usr/convex* and */usr/lib* partitions for the compiler, libraries, and other files, you may specify an alternate directory on any file system. The files which make up this product will be loaded into the alternate directory and symbolic links will be created in */usr/convex* and */usr/lib*. Approximately 26 megabytes is required to install this product (approximately 14mb is required without the CXpa libraries).
5. Activation key: This product is serial number protected. Usually, the required activation key is shipped with the installation tape. If the key is not available, the TAC (CONVEX's Technical Assistance Center) can provide the required key when provided the system's serial number and this product's part number (720-000515-226).
6. Optional product installation: This product includes profiled versions of the run-time libraries suitable for use with the CXpa profiler. If your site does not use the CXpa profiler you can save substantial disk space by not installing these libraries.

## Prerequisites

The following versions of the listed products are recommended:

Product	Version	Status
ConvexOS	9.1 or newer	required
CONVEX C	4.1 or newer	required
Consultant	8.2	optional
CXpa	1.2	optional
CXdb	1.1	optional

ConvexOS and CONVEX C should be installed before installing CONVEX FORTRAN V7.0.1.

Versions of CONVEX Consultant, CXdb and CXpa older than those shown in the above table are not compatible with CONVEX FORTRAN V7.0.1.

## Installing CONVEX FORTRAN

1. Mount the *installsw* tape that contains CONVEX FORTRAN.
2. Log in as *root* or another *superuser*.
3. Enter the commands as shown in the example below. User specified commands and responses are indicated by **bold** text. All other text is written by the installation procedure.
4. After the installation is complete, run **makewhatis** to update the *whatis* database. If several products are installed at the same time, and any product installed after CONVEX FORTRAN does a *makewhatis*, then this step is unnecessary.

```
# tpmount -R -a /dev/rmt20
# /etc/installsw -i -d /dev/rmt20
Tape device is /dev/rmt20
```

```
** Installsw Header File From Tape **
```

```
Copyright 1992 CONVEX Computer Corp.
All rights are reserved.
CREATED ON Fri Oct 25 13:59:58 CDT 1991
720-000515-226 CONVEX FORTRAN, release 7.0.1 4
```

Choose the type of installation you want to perform:

```
LOCAL          --> install on this machine
REMOTE         --> install on a remote machine
ABORT          --> abort installation
```

Enter your selection now --> **local**

```
Setting up installation environment. Hang on...
tar: blocksize = 65536 blocking = 64
This tape contains only release 7.0.1 of CONVEX FORTRAN.
```

```
Do you wish to install or de-install it? install
[Installing CONVEX FORTRAN v7.0.1]
--- Extracting files from tape...
--- Files extracted.
```

### ALTERNATE DIRECTORY SPECIFICATION

This product normally loads directly into */usr/convex*, */usr/lib*, and a few other directories (field test releases install in */usr/convex/newfc*). Optionally, many of these files may be loaded into an alternate (user specified) directory. This minimizes the disk space required on the */usr* partition.

```
Do you want to specify an alternate directory for this product (y or n)? y
Please enter a complete directory name (starting with '/')
/usr2/fc70
Installing into optional directory /usr2/fc70.
```

The CONVEX FORTRAN compiler checks the serial number of the system it is run on to determine if that system is authorized to run CONVEX FORTRAN.

Usually, this software is shipped with a separate piece of paper

containing the necessary activation key[s] for your site.

If the activation key is not known, the TAC (Convex's Technical Assistance Center) can provide the activation key for CONVEX FORTRAN when provided with a system's serial number, and the part number for this software (see the installation procedures document for the part #).

It is time to enter the activation key[s].

If the activation key is not available, you may bypass this step. Note that the installation test will fail unless the compiler is already stamped.

Do you want to enter an activation key now? **y**

What is the activation key? **XXXXXXXX**

Using activation key[s] **XXXXXXXX**

--- Begin installation on mozart

--- running installation tests

--- fc installation tests all pass

The CXpa versions of the Fortran runtime libraries are provided for those sites which use or expect to use the CXpa profiler. Substantial disk space may be saved by not installing these libraries.

Do you wish to install this optional software? [yn] **n**

Skipping optional software

--- Updating man page database.

--- Installation completed successfully.

Done processing install tape

**# tpunmount -a /dev/rmt20**

**# makewhatis**

## Possible Error Messages from Installation

When an installation fails, the files loaded from the tape are usually left in */tmp/install?*, where "?" was the process id of the shell running the installation script. Certain errors will be trapped and you will be given the option of removing this directory. If you are not asked about removing this directory when an installation fails, you may wish to remove it manually to recover the disk space.

-----  
\*\*\* File extraction from tape failed.  
\*\*\* Possible reasons include insufficient disk space in */tmp*  
\*\*\* or a tape error while reading the tape.

Check the available space in */tmp*. Approximately 36 megabytes is required.

-----  
\*\*\* Only a superuser may perform this installation.  
\*\*\* Installation failed.

Some installation steps can only be done by userid *root* or another user with superuser privileges.

-----  
Insufficient space available in ?.  
Have ? Kbytes; need ? Kbytes.  
You may wish to delete some files and continue with the installation.

The indicated filesystem has insufficient space to ensure a successful installation.

Note that very little space is required on */usr* if an alternate installation directory is specified. In this case, symbolic links are created to link the expected file names in */usr* to the user specified alternate location.

-----  
\*\*\* Installation completed; these files could not be installed:

An unexpected problem was encountered while trying to copy the named files. Determine the underlying cause of the problem, correct it, and re-install this product.

-----  
--- compiler installation tests failed in ?

The installation procedure runs several simple test programs on the newly loaded compiler, before installing it in the proper directories. This error indicates that one of those simple tests failed. This might be due to inadequate disk space in */tmp*, improper permissions on some system directory, a bad install tape, incompatible system libraries or utilities, or a hardware failure.

-----  
Other possible errors include "Generic Installation Procedure" errors, which may come from the installation support routines provided by the GIP product, and errors from the *letcinstallsw* program. These errors should be self explanatory.  
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