

# ATTEM

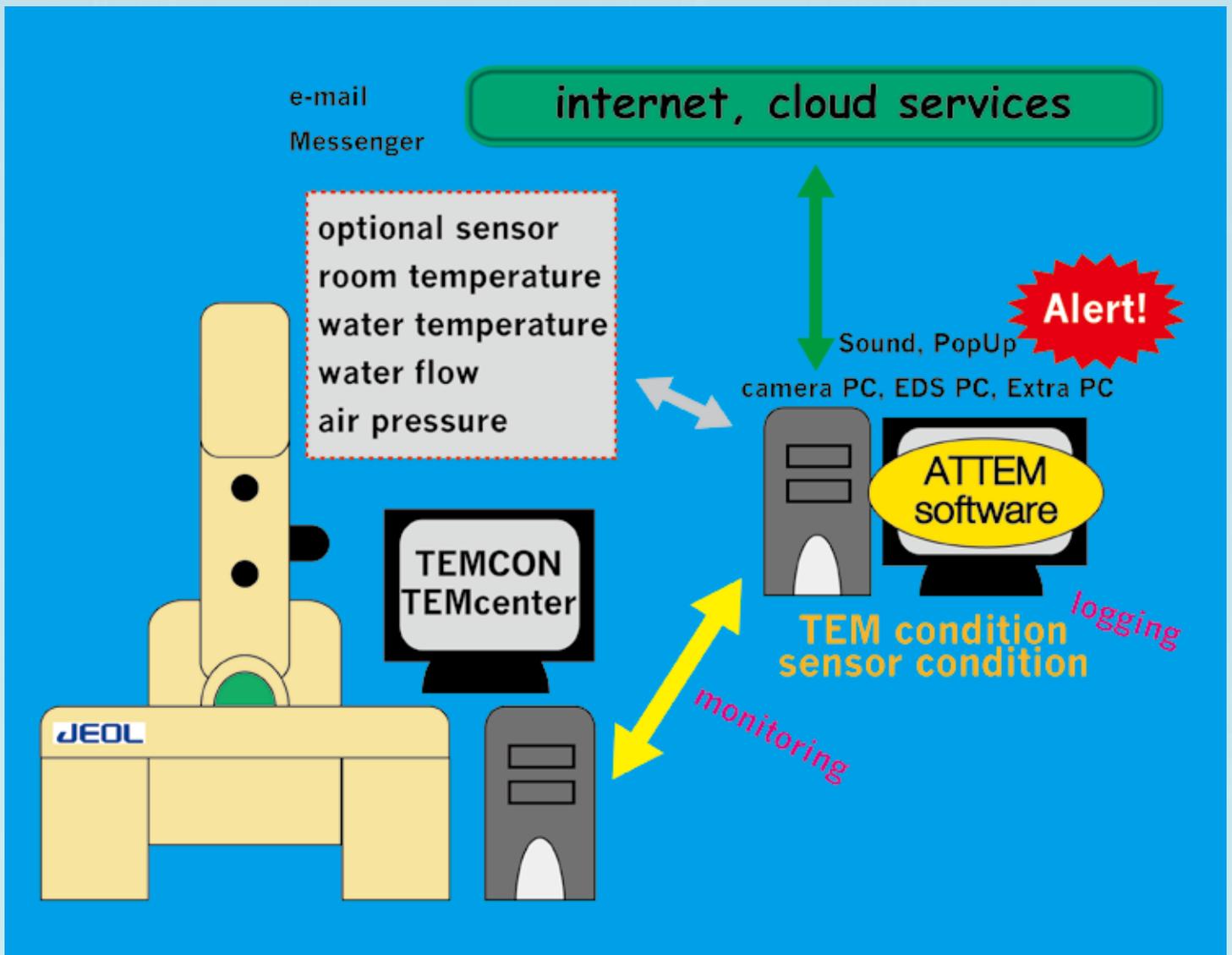
## § Overview

ATTEM is status monitoring software that regularly logs the status of Transmission Electron Microscopes (TEM). The target for logging is each part of the main unit of the machine, such as the high-pressure system, vacuum system, optical system, and sample stage, as well as the ambient environment, including room temperature (\*1) and cooling water temperature (\*1), therefore, by observing and analyzing the logs, you can accurately ascertain and manage the detailed usage status of the machine, the replacement period of consumable parts, and necessity of adjustment, so the performance of the machine can be maintained with ease.

Moreover, ATTEM not only logs information, but it is also equipped with a function that automatically notifies the machine administrator or service engineer when it deems that some kind of error has occurred in the machine unit or installation environment. The administrator or service engineer who receives this notification can then analyze the log data before and after the fault occurred, allowing them to predict the cause of the issue even from a remote location, and perform recovery operations (\*2) using a remote environment or prepare the required parts for repairs, so it is anticipated that downtime can be significantly reduced as a result.

(\*1) When the optional sensor is installed.

(\*2) The system must be set up separately.



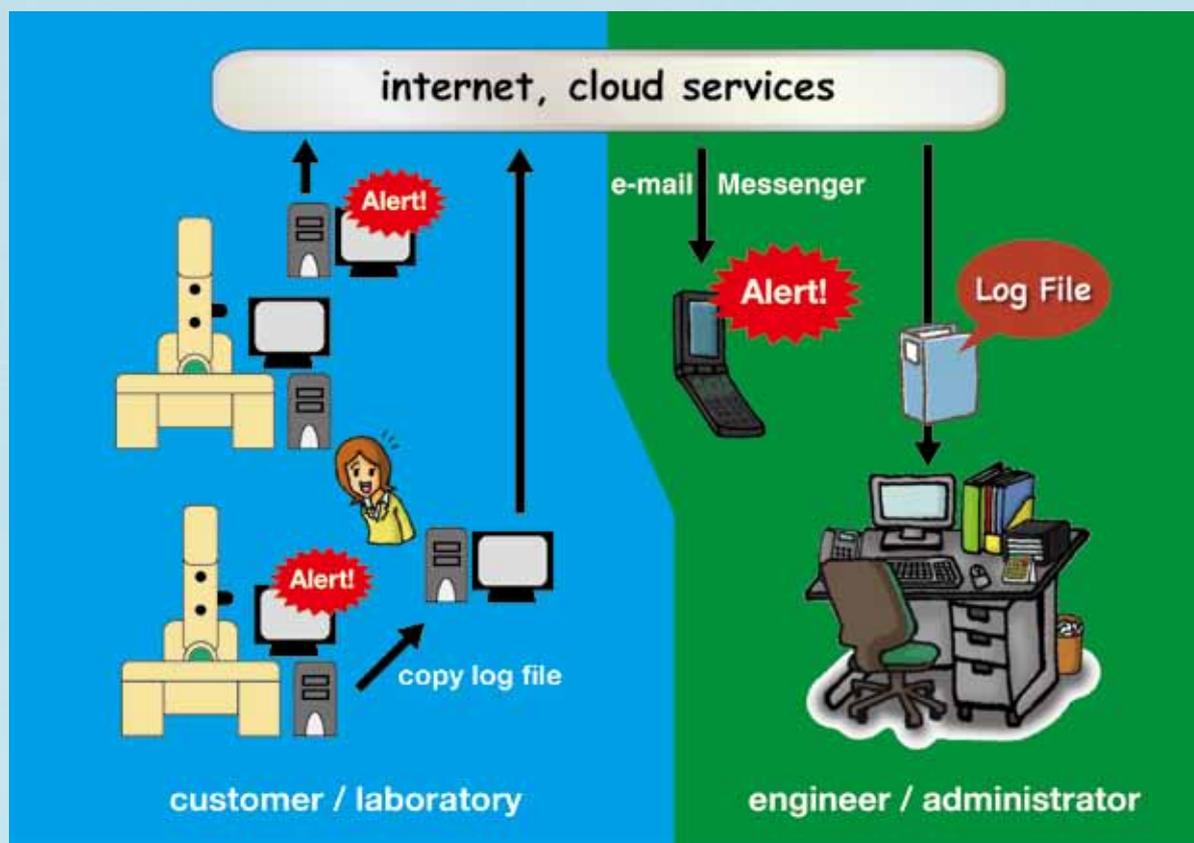
## § Configuration

ATTEM comprises 3 applications - Monitor, Logviewer, and Configurator. These applications can be installed on any PC connected over a network to the PC controlling TEM (a PC running TEM Center, TEMCON, etc., is hereafter referred to as "TEM-PC").

Monitor runs as a background task, obtaining the parameters of TEM in realtime from the TEM-PC, and displaying or logging those parameters. Also, when a particular parameter satisfies a pre-determined condition, an alarm is displayed, and if the applicable PC is connected to the Internet, alarms can also be sent as email notifications.

Logviewer is equipped with functions that allow graphical observation and analysis, for efficient logging over the long term.

Configurator allows fine customization of Monitor operations such as obtaining parameters, display, logging, and alarms, so that you can set up an optimal configuration for your computer resources, network environment, TEM model, attachments, and operations.



## § Specifications

[Supported electron microscopes]

JEM-1400, JEM-1400Plus, JEM-ARM200F, JEM-2100, JEM-2100F, JEM-2100Plus, JEM-2200FS, JEM-2500SE, JEM-2800, JEM-ARM300F, JEM-3100F, JEM-3200FS

[Environment]

Operating system: Windows (8.1/8/7)

Runtime: .Net Framework 4.0 or .Net Framework 4.5

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Contact

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