



PRODUCT DESCRIPTION · OPENVMS PLC CONNECTIVITY

ABNet™

OpenVMS Interface to Allen-Bradley® PLCs

ABNet lets OpenVMS programs communicate directly with **ControlLogix, CompactLogix, PLC-5, and SLC 5 PLCs**, over a direct Ethernet connection or through a ControlLogix DHRIO gateway to Data Highway Plus. Call it from your C or FORTRAN programs.

5×

up to five times faster
than Interchange

90%

up to 90% less CPU
usage than
Interchange

33

DTL Interchange calls
supported

A drop-in replacement for Rockwell Interchange

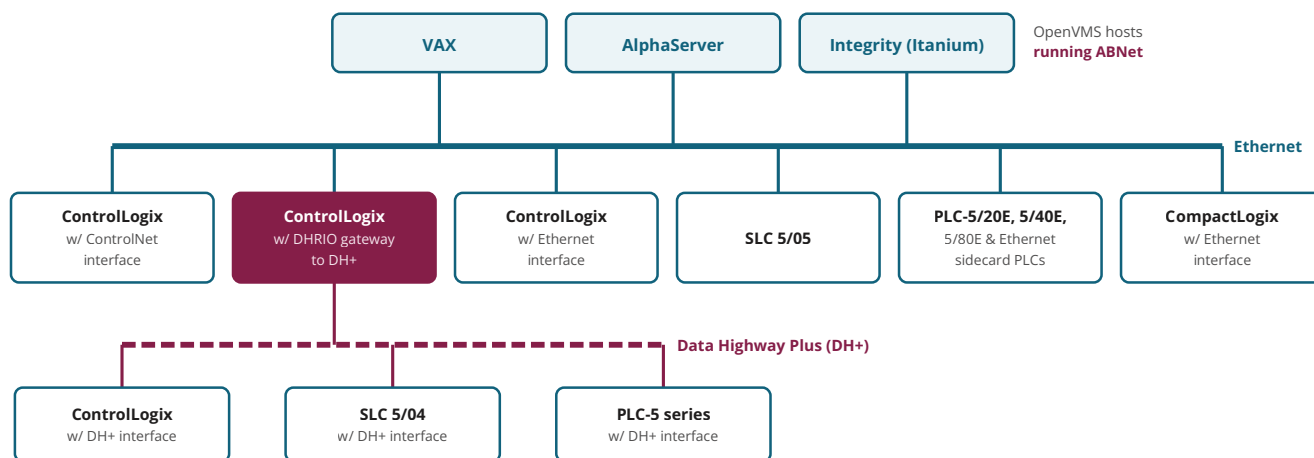
ABNet follows the Rockwell Interchange for VMS call format. Replace Interchange by **relinking against the ABNet libraries**: no programming changes and no recompile required.

Supported software

ABNet is supported software that preserves your software investment and provides a platform for future system growth.

How ABNet Connects

FIGURE 1 · EXAMPLE OF AN ABNET INTERFACE



PLC Connectivity

- ✓ Direct Ethernet communications to PLC-5/20E, 5/40E, and 5/80E processors, SLC 5/05, CompactLogix, and ControlLogix PLCs
- ✓ Allen-Bradley DHRIO to Data Highway Plus for SLC and PLC-5
- ✓ Native-mode tagname communications to ControlLogix and CompactLogix

OpenVMS Platforms

- ✓ VAX VMS V5.5-2H4 and higher
- ✓ Alpha OpenVMS
- ✓ Integrity (Itanium) OpenVMS
- ✓ Relinks to existing Interchange applications with no recompile



<> Definition String Examples

PLC-5 (or PLC-5 mapped to Logix)

```
N7:1, 10, WORD, MODIFY, 101KA:2, 4, PLC5, 1
```

Supported data types

BOOL SINT INT DINT REAL
 TIMER COUNTER USER

Native-mode tagname for Logix communications

```
TEST_INT:INT, 10, WORD, MODIFY, 101KA:2, 2, LGX, 1  
- or -  
TEST.INT[100]:INT, 10, WORD, MODIFY, 101KA:2, 2, LGX, 1
```

≡ Supported DTL Interchange Calls

ABNet supports the following calls. Additional calls can be added.

DTL_CHANNEL_STATE	DTL_CLR_WID	DTL_CONNECT	DTL_C_CONNECT	DTL_C_DEFINE
DTL_DEFINE	DTL_DISCONNECT	DTL_ERROR	DTL_ERROR_S	DTL_GET_FLT
DTL_INIT	DTL_PUT_FLT	DTL_READ	DTL_READEX	DTL_READEX_W
DTL_READ_W	DTL_RECEIVE	DTL_RECEIVE_W	DTL_RMW	DTL_RMW_W
DTL_SETOPT	DTL_SET_MASK	DTL_SET_WID	DTL_TST_MASK	DTL_TST_WID
DTL_UN SOL_DEF	DTL_UN SOL_GETALL	DTL_WAIT	DTL_WRITE	DTL_WRITEEX
DTL_WRITEEX_W	DTL_WRITE_W	DTL_ZERO_MASK		

⚡ ABNet Mon Communications Monitor

Detailed communications diagnostics through a simple, menu-driven, text-based interface:

- ✓ Monitor client and server data structures and counters
- ✓ Monitor in-memory communication queues
- ✓ Dynamically edit log verbosity via mailbox, for the Gateway server and client processes
- ✓ Turn debug and trace on or off dynamically, with detailed tracing that shows entry and exit of every subroutine



Salem Automation is a Rockwell Automation Encompass™ Product Partner.

Ready to replace Interchange?

Talk with Salem Automation about moving your VAX, Alpha, or Integrity applications to ABNet: relink and keep your OpenVMS programs talking to your Allen-Bradley PLCs.

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