CLAIMS

What is claimed is:

1. A method of a system for preventive maintenance of an HVAC unit, the method comprising:

receiving, at a control system associated with the HVAC unit, runtime data of the HVAC unit;

initiating, by the control system, a service message to a service device associated with the HVAC unit in response to determining that a preventive maintenance visit is warranted based on the runtime data;

activating, by the control system, a hot-cold test for the HVAC unit in response to receiving a registration message of the preventive maintenance visit from the service device; and

reporting a validation message in response to validating the preventive maintenance visit based on a result of the hot-cold test for the HVAC unit.

2. The method as described in claim 1, wherein receiving the runtime data of the HVAC unit includes aggregating the runtime data on a periodic basis into periodic totals at the control system.

3. The method as described in claim 1, further comprising determining the runtime data based on at least one of (a) an amount of time the control system is requesting the HVAC unit to run in a particular mode or (b) start and stop times of air flow in at least one air duct of the HVAC unit.

4. The method as described in claim 1, wherein receiving the runtime data of the HVAC unit includes collecting runtimes for a plurality of modes, the plurality of modes including at least one mode of a fan mode, a first stage cool mode, a second stage cool mode, a first stage heat mode, or a second stage heat mode.

5. The method as described in claim 1, wherein determining that the preventive maintenance visit is warranted comprises:

determining a total runtime of each HVAC unit of a plurality of HVAC units since a last preventive maintenance of at least one HVAC unit; and

identifying at least one selected HVAC unit in which a preventive maintenance visit is warranted based on the total runtime of each HVAC unit.

6. The method as described in claim 1, wherein receiving the registration message of the preventive maintenance visit includes receiving a date and/or time for the preventive maintenance visit from the service device.

7. The method as described in claim 1, further comprising receiving completion notification that the HVAC unit has completed performance of the hot-cold test.

8. A system for preventive maintenance of an HVAC unit comprising:

a control system associated with the HVAC unit, the control system receiving runtime data of the HVAC unit, initiating a service message to a service device associated with the HVAC unit in response to determining that a preventive maintenance visit is warranted based on the runtime data, and activating a hot-cold test for the HVAC unit in response to receiving a registration message of the preventive maintenance visit from the service device,

wherein a validation message is reported in response to validating the preventive maintenance visit based on a result of the hot-cold test for the HVAC unit.

9. The system as described in claim 8, wherein the control system aggregates the runtime data on a periodic basis into periodic totals.

10. The system as described in claim 8, wherein the runtime data is determined based on at least one of (a) an amount of time the control system is requesting the HVAC unit to run in a particular mode or (b) start and stop times of air flow in at least one air duct of the HVAC unit.

11. The system as described in claim 8, wherein the runtime data of the HVAC unit includes runtimes for a plurality of modes, the plurality of modes including at least one mode of a fan mode, a first stage cool mode, a second stage cool mode, a first stage heat mode, or a second stage heat mode.

12. The system as described in claim 8, wherein the control system identifies at least one selected HVAC unit in which a preventive maintenance visit is warranted based on a total runtime of each HVAC unit of a plurality of HVAC units since a last preventive maintenance of at least one HVAC unit.

13. The system as described in claim 8, wherein the registration message of the preventive maintenance visit includes a date and/or time for the preventive maintenance visit from the service device.

14. The as described in claim 8, wherein the control system is notified that the HVAC unit has completed performance of the hot-cold test.

15. A non-transitory computer readable medium including executable instructions which, when executed, causes at least one processor of a system for preventive maintenance of an HVAC unit by:

receiving runtime data of the HVAC unit;

initiating a service message to a service device associated with the HVAC unit in response to determining that a preventive maintenance visit is warranted based on the runtime data;

receiving a registration message of the preventive maintenance visit from the service device;

activating a hot-cold test for the HVAC unit in response to receiving the registration message of the preventive maintenance visit from the service device; and

reporting a validation message in response to validating the preventive maintenance visit based on a result of the hot-cold test for the HVAC unit.