

General Specifications

Network Healthiness Check Service - Reporting

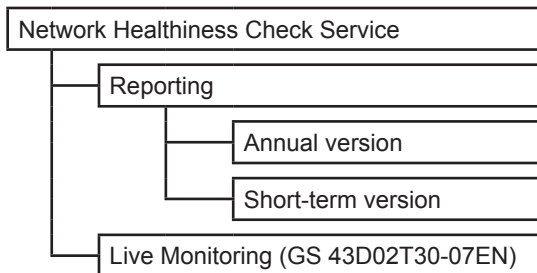
GS 43D02T30-06EN

■ GENERAL DESCRIPTION

The Network Healthiness Check Service - Reporting collects and analyzes the communication information without influencing the existing control system communication and evaluates network healthiness and detects any indications of potential cyber-attacks and/or new threats that cannot be detected by the anti-virus software alone. This service reduces the risk of unauthorized communication and cyber-attacks.

It also provides support in maintaining the soundness of the control system throughout its lifecycle by conducting periodic analyses and reporting on its status.

■ SERVICE CONFIGURATION



■ APPLICABLE NETWORKS

- Ethernet
- Vnet/IP

■ SERVICE CONTENTS

This service collects communication information using the port-mirroring function of the switching hub located on the customer's network. The communication via switching hub is captured by the sensor PC and then collected by the recording HDD device. Yokogawa periodically analyzes the collected data using a dedicated analyzer, and then provides a report of the network conditions to the customer. Please note: 1 sensor PC and 1 recording HDD are necessary per switching hub.

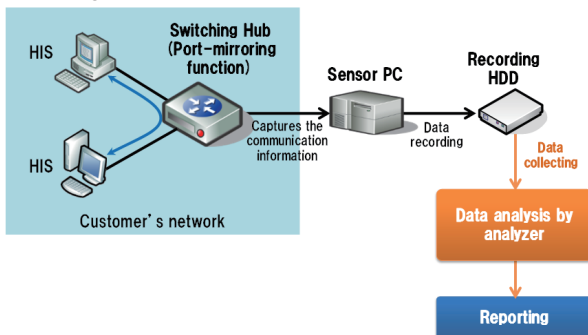


Figure 1: Device installation and service flow

The contents of the "Communication analysis report" provided by Yokogawa will consist of the following.

- The analysis results of the communication data include source, destination, protocol, port and the amount of communication traffic. (From/To matrix type)
- The evaluation of the results to determine whether communication is normal (determined beforehand) or unconfirmed* as well as inclusion of an unconfirmed communication list.

* If an unconfirmed communication is detected, Yokogawa will propose a reinvestigation of the actual condition the source of the unauthorized access in order to evaluate any potential risks.

(Concerning Yokogawa products, we will evaluate the overall healthiness of the network and detect any abnormal indications based on the communication information. In the case of 3rd party vendor products, the necessary communication information will be provided.)

1. Annual version

The aim of this version is to sustain the overall healthiness of the control system throughout its lifecycle. Contract period is 1 year during which time Yokogawa will analyze the collected data and convey the results to the customer 4 times within the contract period. The first overall report will be provided after the first month. All subsequent reports will contain the results compared with data collected during the previous term.

* The number of reports can be increased or decreased according to customers' requirements.

2. Short-term version

The aim of this version is to get a thorough understanding of the current situation and investigate the cause of a failure. Yokogawa collects the communication information during a period of approximately 1 month and provides a detailed report to the customer.

■ HARDWARE SPECIFICATIONS

Table 1: Installation device

Sensor PC	Physical Specification	H×W×D [mm]	360 × 175 × 417
		Weight	9.4Kg
	Environment	Operating Temperature	5 to 45°C
	Power	Voltage	100 to 240V ± 10%
		Wattage	365W
	Number of outlet	1	
Recording HDD	Type	Portable External USB HDD	
	Standard	USB3.0	

■ PRECAUTIONS

Please note the following precautions regarding this service.

- (1) This service is aimed at reducing potential cyber-attacks and/or any risk of unauthorized access and does not guarantee the complete detection of such attacks or risks.
- (2) The customer will need to prepare adequate space for installation of the sensor PC and provide a power outlet.
- (3) We cannot provide this service if the switching hub does not have a port-mirroring function or a vacant port. In such a case, we would need to install a new switching hub that includes the port-mirroring function which can be provided at an additional cost. The installation will be carried out on a timely basis according to the plant's operation plan.
- (4) Should the data collection fail to proceed normally; we will collect the data again, after consultation regarding the extension term with the customer.
- (5) Yokogawa will lease out the sensor PC and data recording HDD.

■ TRADEMARKS

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