# Salem Automation
## System Integration

# ABNet™
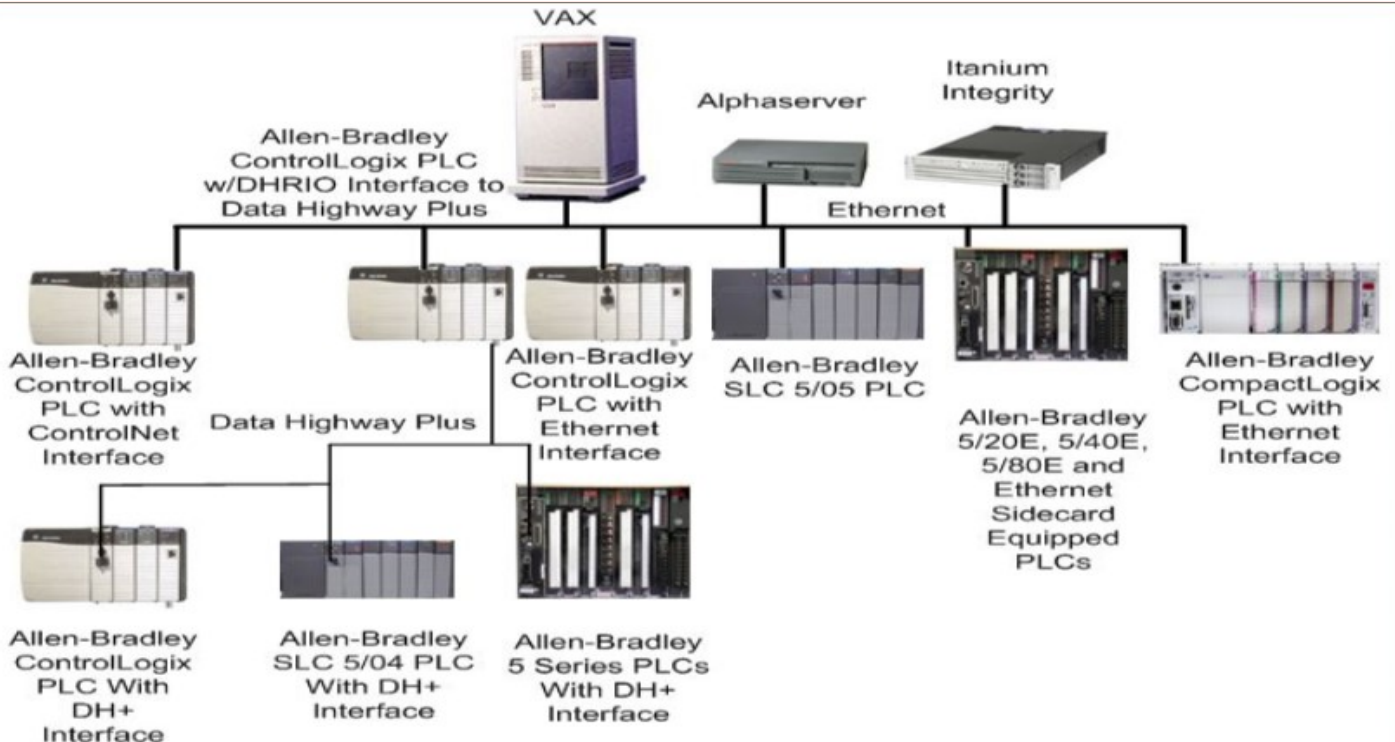## VMS Interface to Allen-Bradley PLCs

## What is *ABNet?*

***ABNet*** allows direct communication from a VMS program on a VAX, Alphaserver, HP Integrity, vtVAX, vtAlpha, or any VAX/ALPHA Emulation software to an Allen-Bradley PLCs via direct Ethernet connection or via ControlLogix DHRIO Gateway to Data Highway Plus. Supported Allen-Bradley PLCs include ControlLogix, CompactLogix, PLC 5 and SLC 5. The ***ABNet*** interface can be called from a user's C or FORTRAN program. ***ABNet*** follows the Rockwell Interchange for VMS call format so that Interchange can be replaced with ABNet by just linking against the ***ABNet*** libraries. No programming changes or recompile required! ABNet supports the following DTL Interchange calls (additional calls can be added):

| | | |
|---|---|---|
| ♦ DTL_C_CONNECT | ♦ DTL_INIT | ♦ DTL_SETOPT |
| ♦ DTL_C_DEFINE | ♦ DTL_READ | ♦ DTL_TST_MASK |
| ♦ DTL_CHANNEL_STATE | ♦ DTL_READ_W | ♦ DTL_TST_WID |
| ♦ DTL_CLR_WID | ♦ DTL_RECEIVE | ♦ DTL_UNSOL_DEF |
| ♦ DTL_CONNECT | ♦ DTL_RECEIVE_W | ♦ DTL_WAIT |
| ♦ DTL_DEFINE | ♦ DTL_RMW | ♦ DTL_WRITE |
| ♦ DTL_DISCONNECT | ♦ DTL_RMW_W | ♦ DTL_WRITE_W |
| ♦ DTL_ERROR | ♦ DTL_SET_MASK | ♦ DTL_ZERO_MASK |
| ♦ DTL_ERROR_S | ♦ DTL_SET_WID | ♦ DTL_UNSOL_GETALL |
| ♦ DTL_READEX | ♦ DTL_WRITEEX | ♦ DTL_GET_FLT |
| ♦ DTL_READEX_W | ♦ DTL_WRITEEX_W | ♦ DTL_PUT_FLT |



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Rockwell Automation
Encompass™
Product Partner

# ABNet™

## VMS Interface to Allen-Bradley PLCs

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### Benefits to *ABNet*

✓ Up to 5 times faster than Interchange!
✓ Up to 90% less CPU usage than Interchange!
✓ Supports Allen-Bradley DHRIO to Data Highway Plus to SLC & PLC 5.
✓ Supports direct Ethernet communications to PLC 5/20/40/80E processors, SLC 5/05, CompactLogix & ControlLogix PLCs.
✓ Native mode tagname communications to ControlLogix and CompactLogix.

> Example PLC 5 Definition String for PLC 5 (or PLC 5 mapped to Logix):
> N7:1, 10, WORD, MODIFY, 101KA:2, 4, PLC5, 1
>
> Example Definition String 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 data types: BOOL, SINT, INT, DINT, REAL, TIMER, COUNTER, USER

✓ Supports VAX VMS, Alpha OpenVMS & Integrity Itanium Open VMS Platforms.
✓ *ABNet* relinks to existing Interchange applications no - recompile required.
✓ *ABNet* is supported software which preserves your software investment and provides a platform for future system growth.
✓ *ABMon* provides detailed communications diagnostics including monitoring client & server data counters, monitoring of communications queues and the ability to dynamically turn on/off debug/trace.

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### *ABNet Mon* - Communications Monitor

✓ Enables monitoring client and server data structures and counters.
✓ Enables monitoring of communication queues in-memory.
✓ Can dynamically change the verboseness of log messages via mailbox, to the Gateway server, as well as client processes.
✓ Detailed tracing and debugging can be enabled to show entry and exit of each and every subroutine.
✓ Simple menu-driven text based interface.

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#### FOR ADDITIONAL INFORMATION, PLEASE CONTACT

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