Siemens 6GK7443-5DX05-0XE0

01 Record the DP station map and process lengths

Record the PROFIBUS segment, station addresses, DP devices and any configured engineering or S7 services using the CP. Preserve the hardware configuration and per-device input/output mapping. Assess cyclic I/O allocation separately from other connection resources before modifying the station.

A list of bus addresses without module and data mapping cannot establish that a replacement will exchange the intended process image.

Acceptance observation	The retained project identifies each device and the service using it.
Evidence to retain	Connection map and approved baseline
Release boundary	Use the applicable SIMATIC S7-400 instructions and the approved application acceptance criteria.

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02 Inspect segment termination and topology

Review the segment topology, cable route and termination arrangement under the approved PROFIBUS installation rules. Identify which equipment provides power to terminating elements where applicable. Keep affected distributed I/O controlled while disconnecting a network boundary or changing station configuration.

A communication problem that begins after removal of a node may involve the bus boundary, not the new CP hardware.

Acceptance observation	The restored segment remains correctly connected and terminated for its topology.
Evidence to retain	Isolation and supply assessment
Release boundary	Use the applicable SIMATIC S7-400 instructions and the approved application acceptance criteria.

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03 Restore CP configuration and supported services

Restore the configured CP and device parameters, keeping station addresses unique. Check total I/O space and each device allocation against the supported limits. Confirm that the intended DP services and device configuration agree at both the master project and field equipment.

A device that responds on the bus can still have an incorrect module layout or mismatched data length.

Acceptance observation	Every configured device can be associated with its expected data area.
Evidence to retain	Restored interface and configuration
Release boundary	Use the applicable SIMATIC S7-400 instructions and the approved application acceptance criteria.

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04 Test cyclic data separately from routing

Observe master and device diagnostics and compare actual input changes and controlled output commands with the configured addresses. Test the required acyclic service independently when the application uses it. A successful engineering connection must not replace verification of cyclic production data.

If cyclic values remain stale while engineering access works, investigate DP configuration and data handling rather than assuming the bus is fully healthy.

Acceptance observation	Required cyclic and acyclic functions operate at their intended boundaries.
Evidence to retain	Measured response and diagnostic state
Release boundary	Use the applicable SIMATIC S7-400 instructions and the approved application acceptance criteria.

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05 Confirm station resources and network recovery

Review normal operation after removing test connections and restoring the process. Record the final station map and any changed device parameters with the controller project. Monitor representative updates under the intended bus loading and preserve the approved fallback behavior for loss of a device.

Restored normal traffic without an understood fault response is insufficient evidence for the complete control application.

Technical basis: Siemens CP443-5 Extended, C79000-G8976-C162-10.

Related product navigation

- Siemens 6GK5206-2BS00-2AC2
- Siemens 6GK5602-0BA10-2AA3
- Siemens 6GK1415-2AA10

Related products for separate application assessment; verify the platform and interface. No interchangeability is implied.