WHITE PAPER

Before It Breaks: Preventive Maintenance & AMC Scheduling in ERPNext

How ERPNext plans periodic service before a machine fails — Maintenance Schedules and Visits for the equipment you sell under AMC, and Asset Maintenance for your own plant.

For service & operations leaders (equipment-heavy) · **8 min read**

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EXECUTIVE SUMMARY

Maintenance is one of the few costs a business can either plan or pay for in a panic. Plan it, and a technician shows up on a known date, does a checklist, and the machine keeps running. Skip it, and the same machine fails mid-shift — an emergency call-out, a production stop, an unhappy customer, and a bill several times larger. ERPNext gives equipment-heavy businesses two distinct systems to move from reactive to preventive. The Maintenance Schedule generates periodic visits for the products you sell and service — the backbone of an AMC (Annual Maintenance Contract) — while the Maintenance Visit records what was actually done on each call, scheduled or not. Separately, Asset Maintenance schedules preventive and calibration tasks on your own plant and equipment, assigns each to a person, and tracks the next due date. This paper explains how both work from the real ERPNext doctypes, where they fit, and what discipline it takes to make preventive maintenance stick — so you find problems on a schedule instead of at the worst possible moment.

The real cost of reactive maintenance

Every breakdown has two bills. The first is the obvious one — the part, the emergency labour, the overtime. The second is quieter and usually far larger: the production hours lost while the machine is down, the delivery you missed, the customer who now doubts you, and the technician you pulled off planned work to fight a fire. Run maintenance reactively for long enough and your best people spend their days on unplanned call-outs, never getting ahead.

For two kinds of business this is existential. If you sell equipment and service it under an AMC, a missed preventive visit is a promise broken — and a warranty or contract claim waiting to happen. If you run plant and equipment yourself, an uncalibrated instrument or an unlubricated bearing is a quality reject or a safety incident in the making. In both cases the fix is the same idea: decide in advance when service should happen, put it on someone's list, and do it before the failure — not after.

ERPNext supports this with two separate, purpose-built systems. It's worth being clear which is which, because teams often try to force one to do the other's job.

- The visible cost of a breakdown — parts and emergency labour — is usually the smaller half of the bill.
- The hidden cost — lost production, missed deliveries, reputational damage, firefighting — dwarfs it.
- Sold-and-serviced equipment: a missed AMC visit is a broken promise and a contract risk.
- Your own plant: skipped preventive or calibration work becomes a quality reject or a safety incident.

Two maintenance systems in ERPNext — which is which

1 **Maintenance Schedule**
periodic service you plan for equipment you sell / service under AMC; generates dated visits by periodicity from a Sales Order.

2 **Maintenance Visit**
the record of what a technician actually did on a call: Scheduled, Unscheduled or Breakdown, with work done per serial number.

3 **Asset Maintenance**
preventive and calibration tasks on your own plant and equipment, on the fixed-asset register, each with a periodicity and owner.

4 **Asset Maintenance Task**
one recurring job (Preventive Maintenance or Calibration) with next-due / last-completion dates and a Planned / Overdue status.

5 **Asset Maintenance Log**
the completion record for a task: date done, actions performed, and the certificate where the task requires proof.

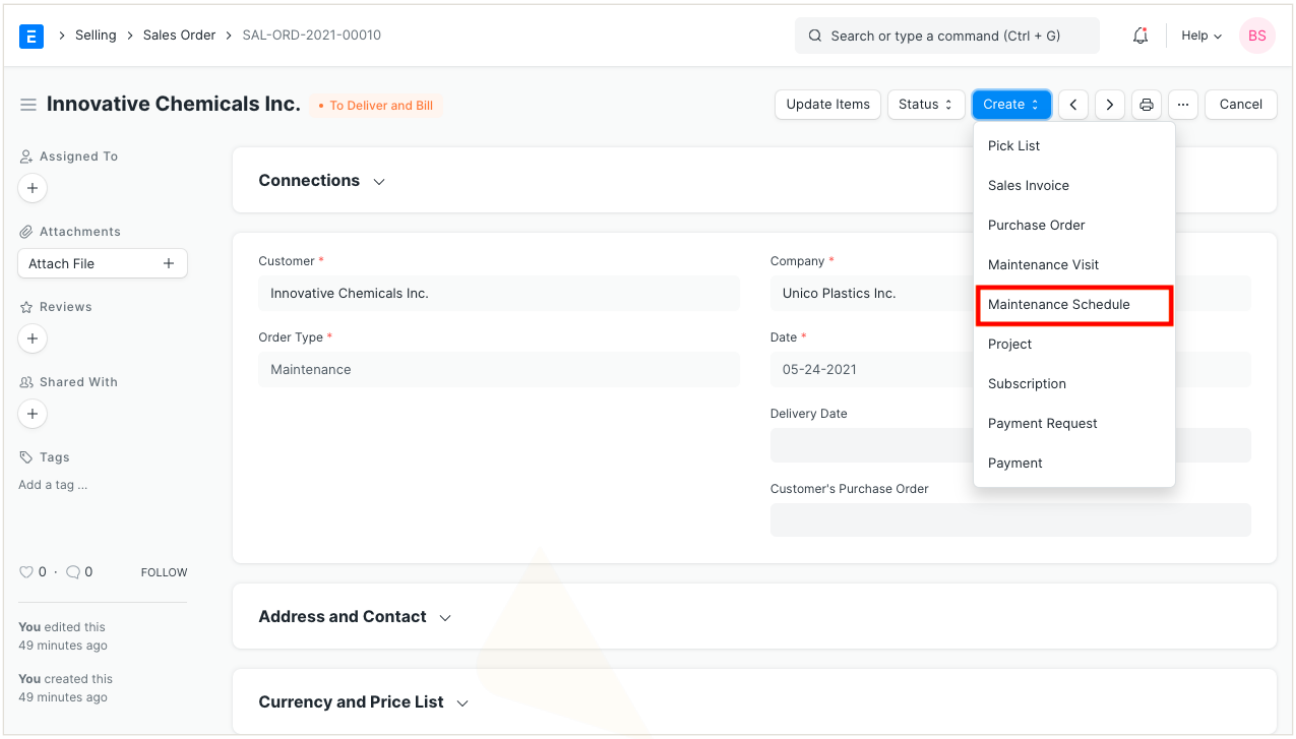
6 **The through-line**
plan the work before failure, assign it to a real person, and record that it was done, so 'preventive' is provable, not aspirational.

Maintenance Schedules — periodic service for what you sell and your AMCs

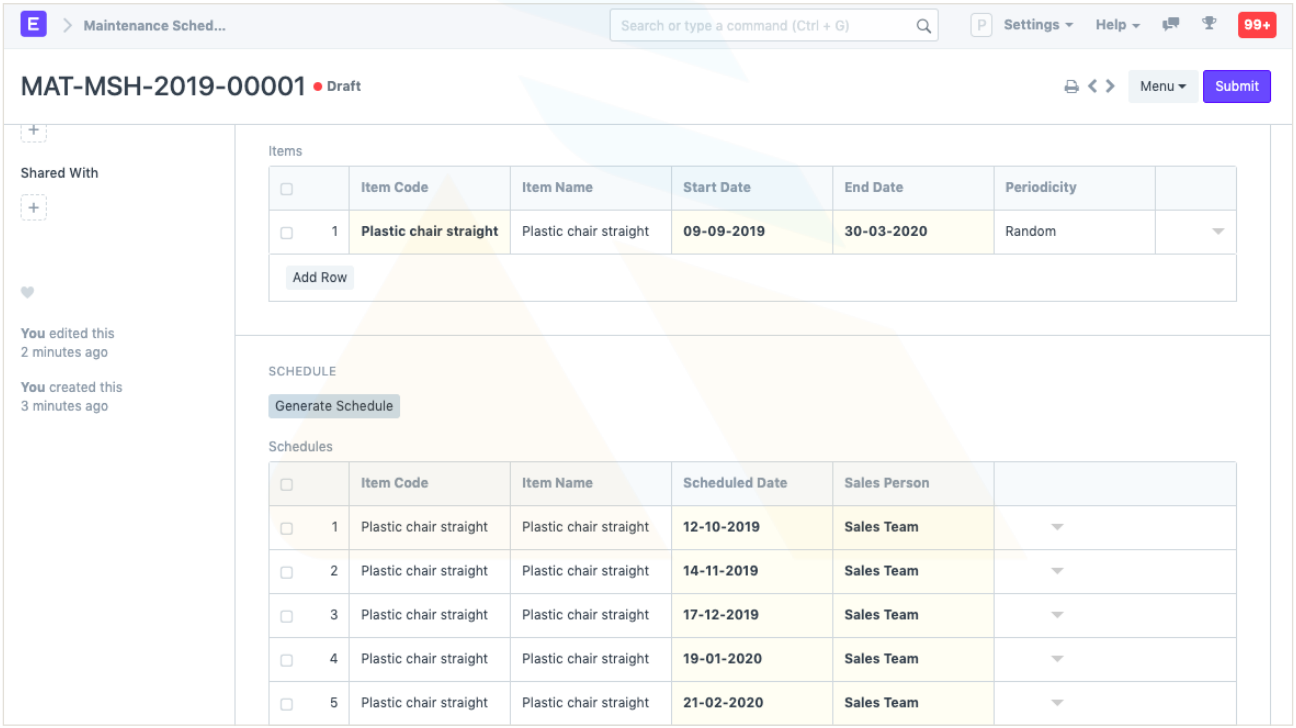
When you sell a machine and commit to service it — often through an Annual Maintenance Contract — you need to know, up front, exactly when each visit falls due for the next year. In ERPNext that plan lives in the Maintenance Schedule. It's typically created straight from a Sales Order of type 'Maintenance', so the contract you sold and the visits you owe stay linked to the same customer.

Against each item on the schedule you set a start and end date, a periodicity — Weekly, Monthly, Quarterly, Half Yearly, Yearly or Random — and a number of visits, and you assign a Sales Person (or service team) responsible for the calls. Then you click Generate Schedule, and ERPNext expands that into individual dated rows: one line per visit, each with its scheduled date and the person responsible. On submission those become calendar events for the assigned person, so the plan isn't a document nobody opens — it's on their calendar. Because each schedule row can carry the serial number of the specific unit under contract, you can track service down to the individual machine you sold, not just the customer.

- Created from a Sales Order of type 'Maintenance' — the AMC you sold drives the visits you owe.
- Per item: start/end dates, periodicity (Weekly to Yearly, or Random) and number of visits.
- Generate Schedule expands the plan into dated rows — one per visit, each with a responsible person.
- On submission, visits become calendar events; serial numbers tie a visit to the exact unit under contract.



An AMC starts from a Sales Order of type 'Maintenance' — from which you create the Maintenance Schedule that plans the year's visits.



A Maintenance Schedule: set periodicity and dates per item, then Generate Schedule expands it into dated visit rows, each with a responsible person.

Maintenance Visits — recording what actually happened on the call

A schedule says what should happen; the Maintenance Visit records what did. When a technician goes out — whether for a planned AMC call, an ad-hoc request, or an emergency — you book a

Maintenance Visit against the customer, capturing the date, time and who attended. Crucially, ERPNext distinguishes the reason: the maintenance type can be Scheduled (a planned visit), Unscheduled (an off-plan call) or Breakdown (something failed). That single field is the raw material for later telling planned work apart from firefighting.

Each visit carries a purposes table — one row per item or serial number serviced — where the service person records the work done, so you have a per-machine service history, not just a visit note. The visit also captures a completion status of Partially Completed or Fully Completed, and a place for customer feedback. Because a Maintenance Visit can be linked back to the Maintenance Schedule (and the specific schedule row it fulfils), the loop closes: the plan says a visit was due, the visit records it was done, and the schedule row's completion status moves from Pending to Partially or Fully Completed. That link is what turns a pile of service dockets into an auditable AMC record.

- Maintenance type — Scheduled, Unscheduled or Breakdown — separates planned service from firefighting.
- A purposes table logs the work done per item / serial number: a real per-machine service history.
- Completion status (Partially / Fully Completed) plus a customer-feedback field on every visit.
- Visits link back to the schedule row they fulfil, closing the plan-then-prove loop for AMC audits.

Asset Maintenance — preventive care for your own plant and equipment

The Maintenance Schedule is aimed outward, at equipment you sell. For the machines, instruments and vehicles you own and run, ERPNext has a separate system: Asset Maintenance, which sits on top of the fixed-asset register. You create an Asset Maintenance record for an asset, assign a Maintenance Team with a named manager, and then list the recurring tasks that keep it healthy.

Each Asset Maintenance Task has a maintenance type of Preventive Maintenance or Calibration, a periodicity that runs from Daily and Weekly through Monthly, Quarterly, Half-yearly and Yearly out to 2 Yearly and 3 Yearly, and a person it's assigned to. ERPNext tracks each task's next due date and last completion date, and moves its status between Planned, Overdue and Cancelled — so an overdue calibration doesn't quietly slip. A task can also be flagged as certificate-required, which matters for regulated or quality-audited equipment where you must retain proof the calibration was done. As work is completed, it's recorded in an Asset Maintenance Log against the task, capturing the completion date, the actions performed and — where required — the attached certificate. Because assigned tasks surface in the responsible person's to-do list, preventive work lands on someone's plate rather than living in a document nobody re-opens.

- Built on the fixed-asset register: an Asset Maintenance record per asset, with a Maintenance Team and manager.
- Tasks are Preventive Maintenance or Calibration, with periodicity from Daily to 3 Yearly.
- Each task tracks next-due and last-completion dates and a status of Planned, Overdue or Cancelled.
- Certificate-required flag and Asset Maintenance Log capture proof and actions for audited equipment.

Measuring uptime and whether your AMCs actually make money

Once maintenance runs through ERPNext instead of a WhatsApp group, the data to manage it starts to accumulate as a by-product of doing the work. On the reliability side, the maintenance-type field on every visit lets you see the mix of Scheduled versus Unscheduled and Breakdown calls — and the direction that ratio moves over time is the honest scorecard for whether preventive maintenance is working. Overdue Asset Maintenance Tasks tell you where your own plant is falling behind before a failure makes it obvious.

On the commercial side, an AMC is only worth selling if it's profitable, and that's a question most service businesses answer by gut feel. ERPNext lets you ground it: the AMC is sold on a Sales Order, and the cost of honouring it accumulates in the Maintenance Visits — the labour, the parts consumed, the travel — booked against that customer and contract. Put the contract revenue next to the service cost and you can see which AMCs, customers or product lines earn their keep and which ones you're subsidising. That's the difference between renewing contracts on hope and repricing them on evidence.

- Scheduled vs Unscheduled vs Breakdown visit mix — the honest measure of whether prevention is working.
- Overdue Asset Maintenance Tasks flag where your own equipment is slipping, before it fails.
- AMC revenue (Sales Order) vs the cost of servicing it (Maintenance Visits) reveals true contract margin.
- Renew and reprice AMCs on evidence, not on gut feel about which customers are profitable.

What it takes to make preventive maintenance stick

The doctypes are capable, but software doesn't service a machine — people do, on a schedule they trust. Preventive maintenance sticks when a few unglamorous disciplines are in place. Schedules and asset tasks need realistic periodicities: set every task to Monthly to look diligent and you'll breed overdue rows nobody believes, which trains people to ignore the whole system. Each visit and task needs a genuinely accountable owner, not a team name that means no one. And the loop has to actually close — technicians must book the Maintenance Visit and log completion, or the schedule quietly drifts out of sync with reality and the AMC record becomes fiction.

There's also a masters question underneath it all: serial numbers on the units you service, a clean fixed-asset register for your own plant, and maintenance teams defined before you try to assign work to them. Get those set up once, honestly, and the reporting above is trustworthy. Skip them, and you have a tidy-looking system that no one relies on — which is worse than a whiteboard, because it looks like control without being it.

- Realistic periodicities — over-scheduling breeds overdue rows and teaches people to ignore the system.
- A named, accountable owner per visit and task — a team name that means 'no one' is the classic failure.
- Close the loop: technicians must book the visit and log completion, or the AMC record becomes fiction.

- Clean masters first — serial numbers, a real asset register and defined maintenance teams.

When to get help

You can run ERPNext maintenance in-house, and many service teams do. Where an experienced partner earns their fee is in the setup decisions that are hard to unwind later: which of the two systems fits which part of your business, how AMC contracts flow from Sales Orders into schedules, how serial-tracked units are structured so a visit ties to the exact machine, and how your fixed-asset register and maintenance teams are laid out so preventive tasks land on the right person's list. Those choices, made well at implementation, are the difference between a system your technicians trust and one they route around.

As an official ERPNext partner working with equipment-heavy Indian businesses, we set up the Maintenance Schedule / Visit flow for what you sell and Asset Maintenance for what you run — mapped to how your service actually operates, with the reporting that tells you whether uptime is improving and whether your AMCs make money. If maintenance is core to your promise to customers or your production uptime, that's the difference between planning service and paying for breakdowns.

KEY TAKEAWAYS

1. Reactive maintenance's real cost is the hidden half — lost production, missed deliveries and firefighting — not just the emergency part and labour.
2. The Maintenance Schedule plans periodic AMC visits for equipment you sell: set a periodicity, Generate Schedule, and each visit lands on a person's calendar.
3. The Maintenance Visit records what actually happened — Scheduled, Unscheduled or Breakdown — with per-serial work done, closing the loop back to the schedule.
4. Asset Maintenance schedules preventive and calibration tasks on your own plant, tracks next-due dates and Overdue status, and keeps certificates for audits.
5. The system only works with realistic periodicities, a named owner per task, closed-loop completion logging, and clean masters — otherwise it looks like control without being it.

FAQ

What's the difference between a Maintenance Schedule and Asset Maintenance in ERPNext?
They serve two different directions. The Maintenance Schedule plans periodic service visits for equipment you sell and service — typically under an AMC created from a Sales Order — and the Maintenance Visit records each call. Asset Maintenance is for your own plant and equipment on the fixed-asset register: it schedules preventive-maintenance and calibration tasks, assigns each to a person, and tracks the next due date. Use the schedule for what you sell, Asset Maintenance for what you run.

Can ERPNext manage our AMC (Annual Maintenance Contract) service visits?
Yes. An AMC typically begins as a Sales Order of type 'Maintenance', from which you create a Maintenance Schedule. You set each item's periodicity — Weekly, Monthly, Quarterly, Half Yearly, Yearly or Random — and number of visits, then Generate Schedule expands it into individual dated

visits assigned to a responsible person and added to their calendar. Each visit's serial number can tie it to the exact unit under contract, so you can track service down to the individual machine.

How does ERPNext handle calibration certificates for audited equipment?
In Asset Maintenance, a task can be flagged as certificate-required — useful for calibration or regulated equipment where you must retain proof the work was done. When the task is completed it's recorded in an Asset Maintenance Log against the asset, capturing the completion date, the actions performed and the attached certificate. That gives you a per-asset, dated maintenance history with the certificates available for a quality or regulatory audit.

Can we tell planned maintenance apart from breakdowns to see if prevention is working?
Yes, and it's one of the most useful things the data gives you. Every Maintenance Visit records a maintenance type of Scheduled, Unscheduled or Breakdown. Watching that mix over time is the honest scorecard for whether preventive maintenance is reducing failures — if breakdown and unscheduled calls are falling as a share of total visits, prevention is working. On your own plant, Overdue Asset Maintenance Tasks flag where you're slipping before a failure makes it obvious.