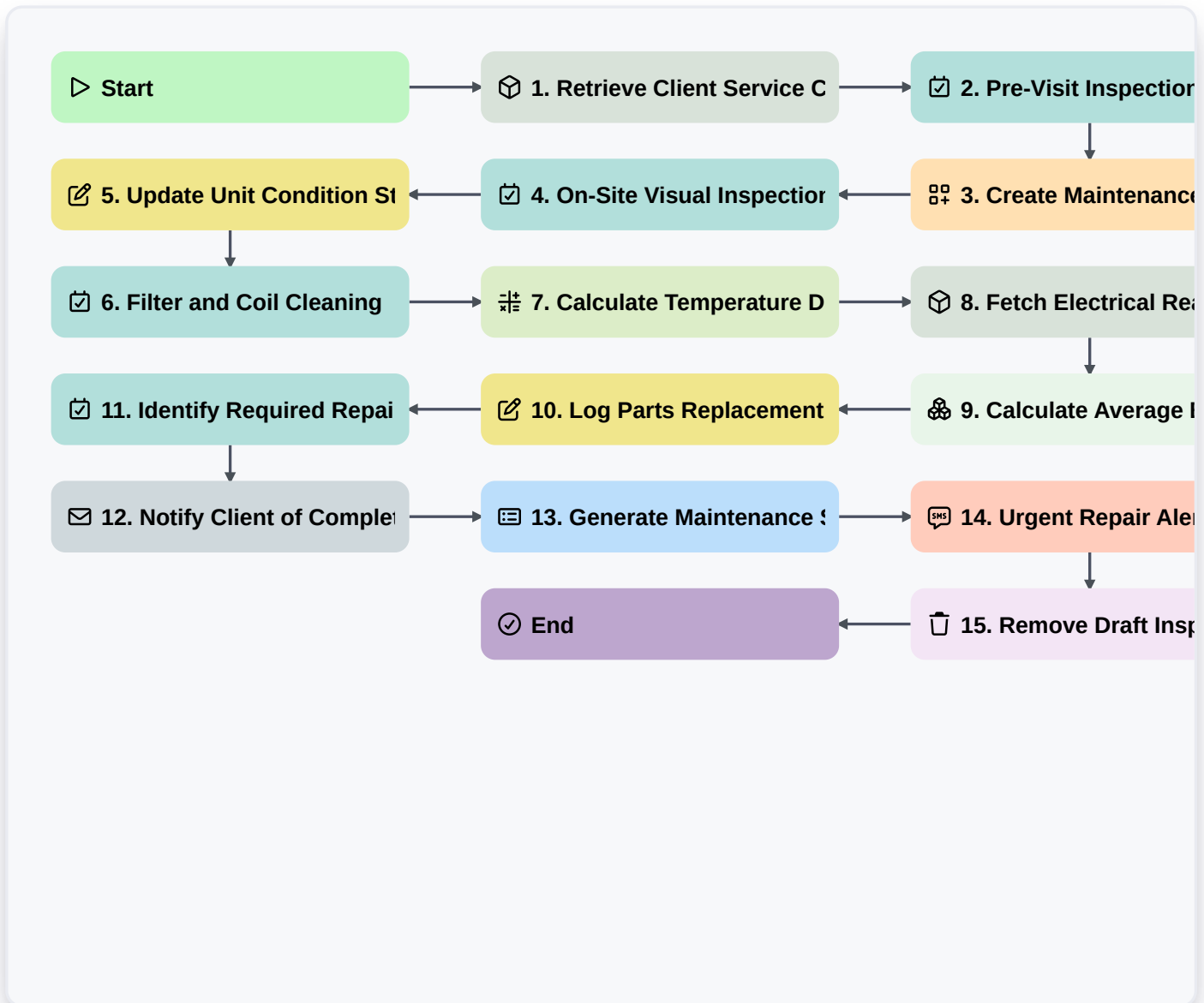


HVAC System Maintenance Procedure



Start

Start of the Workflow/Process.

1. Retrieve Client Service Contract

Fetch the existing customer data and maintenance agreement details from the Client Data Model.

2. Pre-Visit Inspection Prep

Assign a task to the Technician to review the unit's service history and required parts before departure.

3. Create Maintenance Log Entry

Create a new entry in the Maintenance Logs Data Model to track this specific service instance.

4. On-Site Visual Inspection

Task for the technician to check for visible leaks, corrosion, or damage to the HVAC unit.

5. Update Unit Condition Status

Update the 'Last Inspection Status' field in the Equipment Data Model based on findings.

6. Filter and Coil Cleaning

Task to perform physical cleaning of air filters and condenser/evaporator coils.



7. Calculate Temperature Differential

Calculate the difference between intake air and supply air temperature to check system efficiency.

8. Fetch Electrical Readings

Retrieve recorded voltage and amperage readings from the service form entries.

9. Calculate Average Efficiency Score

Aggregate all recorded performance metrics from the current visit to determine an overall efficiency percentage.

10. Log Parts Replacement

Update the Inventory Data Model to reflect parts used (e.g., new filters, capacitors) during the visit.

11. Identify Required Repairs

If defects are found, create a task to generate a repair estimate and parts list.

12. Notify Client of Completion

Send an automated email to the client containing the summary of the maintenance performed.

13. Generate Maintenance Summary Report

Create a finalized PDF report summarizing all findings, readings, and completed checklists for the client's records.

14. Urgent Repair Alert

Send an SMS to the Service Manager if a critical system failure was detected during the procedure.

15. Remove Draft Inspection Notes

Delete temporary/unverified notes from the entry once the final official report is validated.

End

End of the Workflow/Process.