

OLNET Build Procedures [D]

This appendix describes front-end build procedures for OLNET.

D.1 Online diagnostic directories

With the release of UNICOS 9.2, OLNET source code is no longer available as part of the UNICOS operating system release package. You must log in to the Corporate Computing and Networks (CCN) *hydra* system to access the front-end source files and build procedures for IBM MVS, IBM VM, and SunOS front-ends. (The *hydra* system is administered by CCN. Please contact the CCN Help Desk if you need validation assistance.)

After logging in to the *hydra* system, follow the directions in the README file in the `~olddiag/olnet` directory.

The online diagnostic directories and source files for OLNET are as follows:

<u>Directory and file</u>	<u>Description</u>
<code>~olddiag/olnet/netC</code>	Directory that contains SunOS front-end source files
<code>~olddiag/olnet/netF</code>	Directory that contains IBM MVS and IBM VM front-end source files

D.2 Building OLNET on front-end systems

OLNET is written in two source languages. For IBM systems, it is written in Fortran. For all other supported systems, it is written in C.

D.2.1 C source code

OLNET C source code compiles and executes on the systems shown in Table 11.

Table 11. C source code

Network connection	System
VME	Sun
NSC	Sun

The netC directory contains the makefile used to build OLNET.

Use the following steps to build OLNET on the SunOS front-end:

1. From the SunOS front-end, enter the following command to build the code:

```
make
```

2. To clean up the directory, enter:

```
make clean
```

3. To install the executable, enter:

```
make install
```

D.2.2 Fortran source code

Table 12 identifies the source files that apply to your IBM system. The Fortran files are suffixed with .f. The assembly (driver modules) are suffixed with .driver.

Table 12. Fortran source code

Network connection	IBM system	UNICOS file name in ~olddiag/olnet/netF
FEI and NSC	VM	olnet.vm.f vm.driver
FEI and NSC	MVS	olnet.mvs.f mvs.driver

D.2.2.1 VM system

Use the following steps to build OLNET on an IBM system running VM:

1. Transfer the appropriate VM source files, and use the naming conventions shown in Table 13 to name the OLNET source files.

Table 13. VM naming conventions

UNICOS name	VM name	Description
olnet.vm.f	File name OLNET File type FORTAN	OLNET Fortran source code
vm.driver	File name OLFEIV File type ASSEMBLE	OLNET driver (Basic Assembler Language (BAL) code)

- From the CMS user environment, compile the OLNET Fortran source code with the following command:

```
FORTVS OLNET
```

- Access the VM/SP macro libraries with the following commands. (A password may be required to execute the LINK command.)

```
LINK MAINT 194 194 RR
ACC 194 I
GLOBAL MACLIB OSMACRO DMSSP DMKSP CMSLIB TSOMAC
```

- Assemble the VM driver.

```
ASSEMBLE OLFEIV
```

- Link the OLNET driver and source modules to create an executable binary module named OLNET.

```
GLOBAL TXTLIB VLNKMLIB VFORTLIB CMSLIB
LOAD OLNET OLFEIV
GENMOD OLNET
```

- Use the DISCARD command to delete the following files (this step is required under the licensing agreement):

- file name OLNET
file type FORTAN
- file name OLNET
file type TEXT
- file name OLFEIV
file type ASSEMBLE

- file name OLFEIV
file type TEXT
- file name LOAD
file type MAP

D.2.2.2 MVS system

Use the following steps to build OLNET on an IBM system running MVS:

1. Transfer the appropriate MVS source files after allocating the datasets. Use an LRECL of 80 and an RECFM of FB. Use the naming conventions shown in Table 14 to name the OLNET source files. Note that the `mvs.driver` file contains the MVS build job and includes OLNET assembler code.

Table 14. MVS naming conventions

UNICOS name	MVS dataset name	Description
<code>mvs.driver</code>	# <i>PREFIX</i> #.OLNET.CNTL (BUILD)	OLNET driver (BAL code)
<code>olnet.mvs.f</code>	# <i>PREFIX</i> #.OLNET.FORT	OLNET Fortran source code

2. Allocate the MVS files listed in Table 15.

Table 15. Table 15. MVS files

DSNAME	DSORG	RECFM	LRECL	BLKSIZE	SPACE
# <i>PREFIX</i> #.OLNET.LOAD	PO	U	0	23200	CYL (1,1)
# <i>PREFIX</i> #.OLNET.OBJ	PO	FB	80	3200	CYL (1,1)

3. APF authorize the LOAD library.
4. Customize the BUILD job.
 - a. Change the JOB card to the local site standard.
 - b. Change the dataset names in the JCL to the local site standard.

- c. This job assumes the use of ASSEMBLER H. If you do not have ASSEMBLER H, customize the build procedure to use IFOX00 as required.
 - d. In the OLASM step, customize the SYSLIB.
 - e. In the FORT step, customize the STEPLIB.
 - f. In the LINK step, customize SYSLIB for your Fortran environment.
5. Submit the customized build job.
 6. After the build is completed, you may want to verify the execution of OLNET before proceeding to the next step. To execute OLNET, see Section 1.2, page 2.
 7. Delete the files listed in Table 16.

Table 16. Files to delete

MVS dataset name	Description
# <i>PREFIX</i> #.OLNET.CNTL (BUILD)	OLNET driver (BAL) code
# <i>PREFIX</i> #.OLNET.FORT	OLNET Fortran source code
# <i>PREFIX</i> #.OLNET.OBJ	OLNET object code

