

What is claimed is:

1. A method for monitoring a payment machine, implemented by a monitoring device, comprising:
 - monitoring a payment machine's interaction with a terminal; and
 - in response to determining that the payment machine is obtaining payment information from the terminal, sending, in a low-power-consumption communication mode, attribute information of the payment machine to the terminal, causing the terminal to send the attribute information to a server for monitoring an operation status of the payment machine.
2. The method according to claim 1, wherein the payment machine is offline.
3. The method according to claim 1 or 2, wherein the attribute information of the payment machine comprises one or more of a unique identification ID, a machine model, production date, hardware function, a firmware version, an expected deployment location, and expected scenario information of the payment machine.
4. The method according to any one of the claims 1-3, further comprising:
 - obtaining scenario information of the payment machine comprising positioning information and timestamp information of the payment machine; and
 - updating the attribute information of the payment machine with the obtained scenario information.
5. The method according to any one of the claims 1-4, wherein the sending attribute information of the payment machine to the terminal comprising:
 - sending the attribute information of the payment machine at a predetermined time interval.
6. The method according to any one of the claims 1-5, wherein the sending attribute information of the payment machine to the terminal comprising:
 - sending encrypted cyphertext of the attribute information of the payment machine.
7. The method according to any one of the claims 1-6, wherein the payment machine is within a predetermined distance from the monitoring device.
8. A system for monitoring a payment machine, comprising:
 - one or more processors; and
 - one or more computer-readable memories coupled to the one or more processors and having instructions stored thereon that are executable by the one or more processors to perform the computer-implemented method of any of claims 1 to 7.

9. An apparatus for monitoring a payment machine, comprising a plurality of modules for performing the computer-implemented method of any of claims 1 to 7.

10. A non-transitory computer-readable storage medium configured with instructions executable by one or more processors to cause the one or more processors to perform the computer-implemented method of any of claims 1 to 7.

11. A method for monitoring a payment machine, comprising:
obtaining, by the payment machine, payment information from a terminal;
sending, by the payment machine, the payment information to a host for processing an offline payment;
monitoring, by a monitoring device, the payment machine's interaction with the terminal;
sending, by the monitoring device, in a low-power-consumption communication mode, attribute information of the payment machine to the terminal; and
sending, by the terminal, the attribute information to a server for monitoring an operation status of the payment machine.

12 The method according to claim 11, wherein the attribute information of the payment machine comprises one or more of a unique identification ID, a machine model, production date, hardware function, a firmware version, an expected deployment location, and expected scenario information of the payment machine.

13. The method according to claim 11 or 12, wherein the attribute information of the payment machine is stored on the monitoring device during pre-deployment.

14. The method according to any one of the claims 11-13, wherein the payment machine is deployed within a predetermined distance from the monitoring device.

15. The method according to any one of the claims 11-14, further comprising:
obtaining, by the monitoring device, scenario information of the payment machine comprising positioning information and timestamp information of the payment machine; and
updating the attribute information of the payment machine with the obtained scenario information on the monitoring device.

16. The method according to any one of the claims 11-15, wherein the sending, by the monitoring device, attribute information of the payment machine to the terminal comprising:
sending the attribute information of the payment machine at a predetermined time interval.

17. The method according to any one of the claims 11-16, wherein the sending, by the monitoring device, attribute information of the payment machine to the terminal comprising:

sending encrypted cyphertext of the attribute information of the payment machine.

18. A system for monitoring a payment machine, comprising:

one or more processors; and

one or more computer-readable memories coupled to the one or more processors and having instructions stored thereon that are executable by the one or more processors to perform the computer-implemented method of any of claims 11 to 17.

19. An apparatus for monitoring a payment machine, comprising a plurality of modules for performing the computer-implemented method of any of claims 11 to 17.

20. A non-transitory computer-readable storage medium configured with instructions executable by one or more processors to cause the one or more processors to perform the computer-implemented method of any of claims 11 to 17.