

Loss of View, Technique T0829 - ICS

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Adversaries may cause a sustained or permanent loss of view where the ICS equipment will require local, hands-on operator intervention; for instance, a restart or manual operation. By causing a sustained reporting or visibility loss, the adversary can effectively hide the present state of operations. This loss of view can occur without affecting the physical processes themselves. [\[1\]](#) [\[2\]](#) [\[3\]](#)

Sub-techniques: No sub-techniques

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Procedure Examples

Mitigations

ID	Mitigation	Description
M0953	Data Backup	Take and store data backups from end user systems and critical servers. Ensure backup and storage systems are hardened and kept separate from the corporate network to prevent compromise. Maintain and exercise incident response plans [12] , including the management of gold-copy back-up images and configurations for key systems to enable quick recovery and response from adversarial activities that impact control, view, or availability.
M0810	Out-of-Band Communications Channel	Provide operators with redundant, out-of-band communication to support monitoring and control of the operational processes, especially when recovering from a network outage [13] . Out-of-band communication should utilize diverse systems and technologies to minimize common failure modes and vulnerabilities within the communications infrastructure. For example, wireless networks (e.g., 3G, 4G) can be used to provide diverse and redundant delivery of data.
M0811	Redundancy of Service	Hot-standbys in diverse locations can ensure continued operations if the primarily system are compromised or unavailable. At the network layer, protocols such as the Parallel Redundancy Protocol can be used to

ID	Mitigation	Description
		simultaneously use redundant and diverse communication over a local network. [14]

Detection Strategy

References

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