

# What an Automation Really Is

An automation is the intelligence layer of a smart home.

It is the part of the system that watches what is happening, understands the context, makes decisions, and then carries out actions automatically. It turns a collection of smart devices into a coordinated living system.

Without automation, a smart home is mostly just remote control. You still open an app, press a button, or give a voice command.

With automation, the home begins to respond on its own.

It notices:

- when someone enters a room
- when the sun is too bright
- when the house is getting hot
- when battery backup is low
- when solar production is high
- when the nursery temperature starts drifting too high
- when a blind's internal battery is getting low
- when certain rooms need more or less airflow
- when the house should shift into comfort mode, privacy mode, security mode, or conservation mode

Then it makes the right decisions without needing someone to constantly manage it.

That is what an automation is:

**a set of rules, priorities, and logic that allows the home to think through a situation and respond automatically.**

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## The difference between control, scenes, scripts, and automations

This is important because people often use these terms like they mean the same thing, but they do not.

### Manual control

This is the most basic level.  
You push a button, tap an app, or speak a command.

Example:  
“Turn on the kitchen lights.”

That is not really automation. That is just smart control.

## Scene

A scene is a saved state or mood.

Example:  
“Evening Relax” might:

- dim lamps to 25%
- close the blinds
- warm the color temperature
- turn on soft accent lighting
- lower media room brightness

A scene is an outcome, not intelligence.

## Script

A script is a sequence of actions.

Example:  
“Goodnight House” might:

- turn off downstairs lights
- lock doors
- close blinds
- reduce HVAC activity
- arm certain alerts
- announce battery reserve and weather overnight

A script is reusable and useful, but it still needs to be launched somehow.

## Automation

An automation is what decides **when, why, and under what conditions** that scene or script should run.

Example:

“At sunset, if someone is home, if glare is high, if outdoor temperature is above a cooling threshold, and if the living room is occupied, then partially close west-facing blinds, reduce smart vent airflow to unused rooms, set the living room to comfort lighting, and keep enough natural light for visibility while protecting the room from heat gain.”

That is automation.

It is not a single command.

It is a decision process.

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# What an automation is made of

Every good automation has several layers.

## 1. Trigger

This is what wakes it up.

Examples:

- a time of day
- sunrise or sunset
- motion in a room
- door opening
- temperature rising
- humidity dropping
- battery reserve changing
- solar production increasing
- a blind battery dropping below a threshold
- a smart vent reporting restricted flow
- a leak sensor going wet
- a camera event detecting motion
- the alarm changing state
- a voice assistant command
- a double-tap on a wall switch

## 2. Conditions

These decide whether the automation should continue.

Examples:

- only if someone is home
- only if the room is occupied
- only after dark
- only if lux is above a glare threshold
- only if the outdoor temperature is hot enough to justify solar blocking
- only if HVAC is actively cooling
- only if the blind battery is low enough to need protection or charge preservation
- only if the room is not in manual override
- only if battery reserve is below a target
- only on weekdays
- only if the nursery has stayed too warm for more than 5 minutes

### 3. Actions

These are the things it actually does.

Examples:

- dim or brighten lights
- change a scene
- tilt or close blinds
- protect or recharge solar-powered blind batteries
- open or restrict smart vents
- adjust thermostat targets
- turn fans on or off
- play Alexa announcements
- send mobile alerts
- run a script
- lock a door
- activate a camera response
- pause a heavy load
- record a helper value
- set a timer
- log an incident
- wait for a condition
- escalate if things get worse

### 4. State awareness

This is what makes advanced automations feel smooth instead of annoying.

A real system remembers context such as:

- whether the device was manually changed
- whether the house is in Home, Away, Sleep, Guest, Vacation, Storm, or Outage mode

- whether a warning has already been issued
- whether the room was recently occupied
- whether a solar blind battery is being preserved
- whether the Powerwall is in reserve protection
- whether the system has already reacted recently and should avoid repeating itself

This memory is what makes automations feel intelligent instead of mechanical.

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## What your automations can control

Your automations can coordinate:

### Lighting and wall controls

- smart switches
- dimmer switches
- multi-way add-on switches
- scene-capable wall controls
- decorative lighting
- task lighting
- pathway/night lighting

### Shading and daylight control

- motorized blinds
- blind tilt angles
- privacy control
- glare reduction
- sunrise/sunset positioning
- solar charging behavior of your blinds
- blind battery health monitoring
- low-charge preservation rules
- selective charging and usage priorities

### Climate and airflow

- thermostats
- HVAC calls for heating/cooling
- room comfort strategies
- smart vents
- airflow balancing
- room-by-room temperature targeting

- fan coordination
- solar heat avoidance
- occupancy-based comfort routing

## **Occupancy and environment sensing**

- motion sensors
- occupancy sensors
- light level sensors
- temperature sensors
- humidity sensors
- door and window sensors
- leak sensors
- indoor/outdoor environmental readings

## **Energy management**

- Tesla Powerwall 3
- solar panel production
- whole-home consumption
- reserve logic
- free-electricity time windows
- energy-saving modes
- load shifting
- nonessential load control
- battery-aware automations
- solar-preferred operation

## **Security and awareness**

- cameras
- door and window state monitoring
- alarm state changes
- occupancy simulation
- arrival/departure routines
- alert escalation
- privacy state changes

## **Voice, media, and notification systems**

- Alexa announcements
- spoken status reports
- TV/media coordination
- dashboard updates

- push notifications
- silent vs spoken alert logic

## Infrastructure and technical systems

- humidity monitoring
- staged cooling responses
- network/infrastructure awareness
- power event awareness
- noncritical system shedding during power constraints

That means your home is not just a smart home.  
It is a **responsive environment**.

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## Why advanced automations matter

A basic smart home can impress people.

An advanced automated home can support people.

That is the difference.

A strong automation system improves:

- comfort
- convenience
- energy efficiency
- equipment protection
- privacy
- reliability
- peace of mind

It also removes the mental load of having to remember everything yourself.

You do not need to remember:

- when to close blinds for heat
- when to preserve battery
- when to open vents in occupied rooms
- when to warn about nursery heat
- when a blind battery needs attention
- when to shift the house into energy conservation mode

The system does that for you.

That is why automation matters so much.  
It is not just a cool feature.  
It is operational intelligence for the home.

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## Three Examples of Advanced Automations Using Your Full System

Below are three serious, high-level automations showing what a real luxury automation platform can do.

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### 1. Adaptive comfort, daylight, smart vent, and solar-blind management

This would be one of the signature luxury automations in your system.

#### Devices involved

- motorized blinds
- solar-charged blind batteries
- blind charge monitoring
- sunlight/lux sensors
- sun position
- smart dimmers and lighting scenes
- room occupancy sensors
- temperature sensors
- thermostats
- smart vents
- ceiling fans if available
- manual override helpers
- Alexa or dashboard status reporting

#### What it does

This automation manages the comfort of each room as a living system.

It does not just open and close blinds.  
It balances:

- natural daylight
- glare control
- privacy
- room temperature
- HVAC efficiency
- airflow delivery
- artificial lighting fill
- the health and charge status of solar-powered blinds

## **Example behavior**

In the morning, east-facing rooms can:

- begin with blinds closed or minimally tilted
- slowly increase tilt angle as light becomes useful
- avoid sharp glare while still bringing in daylight
- keep lights low if natural light is enough

As midday heat increases, the system can:

- close or reduce tilt on high-solar-gain windows
- direct conditioned air through smart vents toward occupied rooms
- reduce airflow to unused spaces
- coordinate dimmers so the room still feels bright without excess sun load
- reduce HVAC strain by preventing unnecessary solar heat gain

In the evening, it can:

- close blinds for privacy
- shift to warmer lighting scenes
- reduce cooling to rooms no longer occupied
- maintain comfort in active spaces only

## **Solar-charged blind battery management**

This is where your system becomes especially unique.

Because your blinds charge themselves through solar, the system can also monitor and protect that capability.

It can:

- watch charge levels of individual blinds
- identify blinds that are not getting enough light to sustain charge
- detect when certain windows have had poor charging conditions for several days
- adjust blind behavior to preserve battery life when necessary

- notify you before a blind becomes a problem
- prioritize charge-friendly positioning when appropriate
- avoid overusing a low-charge blind in noncritical periods
- treat solar exposure as both a comfort factor and an energy source for the blind itself

### **Why it is advanced**

Because it is solving several problems at once:

- comfort
- privacy
- glare
- energy efficiency
- HVAC support
- room-by-room airflow
- lighting coordination
- blind battery sustainability

That is not one automation.

That is an environmental control system.

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## **2. Whole-home energy orchestration and resilience automation**

This would be one of the most powerful automations in your home.

### **Devices involved**

- Tesla Powerwall 3
- solar production data
- whole-home usage sensors
- HVAC
- smart vents
- lighting loads
- selected smart plugs or relays
- Alexa announcements
- occupancy data
- time-of-use or free-electricity schedule logic
- dashboards/helpers/timers

## What it does

This automation acts as the energy manager for the entire home.

It watches:

- current solar production
- current home consumption
- current battery reserve
- time of day
- utility window rules
- weather trends if available
- occupied vs unused rooms
- optional manual override states

Then it decides how the home should behave.

## Example behavior

During your free-electricity window, it can:

- allow additional charging behavior
- relax conservation rules
- prepare the home for the next day
- pre-condition certain rooms if it is more economical to do so then.
- reset deferred loads

When solar begins ramping up during the day, it can:

- move the house into solar-preferred mode
- allow comfort loads to operate more freely
- reduce unnecessary battery discharge
- prioritize daytime cooling strategies that reduce afternoon HVAC stress later

If battery reserve drops low at night, it can:

- reduce nonessential lighting
- tighten climate control ranges
- reduce smart vent conditioning to unused rooms
- limit comfort actions to occupied spaces
- issue spoken or silent alerts depending on severity

If an outage occurs or outage risk is high, it can:

- place the home into resilience mode
- preserve essential circuits and systems

- restrict luxury loads
- maintain key occupancy-based lighting and security behavior

## **Why it is advanced**

Because it is not just looking at one value.  
It is balancing:

- comfort
- cost
- energy availability
- battery protection
- occupancy
- climate demand
- equipment priority
- resilience planning

This is the kind of automation that turns a house with solar and battery into a house that actually behaves intelligently around energy.

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## **3. Whole-home protective awareness automation: security, family protection, and operational alerts**

This automation protects both the house and the technology inside it.

### **Devices involved**

- cameras
- motion and occupancy sensors
- door and window sensors
- alarm/security states
- leak sensors
- nursery temperature sensors
- humidity sensors
- fans or cooling controls
- Powerwall energy state
- Alexa announcements
- phone notifications
- helper states and escalation timers

### **What it does**

This automation becomes a protective nervous system for the property.

It is not just about intrusion.  
It is about abnormal conditions.

It can detect and respond to:

- unexpected motion
- doors opening at unusual times
- water leaks
- the nursery overheating
- humidity problems around equipment
- power-related risk states
- camera-based events combined with occupancy context

### **Example behavior**

If the home is in Away mode and a door opens:

- cameras can shift priority
- key lighting can activate selectively
- an alert can be issued
- the event can be classified differently depending on whether occupancy or arrival logic says someone should be there

If a leak sensor triggers:

- spoken alerts can happen locally
- mobile alerts can be sent immediately
- nearby devices can shut off water if integrated
- lighting can be turned on in the affected path for visibility

If the nursery temperature begins rising:

- first-stage cooling can activate
- a warning can be delayed slightly to prevent nuisance alerts
- if temperature continues rising, the alert escalates
- if humidity and temperature both keep trending wrong, urgency increases and alerts escalate to maximum

If cameras detect activity outside during nighttime occupancy:

- the home can respond differently depending on whether people are home, sleeping, or away
- interior pathway lighting can remain subtle
- exterior deterrence lighting can be activated if desired
- announcements can be spoken only if the event crosses a threshold of importance

## Why it is advanced

Because it merges:

- security awareness
- environmental protection
- escalation logic
- occupancy context
- local alerts vs remote alerts
- family protection
- power-aware decision making

This makes the house feel not just automated, but guarded.

## Additional advanced automation example: child brushing coaching, consistency, and reporting

This is a very strong example of how automation can support real family life.

## Devices involved

- smart toothbrush or brushing tracking integration
- bathroom occupancy or motion sensors
- bathroom lighting
- Alexa announcements or voice prompts
- helper entities for streaks, completion, missed sections, and report periods
- parent phone notifications
- optional bedtime/morning routine automations

## What it does

This automation monitors and supports a child's brushing routine as part of the household system.

It can:

- detect whether brushing occurred during the expected morning and evening windows
- track total brushing time
- confirm whether all 12 sections of teeth were covered
- identify sections that are repeatedly missed
- remind the child if brushing has not happened by a certain time

- provide spoken encouragement or coaching
- notify parents only when needed, instead of for every routine event
- build daily, weekly, and monthly reports showing consistency and quality
- create streak-based rewards or milestone celebrations

## Example behavior

In the morning, if brushing has not started by a certain time, the bathroom or bedroom Alexa can give a gentle reminder.

Once brushing begins, the system can:

- monitor active duration
- watch for incomplete coverage
- determine whether all 12 sections were brushed properly

If the child stops too early or misses sections, the system can:

- provide a short coaching prompt
- log which sections were missed
- save the event to the daily record

At the end of the day, parents can see:

- whether morning brushing happened
- whether evening brushing happened
- total duration for each session
- which tooth sections were missed
- whether the child met the day's goal

At the end of the week or month, the system can generate a higher-level report showing:

- total completed sessions
- average brushing duration
- most commonly missed sections
- longest streak
- compliance percentage
- improvement trends over time

## Why it is a heavy automation

Because it is combining:

- time-based routines
- sensor/device data

- habit validation
- conditional reminders
- exception handling
- reporting and analytics
- parent-facing summaries
- encouragement without constant manual involvement

This is not just a reminder.  
It is a habit-support system.

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**FindMe Feature** – A Polk Systems exclusive feature comes standard in Blue and other colors if indicated on description. L=Levels of brightness. It uses a very small LED light that allows you to find the switch in the dark. The feature can be deactivated upon request. This feature is incredible for finding the switch at night and this and all products are available for show in our model home. Appointments are available upon request. Picture below shows Blue and red enabled.



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**Colors:**

A=Amber, BK=Black, B=Blue, BR=Brown, G=Green, GR=Grey, I=Ivory, PK=Pink,  
LA=Light Almond, O=Orange, P=Purple, R=Red, Y=Yellow, W=White

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