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From Experience

Key Tips for a Successful SLC Migration

Did you know? Rockwell Automation's line of SLC Programmable Logic Controllers (PLC) have reached the end-of-life status and are now discontinued. Introduced in 1991, the SLC-500 series has been a successful line of PLCs throughout industry, with thousands installed across the United States.

With spare parts on hand and the ability to purchase from secondhand vendors, the SLC-500 will still be available for purchase for a few years; however, supplies will diminish and become more expensive over time. In addition, the cost of maintaining an aging system will grow, as the number of specialists who understand SLC 500 troubleshooting decline. Therefore, the time is right to start thinking about your migration plan to avoid a costly situation down the road.

As you plan your migration, keep in mind these key tips for a successful upgrade:

- **PLC/Module Replacement.** Rockwell Software offers a tool called Integrated Architecture Builder (IAB), which comes with a built-in guide for PLC and module selection. Enter the current SLC-500 rack configuration, and the software will

build and recommend modules automatically for replacement.

- **I/O Replacement.** An Allen-Bradley conversion kit is available so none of the existing field wiring has to be disconnected. Instead, the existing SLC-500 I/O swingarms simply re-attach to the new "conversion rack." This reduces time plus avoids any potential errors that may happen during rewiring. **One note:** Confirm that enough room is available in the space for the additional depth required for the conversion kit.
- **PLC Programming Conversion.** Verify other networks and PLCs with which the SLC-500 communicates. This will need to be addressed and may require some programming modifications in associated PLCs. (This may be an opportunity to

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What should you consider as an alternative to your SLC-500 PLCs? Hixson recommends Rockwell's CompactLogix 5480 line of controllers, which offer a number of key benefits for users. (More information on these can be found [here](#).)

upgrade some of these older networks as well.) In addition, PID control loops need to be considered individually and set up with the same tuning parameters as before to avoid re-tuning of the loops. For best results, PID loops should be placed in a scheduled task matching the scan rate of the PID loop in the SLC-500 software. However, if the system was tuned poorly before, this will not change.

- **HMI Migration.** If an HMI is used, there are several approaches that can be used to convert the HMI application depending on how it was developed. Most likely some modifications will need to be made to the HMI application so it can communicate with the new PLC. Modifications to any reporting functionality or data collection needs to be considered as well.

For more information on the product phase out, visit Rockwell's [Product Lifecycle Status page](#), or contact Hixson.

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